Speedway 5315
(7-Eleven 46746 - Former TNS 111)

2Q June, 2024
GWM Event Report

ADEC File #102.26.026

Stantec

AUTHORIZATION TO SUBMIT REPORT

Stantec has been authorized by the client, 7-Eleven (representative Paula Sime, PG, Manager – Environmental Services) to submit the enclosed report titled "Tesoro North Store 111 - 2Q June 2024 GWM Event" dated July 2024, to the Alaska Department of Environmental Conservation. If you have any questions or need additional information concerning this report, please contact me at (907) 227-9883 or via email at bob.gilfilian@stantec.com.

Regards,

STANTEC CONSULTING SERVICES, INC.

Bob Gilfilian

Robert (Bob) Gilfilian, P.E.

Project Technical Lead

Principal Senior Civil Engineer

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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AK	Alaska Test Method
amsl	above mean sea level
B	analyte detected in associated blank
BTEX	benzene, toluene, ethylbenzene, and xylenes
chemox	chemical oxidation
DO	dissolved oxygen
DRO	diesel range organics
DUP	duplicate sample
EPA	U.S. Environmental Protection Agency
GCLs	groundwater cleanup levels
gpm	gallons per minute
GRO	gasoline range organics
J	The identification of the analyte is acceptable; the reported value is an estimate.
Klozur® One	Trademarked chemical oxidizer developed by PeroxyChem
mg/L	milligrams per liter
MW	monitoring well
NM	Not measured
ORP	oxidation-reduction potential
PAH	polycyclic aromatic hydrocarbon
QA/QC	quality assurance/ quality control
RM	remediation well
SIM	selective ion monitoring
Stantec	Stantec Consulting Services Inc.
Tesoro	Tesoro Refining and Marketing Company
TMB	trimethylbenzene
U	analyte not detected above the reported detection limit in parentheses
VOC	volatile organic compound
WP	Work Plan

1.0 INTRODUCTION

This Groundwater Monitoring Event Report was prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Speedway 5315 (7-Eleven 46746 – Former TNS 111), located at 3679 College Road, Fairbanks, Alaska (**Figure 1**). The methods used for this monitoring event were conducted in accordance with the 2024 Alaska Department of Environmental Conservation (ADEC) approved Work Plan for this site. This monitoring event was conducted by the Stantec field team of Geoff Moorhead, Professional Engineer and Remi Malenfant, Geologist in Training.

This second quarter 2024 event occurred on June 10 and included analytical sampling of Monitoring Wells G-5, MW-10, MW-12, MW-13, MW-16, MW17-1, and MW17-2 as well as Remediation Wells RM-1 and RM-2. Monitoring well MW17-2 and remediation wells RM-1 and RM-2 were also sampled on May 21 prior to the first chemical oxidation (chemox) event of the year.

2.0 SITE BACKGROUND

Background information for this site is summarized in **Appendix A**.

3.0 FIELD ACTIVITIES

The following field activities were conducted during the second quarter 2024 monitoring event:

- Measured static groundwater levels at Monitoring and Remediation Wells G-5, MW-10, MW-12, MW-13, MW-16, MW17-1, MW17-2, RM-1, and RM-2.
- Collected field measurements of the following intrinsic water quality parameters of pH, oxidation-reduction potential (ORP), dissolved oxygen (DO), and specific conductance from wells G-5, MW-10, MW-12, MW-13, MW-16, MW17-1, MW17-2, RM-1, and RM-2.

- Samples from the above locations were submitted for the following laboratory analysis: Gasoline range organics (GRO) by Alaska Test Method (AK)101, diesel range organics (DRO) by AK102, volatile organic compounds (VOCs) (including 1,2,4-Trimethylbenzene (TMB) and 1,3,5-TMB) by U.S. EPA Test Method 8260C, polycyclic aromatic hydrocarbons (PAHs) including naphthalene by EPA Test Method 8270D with selective ion monitoring (SIM), and Metals 6010D for sodium. Sample locations with analytical data are shown on **Figure 2**.

- Monthly chemical oxidation (chemox) injection occurred in on May 31 and June 13 this quarter.

Field methods and procedures are provided in **Appendix B**, and field measurements and notes are provided in **Appendix C**.

4.0 GROUNDWATER MONITORING RESULTS

4.1 GROUNDWATER LEVELS

Table 1 presents groundwater elevations at this site based on the depths to groundwater measured during the second quarter 2024 monitoring event. During the monitoring event the groundwater flow was determined to be to the northwest at approximately 282° with a gradient of 0.012 feet per foot. This is consistent with past events.

A plot of groundwater elevation contours generated using the SampleServe® software program and a rose diagram of previous groundwater flow is included in **Figure 3**. The program uses a combination of kriging and nearest-neighbor analysis to generate the contours.

Table 1 Groundwater Elevations

Measured on June 10, 2024

Monitoring Well Identification	Top of Casing Elevation (feet amsl)[1]	Depth to Groundwater (feet bgs)	Groundwater Elevation (feet amsl)
G-5	430.01	13.62	416.39
MW-10	430.12	14.17	415.95
MW-12	427.86	11.41	416.45
MW-13	429.76	13.39	416.37
MW-16	429.31	12.91	416.40
MW17-1	430.57	14.05	416.52
MW17-2	430.17	13.81	416.36

Key:

1 Based on a vertical control survey completed on September 20, 2023, using an elevation datum of 432.00 feet located on the concrete sidewalk next to the front entrance of the store.

amsl above mean sea level bgs below ground surface

4.2 FIELD PARAMETERS

The results of water quality parameter testing of the water samples collected during this monitoring event are presented in **Table 2**. The concentration of DO in well MW-12 is slightly higher than the rest of the wells. Well MW-12 is located at the east corner of the dispenser island canopy, near the end of the horizontal injection well. High DO readings in this well may be indicative of the influence of the chemox solution in this well.

Table 2 Field Measured Intrinsic Water Quality Parameters

Measured on May 21 and June 10, 2024

Monitoring Well Identification	Date Measured	Volume Purged (gallons)	Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Specific Conductance (µS/cm °C)	ORP (mV)
G-5	6/10/2024	2.5	3.9	6.86	6.86	704	123.4
MW-10	6/10/2024	2.0	5.7	6.99	2.46	724	117.3
MW-12	6/10/2024	7.0	5.9	7.19	13.33	855	138.8
MW-13	6/10/2024	6.0	7.0	7.08	4.15	661	247.3
MW-16	6/10/2024	8.0	5.1	7.05	7.65	940	273.5
MW17-1	6/10/2024	2.5	5.7	6.86	1.31	721	101.4
MW17-2	5/21/2024	NM	3.3	6.81	2.52	1053	188.3
	6/10/2024	2.5	5.1	6.92	2.04	1101	133.4
RM-1	5/21/2024	NM	2.1	6.91	1.40	732	118.8
	6/10/2024	6.0	7.0	7.01	7.47	754	125.0
RM-2	5/21/2024	NM	6.1	6.76	3.46	705	205.1
	6/10/2024	NM	6.8	6.87	1.34	749	102.0

Key:

°C degrees Celsius
µs/cm°C microSiemens per centimeter degrees Celsius
mg/L milligrams per liter
mV millivolts
DO Dissolved Oxygen
ORP oxidation-reduction potential
pH log [H^+]
NM Not measured

4.3 WATER SAMPLE ANALYTICAL RESULTS

All wells were sampled in accordance with the 2024 Work Plan. Historical monitoring data for this site are tabulated in **Appendix D**. Laboratory analytical results for compounds detected in groundwater samples collected during these events are summarized in **Table 3a** and **Table 3b**. The laboratory analytical reports are provided in **Appendix E**.

Wells G-1 and MW-11 were not measured or sampled this quarter due to the wells still being frozen. Well MW17-1 was not sampled this quarter due to it being saturated with chemox. An attempt at sampling was made just prior to the start of the chemox injection, but the chemicals traveled through the SWE-2 line quickly and compromised the potential samples in MW17-1.

Results of analytical sampling showed contaminant concentrations in all wells except MW-12, MW-13, and MW-16 exceeding ADEC groundwater cleanup levels (GCLs). For the May sampling, DUP is a duplicate of sample MW17-2, For the June sampling, DUP 1 is a duplicate of MW17-1 and DUP 2 is a duplicate of RM-2. DUP 2 was labelled DUP 3 in the laboratory report due to a malfunction with the SampleServe™ app. The duplicate sample sets were collected to determine the precision of the field collection and laboratory analysis for this sampling event.

Table 3a Groundwater Analytical Results, May Event

Samples Collected on May 21, 2024

ID	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENE	GRO	DRO	1,2,4-TMB	1,3,5-TMB	NAPH-THALENE[1]	SODIUM
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW17-2	**0.149**	0.000540 J	**0.0272**	0.0435	0.540	**1.65 B**	0.0121	0.00913	**0.00276**	93.6
DUP 1 (of MW17-2)	**0.129**	0.000555 J	**0.0272**	0.0408	0.384	**1.71 B**	0.00852	0.00658	**0.00654**	94.1
RM-1	0.00463 J	0.00198 J	**0.190**	**1.59**	**5.52**	**3.25**	**0.696**	**0.310**	**0.0681**	64.7
RM-2	**0.0131**	0.00652	**0.132**	**0.211**	1.15	0.529 J B	0.0519	0.0163	**0.0234**	39.4
GCLs	**0.0046**	**1.1**	**0.015**	**0.19**	**2.2**	**1.5**	**0.056**	**0.06**	**0.0017**	**NA**

Table 3b Groundwater Analytical Results, June Event

Samples Collected on June 10, 2024

ID	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENE	GRO	DRO	1,2,4-TMB	1,3,5-TMB	NAPH-THALENE[1]	SODIUM
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
G-5	**0.00529**	0.00410	**0.0775**	0.137	1.06	0.586 J	**0.120**	0.0329	U(0.000250)	63.4
MW-10	0.00130	0.000294 J	**0.0477**	0.0902	**6.72**	1.33	**0.487**	**0.184**	**0.0257**	55.4
MW-12	0.000214 J	0.00160	0.0124	0.0257	0.574	0.231 J	0.000641 J	U(0.00100)	0.000763	108
MW-13	0.00235 J	0.000302 J	0.00263	0.00426	0.442	0.451 J	0.00119	0.000590 J	U(0.000250)	91.9
MW-16	U(0.00100)	U(0.00100)	U(0.00100)	U(0.00300)	U(0.100)	0.854	U(0.00100)	U(0.00100)	U(0.000250)	43.0
MW17-1	**0.00549**	0.00415	**0.0396**	0.155	1.35	0.891	0.0528	0.0169	0.000142 J	44.5
DUP 1 (of MW17-1)	**0.00486**	0.00380	**0.0373**	0.151	1.26	0.717 J	0.0518	0.0163	U(0.000250)	44.6
MW17-2	**0.105**	0.000710 J	**0.0261**	0.0455	0.466	**2.00**	0.0105	0.00862	**0.00615**	101
RM-1	**0.00486 J**	0.00151 J	**0.266**	**1.69**	**7.09**	**2.45**	**0.668**	**0.301**	**0.0808**	63.1
RM-2	**0.0128**	0.0114	**0.153**	**0.199**	1.43	0.382 J	0.0449	0.0161	**0.0305**	43.5
DUP 2 (of RM-2)	**0.0135**	0.0126	**0.166**	**0.213**	1.43	0.330	0.0455	0.0164	**0.0311**	42.4
GCLs	**0.0046**	**1.1**	**0.015**	**0.19**	**2.2**	**1.5**	**0.056**	**0.06**	**0.0017**	**NA**

Key:

1	Results from VOC Method 8270D	TMB	Trimethylbenzene analyzed by 8260C
Bold	indicates the concentration exceeds the GCL or the estimated quantitation limit exceeds the GCL	J	The identification of the analyte is acceptable; the reported value is an estimate.
DUP	Duplicate sample of the preceding sample.	U ( )	Undetected above practical quantitation limits shown in parentheses
DRO	Diesel range organics analyzed by AK102.	B	The same analyte is found in the associated blank
GRO	Gasoline Range Organics analyzed by AK101	NM	Not measured

4.4 QUALITY ASSURANCE (QA)/QUALITY CONTROL (QC) REVIEW

Pace Analytical performed all analysis of groundwater samples for the 2Q 2024 sampling event. Pace Analytical met all sample hold times but did not meet all laboratory QA/QC criteria during the analysis of groundwater samples for this sampling event. Data presented in **Table 4** shows the laboratory exceeded precision tolerances for GRO and 1,2,4-TMB in the May 21 sampling event.

Laboratory QC data and the ADEC Laboratory Data Review Checklists are included in **Appendix E**.

Table 4 Laboratory Quality Control Objectives
Samples Collected on May 21 and June 10, 2024

Quality Control Designation	Tolerance	Results for This Event		
Hold Time		**DUP (5/21/2024)**	**DUP 1 (6/10/2024)**	**DUP 3 (6/10/2024)**
DRO/Water/to analyze	40 days	12 days	5 days	5 days
DRO/Water/to extract	14 days	11 days	5 days	5 days
GRO/Water/to analyze	14 days	14 days	14 days	14 days
VOCs/Water/to analyze	14 days	7 days	6 days	6 days
Field Duplicate – Precision		**DUP (5/21/2024)**	**DUP 1 (6/10/2024)**	**DUP 3 (6/10/2024)**
Benzene/Water	± 30%	14.4%	12.2%	5.3%
Toluene/Water	± 30%	2.7%	8.8%	10.0%
Ethylbenzene/Water	± 30%	0%	6.0%	8.2%
Xylenes/Water	± 30%	6.4%	2.6%	6.8%
GRO/Water	± 30%	**33.8%**	6.9%	0%
DRO/Water	± 30%	3.6%	21.6%	14.6%
1,2,4-Trimethylbenzene	± 30%	**34.7%**	1.9%	1.3%
1,3,5-Trimethylbenzene	± 30%	**32.5%**	3.6%	1.8%
Naphthalene	± 30%	**81.3%**	NC	1.9%

Key:

%	Absolute value percentage of variance	VOC	Volatile organic compound
±	Absolute Value	**BOLD**	Exceeds precision tolerance
DRO	diesel range organics	NC	Not Calculated, undetected in duplicate and/or primary
GRO	gasoline range organics		
1	Maximum time. Some samples extracted or analyzed earlier.		

5.0 REMEDIATION SYSTEM OPERATION AND IN-SITU CHEMOX REMEDIATION

Monthly chemical oxidation (chemox) injection occurred in on May 31 and June 13 this quarter. Both events involved the injection of a total of ten 55-pound bags of Klozur™ One, each mixed with 55 gallons of water from remediation well RM-2 and chased with at least 100 gallons of the same water to hydraulically push the solution into the subsurface. During the May event, three bags were injected directly into the horizontal injection well while the seven remaining bags were injected through the manifold into injection wells IW2023-A, IW2023-B, IW2023-C, and IW2023-D. The horizontal injection well was subsequently connected into the manifold, and during the June event all 10 bags were injected through the manifold and split between the five injection wells.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC)

18AAC 75.345 Table C (updated September 18, 2019). Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-5: Benzene, ethylbenzene, and 1,2,4-TMB
- MW-10: Ethylbenzene, 1,2,4_TMB, 1,3,5-TMB, GRO, and naphthalene
- MW17-1: Benzene and ethylbenzene
- MW17-2: Benzene, ethylbenzene, DRO, and naphthalene
- RM-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- RM-2: Benzene, ethylbenzene, total xylenes, and naphthalene.

During the monitoring event the groundwater flow was determined to be to the northwest at approximately 282° with a gradient of 0.012 feet per foot. This is consistent with past events.

6.1 PROPOSED ACTIVITIES

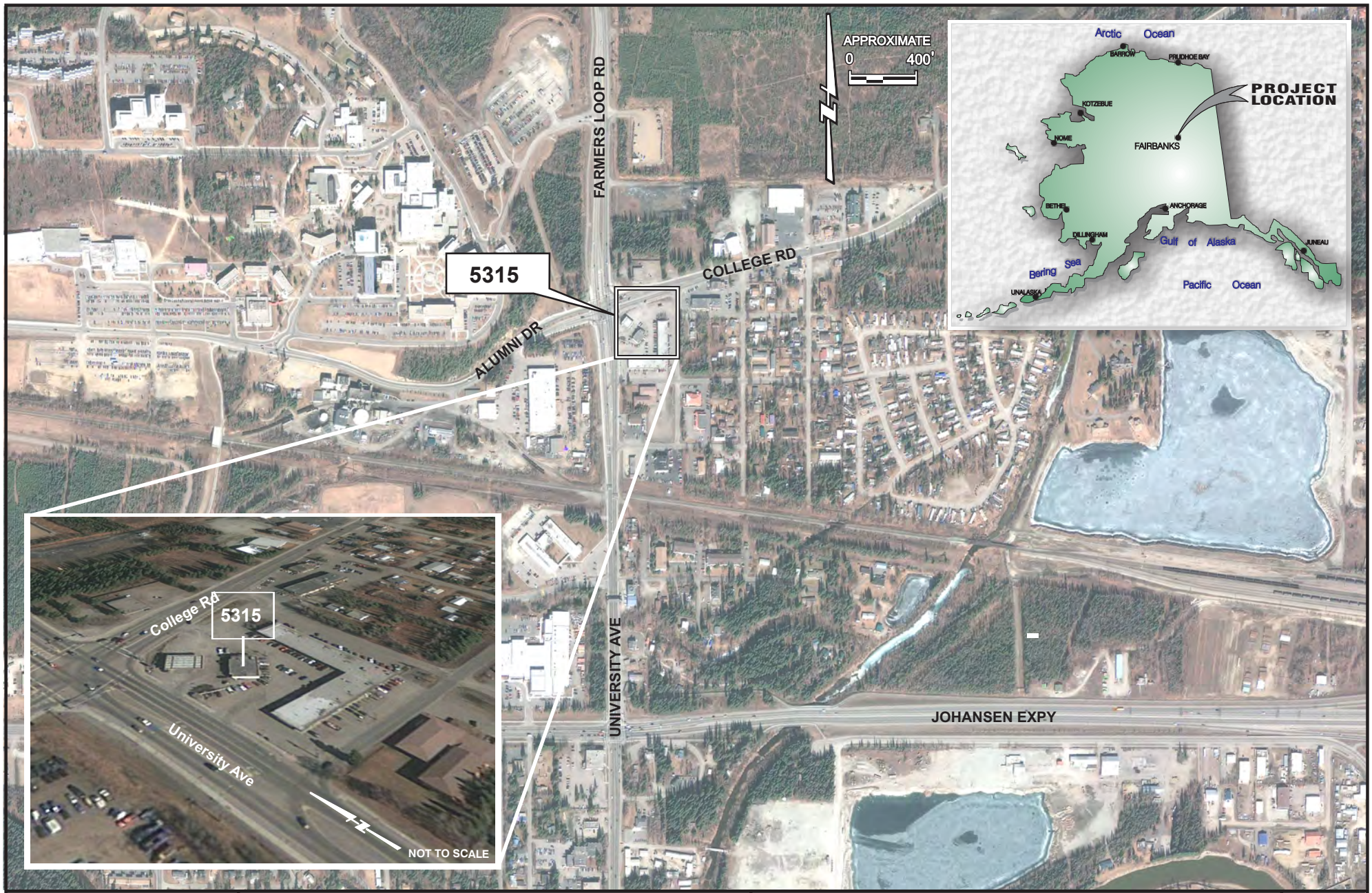
No anomalies were found during the second quarter 2024 groundwater monitoring event that would require additional corrective action or changes to the approved year 2024 Corrective Action Work Plan for this site.

7.0 LIMITATIONS

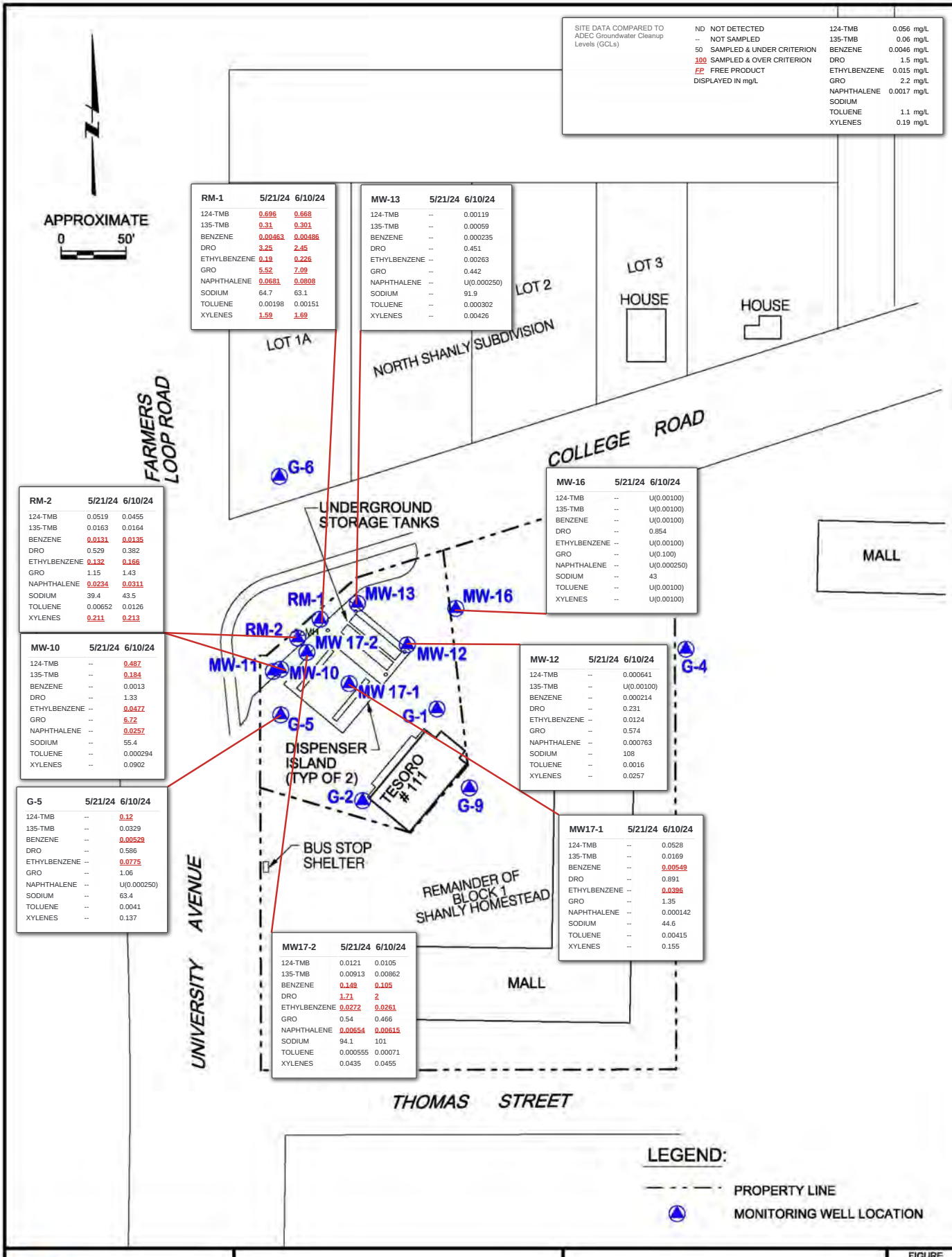
Stantec conducted this monitoring event in accordance with the 2024 Corrective Action Work Plan approved by ADEC, and in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. All sampling activities were completed in accordance with the ADEC *Underground Storage Tanks Procedures Manual – Standard Sampling Procedures* (March 22, 2017). The conclusions in this report are Stantec's professional opinion, as of the time of the report, and concerning the scope described in the report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not consider any subsequent changes. This report relates solely to the specific project for which Stantec was retained and the stated purpose for which the report was prepared. The report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

This report is intended solely for use by the client in accordance with Stantec's contract with the client. While the report may be provided to applicable authorities having jurisdiction and others for whom the client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

FIGURES



Stantec	SPEEDWAY STORE 5315 (7-ELEVEN 46746 - FORMER TNS 111) 2Q JUNE 2024 GWM EVENT REPORT	LOCATION AND VICINITY MAP	FIGURE 1

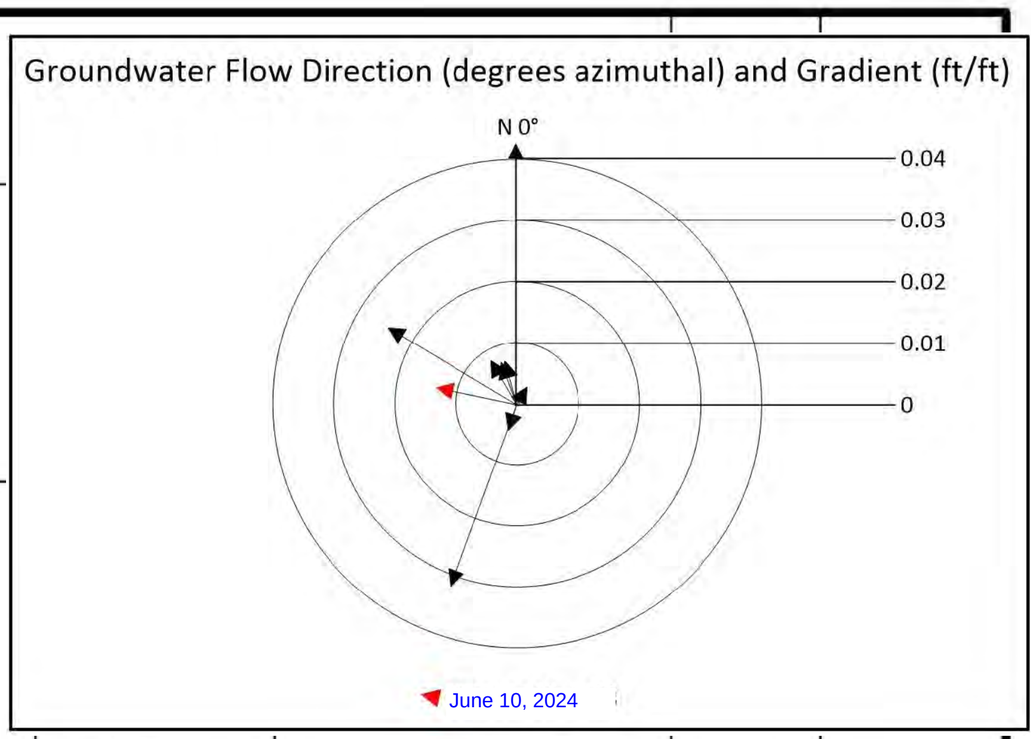


Stantec

Speedway 5315
(7-Eleven 46746 - Former TNS 111)
2Q June GWM Event

Site Map with Analytical Data Results

FIGURE
2



APPROXIMATE
0 50'

LOT 1A
LOT 1
LOT 2
NORTH SHANLY SUBDIVISION

HOUSE
HOUSE

FARMERS LOOP ROAD

COLLEGE ROAD

G-6

UNDERGROUND STORAGE TANKS

MALL

RM-1
MW-13
416.4
MW-16
416.4
RM-2
MH
MW 17-2
416.4
416.4
MW-12
MW-11
MW-10
415.9
MW 17-1
416.5
416.5
G-5
G-1
G-4

DISPENSER ISLAND (TYP OF 2)

TESORO #111

G-2
G-9

BUS STOP SHELTER

REMAINDER OF BLOCK 1 SHANLY HOMESTEAD

MALL

UNIVERSITY AVENUE

THOMAS STREET

LEGEND:

PROPERTY LINE

MONITORING WELL LOCATION

Stantec	Speedway 5325 (7-Eleven 46746 - Former TNS 111) 2Q June GWM Event	Groundwater Elevation Contours	FIGURE 3 185705774

APPENDIX A

Site Background

APPENDIX A – SITE BACKGROUND

Spedway Store 5315 (3679 College Road, Fairbanks, Alaska)
ADEC Facility ID #1112; ADEC File #102.26.026

Speedway Store 5315 (formerly TNS 111) is a retail fuel service station located at the corner of University Drive and College Road in Fairbanks, Alaska. The service station is operated in conjunction with a Tesoro convenience store. A fuel dispensing service station is reported to have been operated at this site since 1971.

Gilfilian Engineering & Environmental Testing (GE^2T), MWH Americas, Inc. (MWH), and Stantec Consulting Services Inc. (Stantec) have performed numerous site investigations and monitoring events at this site since 1995.

November 1990. Shannon & Wilson Inc. installed three groundwater monitoring wells (MW-1, MW-3, and MW-4) and drilled one soil boring (SB-2) at the site to evaluate potential for soil and groundwater contamination prior to right-of-way acquisition. Monitoring Well MW-1 and Boring SB-2 were drilled near the former underground storage tanks (USTs). Petroleum hydrocarbons were detected above Alaska Department of Environmental Conservation (ADEC) soil cleanup levels (SCLs) in MW-1 and Boring SB-2.

February 1991. A release investigation (RI) was conducted by Shannon & Wilson Inc., during which two monitoring wells (MW-10 and MW-16) and seven soil borings were installed. Petroleum hydrocarbons were detected above SCLs in six of the nine soil borings. Petroleum-related compounds were detected in all monitoring wells sampled. The highest concentrations were detected in MW-1 and MW-10.

May 1991. A Phase III RI was conducted that involved drilling two soil borings off the site and installing two new monitoring wells (G-3 and G-4). Petroleum hydrocarbons were not detected above SCLs (borings) or GCLs (monitoring wells), indicating these wells are located beyond the extent of groundwater contamination at the site.

September 1992. Two 12,000-gallon USTs, one 8,000-gallon UST, and one 1,000-gallon UST were removed and replaced with three 10,000-gallon STIP-3, single wall USTs. Petroleum hydrocarbons were detected above SCLs in the UST removal excavations. Due to a nearby high flow groundwater extraction process along the Chena River, operated by a non-Tesoro entity, the groundwater table was lowered by many feet in the surrounding area. Prior to the pumping operation, the groundwater table was typically 12 feet below the ground surface (bgs). When the USTs were replaced, the groundwater was found at 22 feet bgs. After the pumping operation along the Chena River was completed, the groundwater table returned to normal levels. The drop and rise of the groundwater resulted in spreading the smear zone of petroleum contamination over a 12-foot vertical range beneath the site.

July 1995. GE^{2}T installed two new monitoring wells (G-1 and G-2). Petroleum hydrocarbons were not detected above SCLs but were above the ADEC groundwater cleanup levels (GCLs) in both monitoring wells.

August through October 1998. The canopy and fuel dispenser system were upgraded to include new fuel dispensers, a tank monitoring system, and a cathodic protection system. Soil samples collected from below the former dispensers and piping exceeded SCLs for hydrocarbons. As a result, piping was laid in these excavations for expansion of the air sparge (AS) and soil vapor extraction (SVE) system. In addition, six vertical cathodic protection anodes were spaced around the USTs.

May 2001. A RI was conducted that involved drilling two soil borings and installing two new monitoring wells (on-site G-5 and off-site G-6). Samples collected from G-6 did not exceed SCLs or GCLs, but both were exceeded in samples from G-5 (on-site well)

May 2003. Four additional AS wells were installed at the site. Benzene was detected above the SCL in AS Wells AS-13 and AS-14, and diesel range organics (DRO) was detected slightly above the SCL in AS-14. No other compounds were detected above the SCLs.

November 2003. A RI was performed at the site. The RI involved drilling one soil boring that was completed as a 2-inch diameter monitoring well (G-9). No analytes of concern were detected at concentrations above the laboratory practical quantitation limits (PQLs) in soil or groundwater samples collected during the RI.

June 2010. A sampling event was conducted for sulfolane in Monitoring Well MW-10. Sample results were non-detect.

June 2012. MWH conducted an UST closure site assessment. The former UST system consisted of three 10,000-gallon capacity gasoline and diesel tanks, associated piping, and three dispenser islands with one overhead canopy. The three USTs were replaced with two, multi-compartment, 15,000-gallon capacity fiberglass USTs. Petroleum-contaminated soil was encountered during the UST removal. The contaminated soil was removed from the site for off-site thermal treatment. Soil contamination was found at 13 feet bgs, a couple of feet below the bottom of the new USTs. Due to the groundwater conditions, the saturated contaminated soil could not be removed and, therefore, was left in-place.

September 2012. A RI was performed at the site. The RI involved advancing four soil borings (three around the new USTs in the northern portion of the site and one along the west edge of the site) and collecting three soil samples from each soil boring. Three groundwater monitoring wells (MW-11, MW-12, and MW-13) and one air lift well (RM-1) were installed in the four soil borings and groundwater samples were collected. Petroleum hydrocarbons were detected above SCLs in the soil borings along the west edge of the site, the northern portion of the property line on the east side of the USTS, and the northern side of the dispenser island. Petroleum hydrocarbons were detected above the GCLs in all three monitoring wells.

June 2013. A first round of chemical oxidation application of Klozur CR® was injected into two on-site wells (Monitoring Well MW-10 and AS Well AS-9). Monitoring Well G-5 was used to measure the chemical oxidation impact to the groundwater table. The prior and post injection results of intrinsic parameters clearly indicated the effectiveness of the chemical oxidant – in particular with respect to the sodium, pH, total organic carbon (TOC), and dissolved oxygen levels. The laboratory analytical results indicated significant reductions in the petroleum contaminants of concern.

July 2013. A pump test was conducted of Remediation Well RM-1, which was initially designed and constructed to serve as an air-lift well. Due to concerns about maintaining a continuous pumping air-lift well in the sub-Arctic climate found in the Fairbanks area, it was decided to pump the well with a submersible well pump. The field test data collected during the 2-day well pump test indicated that, by recirculating the water pumped from RM-1 into the upgradient horizontal wells that were installed along the bottom edge of the USTs, the contaminated groundwater flowing beneath the USTs would be captured in RM-1. Then the groundwater could be pumped (re-circulated) back into the upgradient horizontal wells. On a quarterly basis, the groundwater would undergo chemical oxidation with the injection of Klozur CR® into the horizontal wells. Also, it was initially planned to add air in the well pump discharge line via a venturi air injector.

August/September 2013. Two rounds of Klozur CR® were injected into one on-site well (Monitoring Well MW-12). Water samples were collected from Monitoring Wells MW-12 and MW-13, and Remediation Well RM-1 prior to and approximately 6 and 8 weeks after the first round of Klozur CR® application. Most analytes of concern showed a significant reduction in concentrations. In addition, the dissolved oxygen level in MW-12 was noted to be very high, which confirmed the claim that Klozur CR® provides an extended oxygen release for long-term remediation of contaminant plumes in groundwater. Given these positive preliminary pilot test findings, MWH recommended additional rounds of application of Klozur CR® chemical oxidant to treat the residual contamination found in the area beneath the USTs.

March 2014. Petroleum compounds were found to exceed GCLs in Monitoring Wells G-1, MW-10, MW-11, MW-12, MW-16, and Remediation Well RM-1. The SVE system remained in operation. The AS system operation was temporarily inactive pending system upgrades.

July 2014. Petroleum compounds were found to exceed GCLs in Monitoring Wells G-5, MW-10, MW-11, and MW-16, as well as Remediation Well RM-1. The SVE system remained in operation. The AS system operation was temporarily inactive pending system upgrades. During July, Remediation Well RM-1 was outfitted with a submersible pump and linked to a series of horizontal injection wells which were positioned at the water table interface along the east and southern periphery of the UST system upgrades at the site. An in-line venturi was installed to aerate water within the remediation system prior to injection.

March 2015. Petroleum compounds were found to exceed GCLs in Monitoring Wells MW-10, MW-11, MW-12, and MW-16, as well as Remediation Well RM-1. The SVE system remained in operation. The operation of the groundwater circulation system was suspended due to mineral deposits or biological growth (related to the abundance of aqueous iron in the system) that fouled

the submersible pump and lowered the efficiency of the well screen at the remediation well (RM-1).

July 2015. Petroleum compounds were found to exceed GCLs in Monitoring Wells MW-10, MW-11, MW-12, and MW-16, as well as Remediation Well RM-1. The SVE system remained in operations. Well rehabilitation, by acid treatment, was performed in RM-1 and the south horizontal injection well. Chemical oxidation treatment with the manual injection of Klozur CR® product was performed at the southeast and northeast horizontal injection wells.

February 2016. Results of the analytical sampling showed the analytes detected above the GCLs included: DRO in Monitoring Wells MW-10 and MW-13, and gasoline range organics (GRO) in Remediation Well RM-1. Chemical oxidation treatment with the manual injection of Klozur CR® product was performed at the southeast and northeast horizontal injection wells.

October 2016. Results of the analytical sampling showed that DRO was detected above the GCL in Monitoring Well MW-10, and benzene and GRO were detected above the GCLs in Remediation Well RM-1. Remediation Well RM-1 was manually injected with NUWELL™. Chemical oxidation treatment with the manual injection of Klozur CR® product was performed at the southeast and northeast horizontal injection wells.

March 2017. Results of the analytical sampling showed analytes present above the GCLs in Monitoring Wells G-1, G-5, MW-10, MW-11, and MW-12. Analytes in exceedance included benzene, ethylbenzene, xylenes, GRO, and DRO. The SVE system continues to operate within normal parameters. Remediation Well RM-1 remains inactive, following the discovery of a frozen circulation line the last week of November 2016. The AS system is currently inactive pending evaluation of the system.

July 2017. Results of the analytical sampling showed analytes present above the GCLs in Monitoring Wells G-1, MW-11, MW-12, and MW-16. Monitoring Wells G-5 and MW-10 had ice plugs present. The expanded suite of volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs) for Monitoring Wells MW-11, MW-12, and Remediation Well RM-1 also indicated GCL exceedances. Remediation Wells RM-1 was placed back in operation at 1.4 gallons per minute at 90 pounds per square inch (psi). SVE and AS systems currently inactive.

March 2018. Results of the analytical sampling showed analytes were present above the GCLs in Monitoring Wells G-5, MW-10, MW-11, MW17-1, and MW17-2. Remediation Well RM-1 was shut down during the winter because of the continued power failure of the newly installed heat trace. The SVE and AS systems remain inactive.

September 2018. Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC GCLs in Monitoring Wells G-5, MW-10, MW-11, MW-12, MW17-1, and MW17-2, as well as Remediation Well RM-1. Analytes in exceedance included: BTEX, GRO, DRO, VOCs, and/or PAHs.

Upon arrival at the site, Remediation Well RM-1, for the groundwater recirculation chemox treatment system, was not operating due to freeze damage caused by heat trace failure. The

RM-1 well pump was placed back into continuous operation after repairs were made to the water line located in RM-1 manhole.
A chemox solution consisting of 110 pounds of Klozur® One, with approximately 800 gallons of clean water, was injected into the two horizontal groundwater injection wells located along the eastern edge of the UST.

March 2019. Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC GCLs in Monitoring Wells G-1, G-5, MW-10, MW-11, MW-16, MW 17-1, and MW 17-2. Analytes in exceedance included: BTEX, GRO, and DRO. It is noted that GRO above the GCL was detected in Monitoring Well G-1, which was uncharacteristic since this well has not had an exceedance for GRO in past 17 years of monitoring. This well will be resampled during the semi-annual monitoring event to further assess the groundwater condition in this area of the site.

Upon arrival at the site, Remediation Well RM-1, for the groundwater recirculation chemox treatment system, was operating but was shut off due to debris entering the pump intake. It will be cleaned and restarted after daily air temperatures remain above freezing.

July 2019. Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC GCLs in Monitoring Wells G-5, MW-10, MW-11, MW 17-1, and MW 17-2 and Remediation Well RM-1. Analytes in exceedance included: BTEX; GRO; DRO; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; naphthalene; and 1-methylnaphthalene. It was noted that GRO above the GCL was detected in Monitoring Well G-1 during March 2019 monitoring (an anomaly after 17 years of sampling), and this well was resampled during this semi-annual monitoring event and GRO was found to be under the PQL and the GCL.

October 2019. A high dose chemox solution of 165 lbs of Klozur® One to 150 gallons of water was injected into three SVE access lines (SVE-1, SVE-2, and SVE-3) while 110 lbs of Klozur® One was injected into the horizontal groundwater injection well on the eastern edge of the UST. The Klozur® One treatments were then pushed into the formation with more than 1000 gallons of water from RM-2. Analytical sampling of RM-1 and RM-2 was conducted. Analyte levels exceeding ADEC GCLs in RM-2 were Benzene, Ethylbenzene, and Xylene. Analyte levels exceeding ADEC GCLs in RM-1 were Ethylbenzene, Xylene, and GRO.

July and August 2020. RM-1 was turned off in January 2020 due to the system freezing. RM-1 was brought back online July 1, 2020. On July 15, 2020, a chemox solution of 110 lbs of Klozur® One to 100 gallons of water was injected into the three SVE access lines and into the horizontal groundwater injection well on the eastern edge of the UST, then pushed into the formation with 150 gallons of water from RM-2 at each point. In total the site was treated with 440 lbs of Klozur® One. A leaking fitting on the line feeding the eastern edge of the UST from the freeze up the previous winter was repaired.

Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC GCLs in Monitoring Wells G-5, MW-10, MW-11, MW 17-1, and MW 17-2 and Remediation Well RM-1. Analytes in exceedance included: BTEX; GRO; DRO; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; naphthalene; and 1-methylnaphthalene. It was noted that sodium was detected for all locations sampled

After the August 2020 sampling event, a low profile equipment shed was installed over remediation well RM-2. Subsequently plumbing was installed to facilitate recirculated groundwater flow pumped from RM-2 to discharge on a full time and year-round basis into the three former SVE horizontal wells located beneath and adjacent to the fuel dispenser islands. Since September 3, 2020, RM-2 had recirculated more than 316,000 gallons of water into the SVE lines prior to the October 14, 2020 sampling event.

October 2020. Stantec conducted a fourth quarter analytical sampling event of Monitoring Wells MW-10, MW-11, MW-12, MW-13, MW-16, MW 17-1, MW 17-2, G-1, and G-5 as well as Remediation Wells RM-1 and RM-2. The groundwater depth measurements indicate the average hydraulic gradient was approximately 0.007 feet per foot directed toward the northwest at 330 degrees. Analytes in exceedance included: benzene, ethylbenzene, and xylenes (BTEX); gasoline range organics (GRO); diesel range organics (DRO), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene. It is noted that analytes levels for RM-2 measurable increased since the August 2020 monitoring event which is interpreted as an indication that the remediation well is capturing the contaminated groundwater plume. Equally important is the finding that the petroleum contaminant levels have decreased appreciably in MWs 17-1 and 17-2 which may be a positive indication of in-situ treatment with the chemox injection.

On October 15, 2020, a chemical oxidation (chemox) injection with Klozur® One of 550 pounds of Klozur® One combined with 350 gallons of water from RM-2 into five treatment points that was then pushed into the formation with flow from RM-1 and RM-2. The Klozur® One injections were into the three soil vapor extraction (SVE) system lines on the western portion of the site and into the two former SVE horizontal lines along the eastern edge of the UST located on the eastern portion of the site. In November 2020, RM-1 shutoff to prevent clogging of the eastern SVE injection lines from the high amount of iron oxide (precipitates and flocculation) noted during the O&M and sampling events in 2020.

March 2021. Stantec conducted a first quarter (semi-annual) analytical sampling event of Monitoring Wells MW-12, MW-13, MW 17-1, MW 17-2, and G-1, as well as Remediation Well RM-1. Results of the March 2021 groundwater analytical sampling showed that analytes detected above ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (9/18/2019) for all wells tested in the primary groundwater samples were:

- Monitoring well MW 12: Ethylbenzene.
- Monitoring well MW 17-1: Ethylbenzene, xylenes, gasoline range organics (GRO), diesel range organics (DRO), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene.
- Monitoring well MW 17-2: DRO, and naphthalene (non-detect lab reporting level exceeded ADEC GCL).
- Remediation well RM-2: Benzene, ethylbenzene, xylenes, GRO, DRO, 1,2,4-trimethylbenzene, and naphthalene.

It is noted that analytes levels for RM-2 measurable increased since the August 2020 monitoring event which is interpreted as an indication that the remediation well is capturing the contaminated

groundwater plume. Equally important is the finding that the petroleum contaminant levels have decreased appreciably in MWs 17-1 and 17-2 which may be a positive indication of in-situ treatment with the chemox injection.

Hydraulic gradient and direction of groundwater flow was not calculated for this monitoring event since the pumping level in remediation well RM-2 was not measured to determine the radius of influence.

October 2021. Stantec conducted a fourth quarter (semi-annual) analytical sampling event of Monitoring Wells MW G-1, MW G-5, MW-10, MW-11, MW-12, MW-13, MW-16, MW-17-1, MW-17-2, and Remediation Wells RM-1, and RM-2. Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated November 18, 2021) for all wells tested. Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-1: Naphthalene
- G-5: Benzene, ethylbenzene, 1,2,4-trimethylbenzene (TMB), and naphthalene.
- MW-10: DRO.
- MW-11: Ethylbenzene, xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW-12: Ethylbenzene, xylenes, and naphthalene.
- MW-16: DRO.
- MW 17-1: Benzene, toluene, ethylbenzene, xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW 17-2: DRO, and naphthalene.
- RM-1: Ethylbenzene, xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- RM-2: Ethylbenzene, and naphthalene.

The professional modeling software program (Surfer®) was used to calculate with polynomial regression the average groundwater hydraulic flow across the site. The groundwater gradient was calculated to be approximately 0.002 feet per foot with flow trending toward the north-northeast at 30 degrees presented on **Figure 2**. However, the "pump and treat" remediation system creates large variation in the groundwater elevations across the site. As shown on the groundwater contour map in **Appendix C**, there is a depression of the groundwater table at "pump and treat" remediation wells RM-1 and RM-2 and slight mounding of the groundwater table at MW G-5, and MW-17-2. In conclusion, it is recommended the average gradient and direction of flow across the site as calculated by regression analyses not be applied to the site but rather note the confirmation of flow towards the "pump and treat" wells (RM-1 and RM-2).

On October 14, 2021, Stantec conducted a chemical oxidation (chemox) injection of Klozur® One product into five treatment/injection points consisting of SVE-1, SVE-2, SVE-3, NE Injection Well, SE Injection Well. The Klozur® One product was mixed with potable water from the retail

convenience store. Following the chemox injection, the Klozur® One solution was "hydraulically flushed" into the subsurface formation by injecting additional potable water into several of the wells. In summary, a total of 550 pounds of Klozur® One product mixed with 1,100 gallons of potable water plus was injected into the subsurface via the remediation wells during the chemox injection process. In addition, 165 gallons of potable water was used to flush the chemox into the subsurface formation.

May 2022. Stantec conducted the second quarter 2022 Groundwater Monitoring Event that involved the sampling of Monitoring Wells MW G-1, MW G-5, MW-10, MW-11, MW-12, MW-16, MW-17-1, MW-17-2, and Remediation Well RM-2. Several of the well sampled had analytes of concern at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345, Table C (updated September 18, 2019) for all wells tested. Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-1: Naphthalene
- G-5: Benzene, ethylbenzene, total xylenes, 1,2,4-trimethylbenzene (TMB), and naphthalene.
- MW-10: Ethylbenzene, DRO, 1,2,4-TMB, and naphthalene.
- MW-11: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW-12: Ethylbenzene and 1,2,4-TMB.
- MW 17-1: Benzene, toluene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW 17-2: Ethylbenzene, total xylenes, GRO, DRO, 1,2,4-TMB, and naphthalene.

The groundwater gradient was calculated to be approximately 0.003 feet per foot with flow trending toward the south-southwest at 198 degrees.

An injection of Klozur® One product (chemox) was not completed during the 1st quarter due to the severe winter conditions but is planned for the 2nd quarter in the month of June 2022.

September 2022: On September 20 and 21, 2022, the Stantec team, which included Engineer in Training (EIT) Geoff Moorhead and EIT Leslie Petre, conducted the 4th quarter analytical sampling event of Monitoring Wells G-1, G-5, MW-10, MW-11, MW-12, MW-13, MW-16, MW-17-1, MW-17-2, and Remediation Wells RM-1 and RM-2.

Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated September 18, 2019) for all wells except G-1 and MW-10. Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-5: Benzene, ethylbenzene, total xylenes, GRO, 1,2,4-trimethylbenzene (TMB), and naphthalene.
- MW-11: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW-12: Benzene, ethylbenzene, 1,2,4-TMB, and naphthalene.
- MW-13: Benzene and ethylbenzene.
- MW-16: DRO.
- MW 17-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW 17-2: Benzene and DRO.
- RM-1: Ethylbenzene, total xylenes, GRO, DRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- RM-2: Benzene, ethylbenzene, total xylenes, GRO, 1,2,4-TMB, and naphthalene.

During the monitoring event the groundwater flow was determined to be to the north at approximately 345° towards the pump and treat wells (RM-1 and RM-2) with a gradient of 0.006 feet per foot. The groundwater level was not measured in RM-2, making it difficult to determine the effect of the pump's drawdown on the groundwater system.

Monthly between July and October, chemox treatments were conducted which involved the injection of 550 pounds of Klozur® One and 1700 gallons of water from the onsite remediation well into formation to treat in-situ contamination.

April 2023: Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated September 18, 2019). Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- Monitoring Well G1: Naphthalene
- Monitoring Well G5: Benzene, ethylbenzene, total xylenes, 1,2,4-TMB, and naphthalene.
- Monitoring Well MW-10: Benzene, ethylbenzene, and naphthalene.
- Monitoring Well MW-12: Ethylbenzene and naphthalene.
- Monitoring Well MW-16: DRO.
- Monitoring Well MW17-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- Remediation Well RM-2: Benzene, ethylbenzene, total xylenes, and naphthalene.

During the monitoring event, the groundwater flow was determined to be to the north at approximately 200° with a gradient of 0.03 feet per foot. The groundwater level was not measured in RM-2, the well was not used to calculate gradient.

May 2023: Chemox monthly events resumed May 24, 2023, after winter break-up so solution could be mixed without flash freezing prior to injection. Frozen AS Well 4, AS Well 11, and the three former SVE horizontal wells placed beneath the UST tanks reduced the usual site dosage. The May monthly chemox event on this site involve the injection of 8 55-pound bags of Klozur® One into the formation. Due to the cold temperatures of the ground water at this site, one bag of the chemical is mixed at a ratio of 1 pound per 2 gallons of water (60 g/L). This is within the manufacturer's suggested range of mixing ratios (50-200 g/L). The site treatment of chemox product involved 450 pounds of Klozur® diluted with more than 900 gallons of water sourced from remediation well RM-2 and applied to the site as follows:

- AS Well 12: 440 gallons of chemox solution followed by 220 gallons of water.
- Northern 4" injection well on east site of UST tanks: 220 gallons of chemox solution followed by 110 gallons of water.
- Southern 4" injections well on east side of UST tanks: 220 gallons of chemox solution. RM-2 was then used to return flow through this injection well at a rate of 2 gpm.

June 2023: Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated September 18, 2019). Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- Monitoring Well MW-11: Benzene, ethylbenzene, 1,2,4-TMB, total xylenes, and naphthalene.
- Monitoring Well MW17-2: Benzene, ethylbenzene, total xylenes, DRO, GRO, and naphthalene.
- Remediation Well RM-1: Ethylbenzene, 1,2,4-TMB, 1,3,5-TMB, GRO, DRO, total xylenes, and naphthalene
- Remediation Well RM-2: Ethylbenzene, total xylenes, and naphthalene.

During the monitoring event, the groundwater flow was determined to be to the north at approximately 345° towards the pump and treat Remediation Wells (RM-1 and RM-2) with a gradient of 0.006 feet per foot. The groundwater level was not measured in RM-2, making it difficult to determine the effect of the pump's drawdown on the groundwater system.

In May of 2023, chemox treatments were conducted which involved the injection of 550 pounds of Klozur® One and 1700 gallons of water from the onsite remediation well into formation to treat in-situ contamination.

July 2023: Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated September 18, 2019). Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- Monitoring Well G5: Benzene, ethylbenzene, total xylenes, and naphthalene
- Monitoring Well MW-10: Benzene, ethylbenzene, DRO, and naphthalene

- Monitoring Well MW-11: Benzene, ethylbenzene, total xylenes, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- Monitoring Well MW-12: Benzene, ethylbenzene, and naphthalene
- Monitoring Well MW-13: Ethylbenzene
- Monitoring Well MW17-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- Monitoring Well MW17-2: Benzene
- Remediation Well RM-1: Ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- Remediation Well RM-2: Benzene, ethylbenzene, total xylenes, 1,2,4-TMB, and naphthalene.

During the monitoring event, the groundwater flow was determined to be to the northwest at approximately 340° towards the pump and treat Remediation Wells (RM-1 and RM-2) with a gradient of 0.006 feet per foot.

On July 27, 2023, chemox treatments were conducted which involved the injection of 605 pounds of Klozur® One and 1100 gallons of water from the onsite remediation well into formation to treat in-situ contamination.

September 2023: Four new injection wells (IW2023-A, IW2023-B, IW2023-C, and IW2023-D) were installed.

October 2023: Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC groundwater cleanup levels (GCLs) as listed in Alaska Administrative Code (AAC) 18AAC 75.345 Table C (updated September 18, 2019). Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-5: Benzene and ethylbenzene
- MW-10: Ethylbenzene
- MW-11: Benzene, ethylbenzene, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW-12: Benzene and ethylbenzene
- MW-13: Ethylbenzene
- MW17-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- MW17-2: Benzene
- RM-1: Ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- RM-2: Benzene, ethylbenzene, total xylenes, and naphthalene.

During the monitoring event, the groundwater flow was determined to be to the northwest at approximately 345° towards the pump and treat Remediation Wells (RM-1 and RM-2) with a gradient of 0.006 feet per foot. No chemox injection occurred during this quarter due to freezing weather conditions.

May and June 2024: Results of the analytical sampling showed analytes were present at concentrations exceeding ADEC GCLs. Monitoring wells and the respective analytes in exceedance of ADEC GCLs included:

- G-5: Benzene, ethylbenzene, and 1,2,4-TMB
- MW-10: Ethylbenzene, 1,2,4_TMB, 1,3,5-TMB, GRO, and naphthalene
- MW17-1: Benzene and ethylbenzene
- MW17-2: Benzene, ethylbenzene, DRO, and naphthelene
- RM-1: Benzene, ethylbenzene, total xylenes, DRO, GRO, 1,2,4-TMB, 1,3,5-TMB, and naphthalene.
- RM-2: Benzene, ethylbenzene, total xylenes, and naphthalene.

During the June 2024 monitoring event the groundwater flow was determined to be to the northwest at approximately 282° with a gradient of 0.012 feet per foot. This is consistent with past events.

Monthly chemical oxidation (chemox) injection occurred in on May 31 and June 13 this quarter. Both events involved the injection of a total of ten 55-pound bags of Klozur™ One, each mixed with 55 gallons of water from remediation well RM-2 and chased with at least 100 gallons of the same water to hydraulically push the solution into the subsurface.

APPENDIX B

Field Methods and Procedures

APPENDIX B – FIELD METHODS AND PROCEDURES

Speedway Store 5315 (3679 College Road, Fairbanks, Alaska)

The following table presents the proposed tasks for the Alaska Department of Environmental Conservation (ADEC)-approved 2024 Corrective Action Work Plan. The scope of these tasks is based on the results and findings of the monitoring and remediation completed to date at Tesoro North Store 111, ADEC Facility ID #1112; ADEC File #100.26.026.

2024 Work Plan Schedule for Speedway Store 5315

Work Plan Tasks for 2024		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Task 1	Monitoring Wells: MW-10, MW-11, MW-12, MW-13, MW-16, G-1, G-5		V, G, D, P, I & S	V, G, D, P, I & S	V, G, D, P, I & S
	MW17-1, MW17-2, and Recirculation/Remediation Wells: RM-1 and RM-2		V, G, D, P, I & S	V, G, D, P, I & S	V, G, D, P, I & S
Task 2	O&M Groundwater Recirculation Wells RM-1 & RM-2		✓	✓	✓
Task 3	Chemical Oxidation Treatment		✓	✓	✓

Key:

AK – Alaska Test Method
D – Diesel range organics by AK102.
G – Gasoline range organics by AK101.
I – Intrinsic indicators include – dissolved oxygen, specific conductance, oxygen-reduction potential, pH, and temperature.
O&M – Operation and Maintenance
P – Polynuclear aromatic hydrocarbons (PAHs), i.e., semi-volatile organic compounds associated with petroleum fuel, by EPA Test Method 8270D Selective Ion Monitoring (SIM).
S – Sodium analyzed by Metals (ICP) Method 6010C.
V – Volatile organic compounds by EPA Test Method 8260C.

- *Task 1 – Groundwater Monitoring*

  Monitoring of the on-site groundwater monitoring wells will be conducted on a variable frequency as outlined in 2024 Work Plan Schedule shown above. Sampling schedules, well locations and analyses are referenced in the 2024 Work Plan Schedule.

- *Task 2 – O&M Groundwater Recirculation Wells RM-1 & RM-2*

  Perform quarterly maintenance on the remediation system, which consists of the existing 4-inch diameter recirculation/remediation wells RM-1 and RM-2. These wells are used as part of a pump and treat system to remediate the soil and groundwater beneath the existing USTs and fuel dispenser islands the injection of a chemical oxidant (see below Task 3).

  The submersible pumps for the two pump and treat systems will run continuously (24-hours per day) subject to acceptable groundwater table levels for operation of the pumps. The pumping systems for both wells are monitored daily for electrical usage, water pressure and water line temperature with iMonnit® wireless sensors and the equipment checked monthly with maintenance that will be provided on an as need basis. The iMonnit® wireless based remote monitoring system uses a wireless broadband network via cellular internet.

- *Task 3 – Chemical Oxidation Treatment*

  Stantec proposes to provide chemical oxidation (chemox) treatment of the petroleum contaminated soil and groundwater into the three existing horizontal injection lines located beneath the fuel dispenser islands and the two injection lines located on the east side of the USTs. The chemox injection system in the vicinity of the fueling islands will be expanded in 2024 as described below in Task 4. The injection of chemox will occur in two quarters of the year. Subject to suitable (non-freezing) weather conditions, Stantec will attempt to inject chemox monthly throughout the year.

  A total of five hundred (500) gallons of a prepared solution of the chemical oxidant Klozur® One (a chemical mixture consisting primarily of sodium persulfate) will be injected into the five existing horizontal injection lines with a dose of 100 gallons per injection well. The chemox mixture for each well will consist of 110 pounds Klozur® One mixed with approximately 100 gallons of water pumped from RM-2 well. The horizontal injection well located along the northeast edge of the USTs will receive an additional 200 gallons of water pumped from RM-2 well to provide a "hydraulic push" to distribute the chemox solution into the surrounding formation. The other four injection lines are continuously dosed with recirculated groundwater discharged from wells RM-1 & RM-2. The on-site monitoring wells will be sampled quarterly as outlined in Task 1 to assess treatment impact on the groundwater table. The remediation/recirculation wells will be sampled on a quarterly basis. Also, the groundwater monitoring wells will be sampled for sodium to assess the distribution of the chemical oxidant.

The Corrective Action Work Plan for the year 2024 will be implemented by Stantec on behalf of Speedway. Groundwater monitoring will be conducted to track migration and trends of contaminants that are present at the site. All sampling activities will be completed in accordance with ADEC's *Underground Storage Tanks Procedures Manual– Standard Sampling Procedures* (March 22, 2017). The methods that will be used for conducting a monitoring event, unless otherwise noted in the monitoring report, will include:

• The static water levels in the monitoring wells will be measured with respect to the top of each well casing. The elevation of the static water level will be based on an arbitrary datum established on-site during a vertical control survey that will be completed by Stantec on an annual basis. The survey will be performed during the summer after the seasonal frost layer thaws.

• The monitoring wells will be purged of a minimum of three well bore volumes prior to collecting the water samples. A new, disposable, Teflon® bailer will be used to sample each well. The first bail of water removed from each well will be examined for petroleum odor, sheen, and any other unique physical features.

• Water samples will be collected in laboratory-supplied sample containers. The samples will be delivered to an ADEC-approved laboratory in accordance with standard chain-of-custody procedures.

• Additional water samples will be collected from the monitoring wells after the well has been purged, as described above, and tested in the field for chemical and physical intrinsic parameters listed in the 2024 Work Plan Schedule shown above.

APPENDIX C

Field Measurements and Notes

APPENDIX D

Tables of Historical Monitoring Data

APPENDIX E

Laboratory Analytical Report and ADEC Laboratory Data Review Checklist

SampleServe

Site Name: TNS #111 **Date:** 05/21/2024 **Name(s):**

Well ID	Time of Day	Depth to Product	Depth to Water	Depth to Bottom	Product Thickness	Well Diameter	Well Material	Comment(s) on Condition of Well
MW17-1	13:28		14.24			2.0	pvc	Compromised Purged 2.5 gal. Orange flocculent. Purple chemox. Unable to sample.

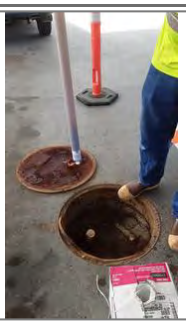
SampleServe

Site Name: TNS #111 **Date:** 05/21/2024, 1:28 PM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW17-1	N/A	14.24	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.55	2.0		pvc
Latitude (decimal)		Longitude (decimal)	Weather
64.8554931		-147.8121171	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔



Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
13:28	14.24		Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Compromised - Purged 2.5 gal. Orange flocculent. Purple chemox. Unable to sample.

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

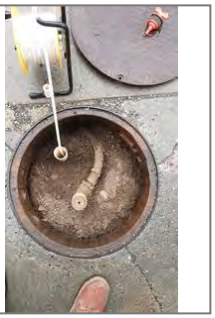
SampleServe

Site Name: TNS #111 **Date:** 05/21/2024, 11:42 AM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW17-2	N/A	14.01	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.17	2.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.8555037		-147.8123842	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔




Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
11:42	14.01		Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Purged 2.5 gallons. Retained for disposal in 101 aeration tank. Clear to light tan. Wispy sheen slight odor. pH 6.81 DO 2.52 SpC 1053 Temp 3.3 ORP 188.3

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 **Date:** 05/21/2024, 1:14 PM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
RM-1	N/A	12.04	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
428.22	4.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.8556339		-147.8123965	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔


Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
13:14	12.04		Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Purged dry about 30 gallons. pH 6.91 DO 1.40 SpC 732 Temp 21.1 ORP 118.8

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

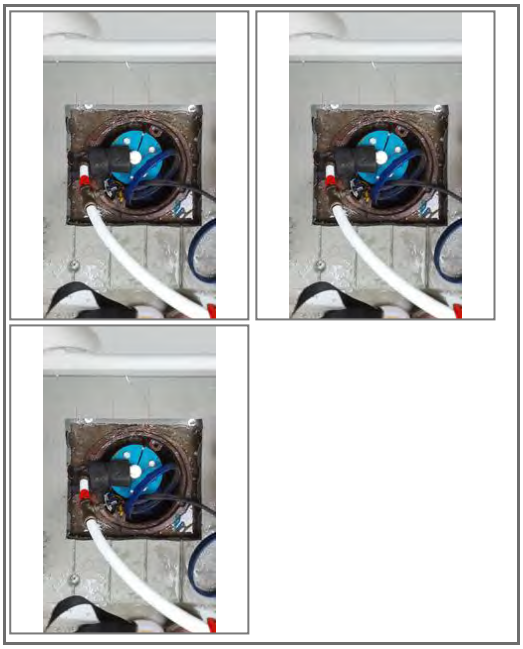
SampleServe

Site Name: TNS #111 **Date:** 05/21/2024, 3:08 PM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
RM-2	N/A		
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.79	4.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.855532		-147.812473	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔



Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
15:08			Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Continuous purge. pH 6.76 DO 3.46 SpC 704.7 Temp 6.1 ORP 205.1

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024 Name(s): _____

Well ID	Time of Day	Depth to Product	Depth to Water	Depth to Bottom	Product Thickness	Well Diameter	Well Material	Comment(s) on Condition of Well
G-1	11:29					4.0	pvc	Compromised Solid ice at 6.3'
G-5	11:49		13.62			2.0	pvc	
MW17-1	10:41		14.05			2.0	pvc	
MW17-2	11:43		13.81			2.0		
MW-10	10:49		14.17			4.0		
MW-11	11:26					2.0		Compromised Solid ice At 5.90'.
MW-12	12:23		11.41			2.0	pvc	
MW-13	12:32		13.39					
MW-16	13:09		12.91	17.87				
RM-1	12:06					4.0		
RM-2	10:18					4.0		

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 11:29 AM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
G-1	N/A		
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
429.97	4.0		pvc
Latitude (decimal)		Longitude (decimal)	Weather
64.8554658		-147.8116616	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
11:29			Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Compromised - Solid ice at 6.3'

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 11:50 AM Name(s): Leslie Petre

GM

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
G-5	N/A	13.62	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.08	2.0		pvc
Latitude (decimal)	Longitude (decimal)	Weather	
64.8553909	-147.8125219		

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
11:49	13.62		Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)
11:50	**13.62**	**--**	**6.87**		**703.80**		**--**		**4.38**		**3.80**		**122.4**	

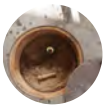
Sample Collected? Yes Time 11:50 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

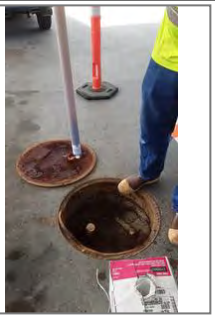
Site Name: TNS #111 Date: 06/10/2024, 10:46 AM Name(s): Leslie Petre

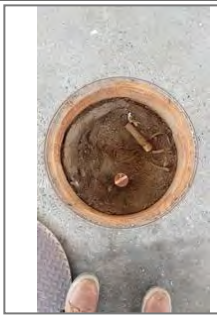


Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW17-1	N/A	14.05	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.55	2.0		pvc
Latitude (decimal)		Longitude (decimal)	Weather
64.8554931		-147.8121171	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔





QA/QC:Duplicate #1

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
10:41	14.05	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 10:46 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 11:45 AM Name(s): Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW17-2	N/A	13.81	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.17	2.0		
Latitude (decimal)	Longitude (decimal)	Weather	
64.8555037	-147.8123842		

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
11:43	13.81	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 11:45 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 10:58 AM Name(s): Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW-10	N/A	14.17	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.12	4.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.8554954		-147.8125854	

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
10:49	14.17	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 10:58 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 11:26 AM **Name(s):** _____

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW-11	N/A		
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.5	2.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.8554907		-147.8125321	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔



Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
11:26			Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? No Time _____ Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

- Compromised - Solid ice At 5.90'.

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 12:27 PM Name(s): Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW-12	N/A	11.41	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
427.85	2.0		pvc
Latitude (decimal)		Longitude (decimal)	Weather
64.8555459		-147.8119444	

Type/Model Meter Used: _____

Calibrated: (date) _____ (time) _____

Cell Vol: _____

Type/Model Pump Used: _____

Pump Intake? _____ ft

Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
12:23	11.41	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 12:27 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 1:00 PM Name(s): Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW-13	N/A	13.39	
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
429.76			
Latitude (decimal)		Longitude (decimal)	Weather
64.8556574		-147.8122008	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
12:32	13.39	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 13:00 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 Date: 06/10/2024, 1:25 PM Name(s): Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
MW-16	N/A	12.91	17.87
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
429.29			
Latitude (decimal)		Longitude (decimal)	Weather
64.8556057		-147.8116528	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
13:09	12.91	X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 13:25 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

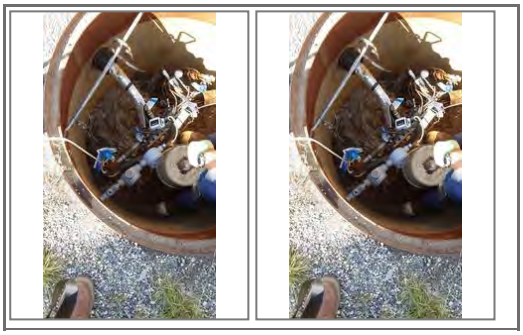
SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 12:07 PM **Name(s):** Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
RM-1	N/A		
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
428.22	4.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.8556339		-147.8123965	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔



Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
12:06			Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 12:07 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

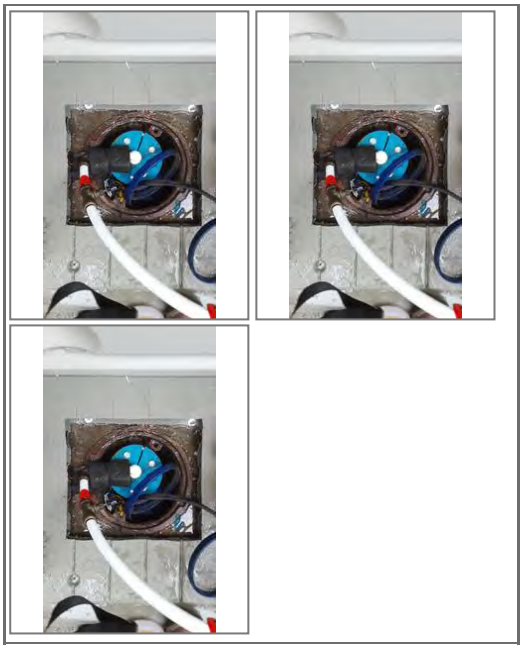
SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 10:29 AM **Name(s):** Leslie Petre

Well ID	Free Product (ft)	Water (ft)	Bottom (ft)
RM-2	N/A		
TOC	Well Dia. (in)	Screen Length (ft)	Well Material
430.79	4.0		
Latitude (decimal)		Longitude (decimal)	Weather
64.855532		-147.812473	

Type/Model Meter Used: _____
Calibrated: (date) _____ (time) _____
Cell Vol: _____
Type/Model Pump Used: _____
Pump Intake? _____ ft
Above / Below Bottom / TOC

Analytical Parameters	Bottles to be filled
PAH 8270 SIM	3 X 40 mL Amber VOAs ✔
BTEX/Fuel	3 X 40 mL Amber VOAs ✔
GRO	3 X 40 mL Amber VOAs ✔
DRO	2 X 100 mL Amber Glass ✔
Sodium	1 X 250 mL Poly ✔



QA/QC:Duplicate #3

Time	Depth to Water (ft)	Flow Rate (ml/Min)	pH		Conductivity (ms/cm)		Turbidity (NTU)		Dissolved O2 (mg/l)		Temp. (Celsius)		Oxygen Reduction Potential (ORP) mv	
10:18		X	Reading	Change* (±0.1)	Reading	Change* (±3%)	Reading	Change* (±10% or <5)	Reading	Change* (±10% or <0.5)	Reading	Change* (±3%)	Reading	Change* (±10mv)

Sample Collected? Yes Time 10:29 Total Pumped from Well? 0 Gal

NOTES / COMMENTS:

*Minimum pumping time 15 Mins. - Collect data every 3 mins once flow through cell is full or once every volume of the flow through cell based on flow rate, which ever is longest. Indicator Parameters Have Stabilized When 3 Consecutive Readings Are Within: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mv for ORP; and ± 10% for Turbidity (when Turbidity is above 5 NTUs) or 3 readings less than 5.0 NTUs; ± 10% mg/l Dissolved Oxygen (when Dissolved Oxygen is above 0.5mg/l) or 3 readings less than 0.5 mg/l.

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 11:29 AM **Name(s):**

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
G-1	64.8554658	-147.8116616

Field Intrinsics	
Sampler Names:	Sheen/Odor?:
pH:	Specific Conductance:
DO:	Temperature (C):
ORP:	Purge Volume (gal):
Notes:	

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 11:50 AM **Name(s):** Leslie Petre

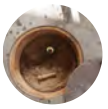
GM

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
G-5	64.8553909	-147.8125219

Field Intrinsics	
Sampler Names: Geoff	Sheen/Odor?: N/n
pH: 6.86	Specific Conductance: 703.9
DO: 6.86	Temperature (C): 3.9
ORP: 123.4	Purge Volume (gal): 2.5
Notes:	

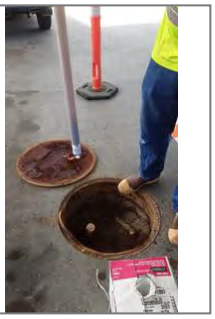
SampleServe

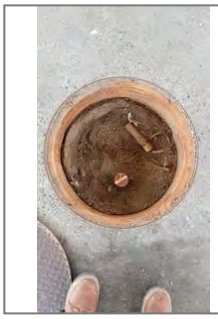
Site Name: TNS #111 **Date:** 06/10/2024, 10:46 AM **Name(s):** Leslie Petre



Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW17-1	64.8554931	-147.8121171

Field Intrinsics	
Sampler Names: Geoff	Sheen/Odor?: N/n
pH: 6.89	Specific Conductance: 720.8
DO: 1.31	Temperature (C): 5.7
ORP: 101.4	Purge Volume (gal): 2.5
Notes:	



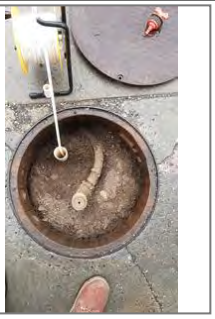


SampleServe

Site Name: TNS #111 Date: 06/10/2024, 11:45 AM Name(s): Leslie Petre

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW17-2	64.8555037	-147.8123842

Field Intrinsics	
Sampler Names: Remi	Sheen/Odor?: Light odor
pH: 6.92	Specific Conductance: 1101
DO: 2.04	Temperature (C): 5.1
ORP: 133.4	Purge Volume (gal): 2.5
Notes: Clear	



SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 10:58 AM **Name(s):** Leslie Petre

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW-10	64.8554954	-147.8125854

Field Intrinsics	
Sampler Names: Remi	Sheen/Odor?: Odor
pH: 6.99	Specific Conductance: 723.5
DO: 2.46	Temperature (C): 5.7
ORP: 117.3	Purge Volume (gal): 2
Notes: Clear	

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 11:26 AM **Name(s):**

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW-11	64.8554907	-147.8125321

Field Intrinsics	
Sampler Names:	Sheen/Odor?:
pH:	Specific Conductance:
DO:	Temperature (C):
ORP:	Purge Volume (gal):
Notes:	

SampleServe

Site Name: TNS #111

Date: 06/10/2024, 12:27 PM

Name(s): Leslie Petre

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW-12	64.8555459	-147.8119444

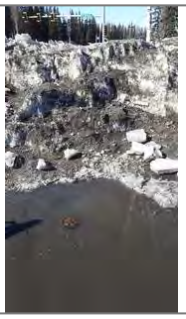
Field Intrinsics	
Sampler Names: Geoff	Sheen/Odor?: None
pH: 7.19	Specific Conductance: 855
DO: 13.33	Temperature (C): 5.9
ORP: 138.8	Purge Volume (gal): 7
Notes: Clear	

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 1:00 PM **Name(s):** Leslie Petre

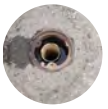
Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW-13	64.8556574	-147.8122008

Field Intrinsics	
Sampler Names: Remi	Sheen/Odor?: No
pH: 7.08	Specific Conductance: 660.7
DO: 4.15	Temperature (C): 7.0
ORP: 247.3	Purge Volume (gal): 6
Notes: Dirt brown	



SampleServe

Site Name: TNS #111 Date: 06/10/2024, 1:25 PM Name(s): Leslie Petre



Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
MW-16	64.8556057	-147.8116528

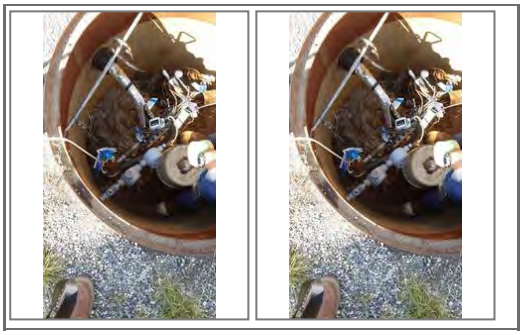
Field Intrinsics	
Sampler Names: Geoff	Sheen/Odor?: None
pH: 7.05	Specific Conductance: 940
DO: 7.65	Temperature (C): 5.1
ORP: 273.5	Purge Volume (gal): 8
Notes: Dark brown. Ice collar	

SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 12:07 PM **Name(s):** Leslie Petre

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
RM-1	64.8556339	-147.8123965

Field Intrinsics	
Sampler Names: Remi	Sheen/Odor?: Strong odor
pH: 7.01	Specific Conductance: 754.0
DO: 7.47	Temperature (C): 7.0
ORP: 125.0	Purge Volume (gal): 600
Notes: Extremely aerated	

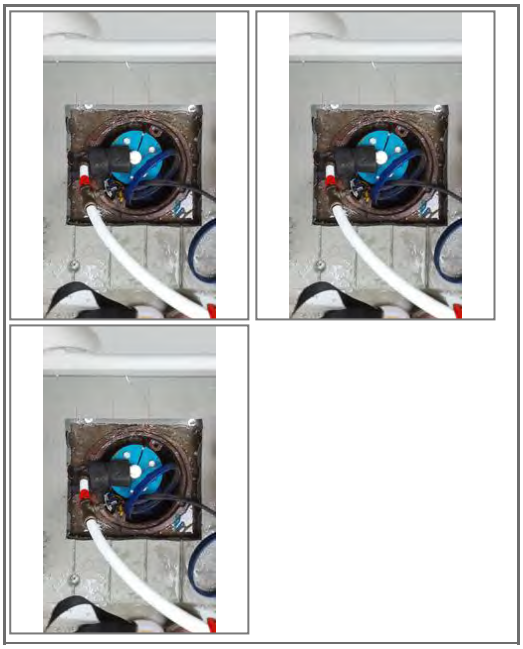


SampleServe

Site Name: TNS #111 **Date:** 06/10/2024, 10:29 AM **Name(s):** Leslie Petre

Location ID	GPS Latitude (decimal)	GPS Longitude (decimal)
RM-2	64.855532	-147.812473

Field Intrinsics	
Sampler Names: Remi	Sheen/Odor?: Strong fuel odor
pH: 6.87	Specific Conductance: 748.7
DO: 1.34	Temperature (C): 6.8
ORP: 102	Purge Volume (gal):
Notes:	



	Well Screen Interval	Ground Water Elevation	124-TMB	135-TMB	Benzene	DRO	Ethylbenzene	GRO	Naphthalene	Sodium	Toluene	Xylenes
Unit	**ft**	**ft**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
G-5												
05/30/2001	--	412.59	—	—	**12.4**	**6.47**	**2.10**	**107**	—	—	**11.5**	**9.90**
12/13/2001	--	413.22	—	—	**6.21**	**3.05**	**1.71**	**72.8**	—	—	**8.71**	**12.74**
05/01/2002	--	414.55	—	—	**11.9**	**6.75**	**1.95**	**83.4**	—	—	**7.70**	**15.1**
08/19/2002	--	417.80	—	—	**12.9**	**7.85**	**2.00**	**86.6**	—	—	**7.31**	**8.53**
11/05/2002	--	417.05	—	—	**5.70**	**7.17**	**1.38**	**41.9**	—	—	**4.37**	**6.70**
03/19/2003	--	416.19	—	—	**2.46**	**7.55**	**0.741**	**30.0**	—	—	**1.75**	**5.25**
08/05/2003	--	418.76	—	—	**5.07**	**5.78**	**0.943**	**47.5**	—	—	**2.99**	**6.41**
03/08/2004	--	414.93	—	—	0.0025400	**3.45**	0.0010400	0.126	—	—	0.0049500	0.03270
09/15/2004	--	416.64	—	—	**0.0057700**	**1.84**	0.000506000	0.0610	—	—	0.0012600	0.0046700
01/10/2005	--	414.80	—	—	U (0.0005)	1.22	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
07/15/2005	--	417.83	—	—	U (0.0005)	1.19	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
02/16/2006	--	414.48	—	—	U (0.0005)	1.08	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
07/27/2006	--	417.09	—	—	U (0.0005)	0.865	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
03/02/2007	--	414.24	—	—	U (0.0005)	1.03	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
10/17/2007	--	416.22	—	—	0.000837000	**3.44**	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
06/05/2008	--	415.73	—	—	U (0.0005)	1.10	0.0045200	0.112	—	—	U (0.0005)	0.03160
09/29/2008	--	417.20	—	—	U (0.0005)	**1.66**	0.0045800	0.07940	—	—	U (0.0005)	0.01030
02/25/2009	--	414.45	—	—	0.00068000	1.30	**0.05790**	**2.53**	—	—	0.00053000	0.174
07/21/2009	--	416.73	—	—	0.001800	1.27	U (0.001)	U (0.05)	—	—	U (0.0010	U (0.003)
03/17/2010	--	413.98	—	—	**0.0130**	0.961	**0.19**	**4.40**	—	—	0.001400	**0.37**
09/15/2010	--	416.59	—	—	**0.08490**	1.10	0.0027900	0.287	—	—	0.000886000	0.01490
03/22/2011	--	413.96	—	—	U (0.0005)	1.04	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
09/01/2011	--	417.44	—	—	0.0033100	0.898	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
03/13/2012	--	414.37	—	—	**0.03070**	1.02	**0.113**	**3.63**	—	—	0.0034600	**0.23**
07/23/2012	--	416.90	—	—	0.0019900	0.571	U (0.0010)	U (0.05)	—	—	U (0.0010)	U (0.0030)
08/13/2013	--	416.50	—	—	U (0.0005)	0.884	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
03/18/2014	--	414.36	—	—	**0.0250**	0.778	**0.07390**	**2.44**	—	—	0.0061200	0.161
07/31/2014	--	419.24	—	—	**0.49**	1.40	**0.0710**	2.20	—	—	0.006400	**0.21**
03/03/2015	--	414.58	—	—	U (0.0005)	0.43	U (0.0005)	U (0.05)	—	—	U (0.0005)	0.001500
07/27/2015	--	416.18	—	—	**0.92**	1.40	**0.59**	**10.0**	—	—	0.57	**1.10**
02/23/2016	--	415.19	—	—	U (0.001)	0.21	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
10/06/2016	--	418.75	—	—	U (0.001)	0.95	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
03/16/2017	--	414.93	—	—	**0.27**	1.30	**0.56**	**7.90**	—	—	0.36	**1.91**
03/29/2018	--	414.68	—	—	**0.38**	**1.60**	**0.72**	**14.0**	—	—	0.30	**2.27**
09/07/2018	--	418.68	—	—	**0.61**	**2.40**	**0.51**	**7.40**	—	—	0.91	**1.92**
03/13/2019	--	415.24	—	—	**0.11**	1.20	**0.39**	**5.80**	—	—	0.0110	**1.05**
07/30/2019	--	416.31	—	—	U (0.15)	1.20	**0.18**	**2.90**	—	—	U (0.1)	**0.71**
08/04/2020	--	419.57	—	—	**0.114**	1.07	**0.123**	0.712	—	—	0.000683000	0.124
10/14/2020	--	418.67	—	—	0.001600	**2.16**	0.01480	0.251	—	—	0.0051300	0.0790

Unit	Well Screen Interval ft	Ground Water Elevation ft	124-TMB ppm	135-TMB ppm	Benzene ppm	DRO ppm	Ethylbenzene ppm	GRO ppm	Naphthalene ppm	Sodium ppm	Toluene ppm	Xylenes ppm
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
10/12/2021	--	419.21	—	—	**0.0060700**	1.42	**0.06610**	0.909	—	—	0.000300 J	0.09280
05/17/2022	--	417.95	**0.06810**	0.0039900	**0.04620**	1.46	**0.315**	1.45	**0.03970**	66.8	0.178	**0.258**
09/20/2022	--	417.59	**0.122**	0.04460	**0.04760**	1.05	**0.266**	**2.89**	**0.03570**	61.5	0.0200	**0.666**
04/27/2023	--	--	**0.285**	0.02450	**0.01910**	1.21	**0.232**	1.23	**0.03990**	79.9	0.00088000	**0.233**
07/25/2023	--	--	**0.05670**	0.03090	**0.01730**	0.677	**0.187**	1.36	**0.02110**	53.9	U(0.00500)	**0.281**
10/24/2023	--	--	0.009500	0.0029700	**0.0093400**	0.424	**0.05170**	0.629	U(0.000250)	89.5	U(0.00100)	0.05120
06/10/2024	--	416.46	**0.12**	0.03290	**0.0052900**	0.586	**0.07750**	1.06	U(0.000250)	63.4	0.004100	0.137
MW17-1												
03/29/2018	--	--	—	—	**2.90**	**6.00**	**1.20**	U (100)	—	—	**6.60**	**8.50**
09/07/2018	--	--	—	—	**0.18**	**4.80**	**3.30**	**80.0**	—	—	**26.0**	**18.0**
03/14/2019	--	415.28	—	—	**3.00**	**3.30**	**1.70**	**47.0**	—	—	**7.40**	**7.40**
07/30/2019	--	416.35	—	—	**0.36**	**3.90**	**3.40**	**88.0**	—	—	**9.20**	**14.9**
08/04/2020	--	419.63	—	—	**0.126**	**2.78**	**3.47**	**61.1**	—	—	**22.5**	**13.8**
10/15/2020	--	418.92	—	—	0.0231 J	**4.03**	**0.305**	**5.90**	—	—	0.254 J	**2.10**
03/30/2021	--	415.86	—	—	0.000535 J	**2.66**	**0.04010**	**2.59**	—	—	U (0.001)	0.178
10/12/2021	--	417.63	—	—	1.61 Q	**3.68**	1.03 E	**30.9**	—	—	5.27 Q	**3.69**
05/17/2022	--	417.95	**1.53**	**0.315**	**0.582**	**7.43**	**3.03**	**30.8**	**0.241**	60.3	**1.63**	**9.48**
09/21/2022	--	417.52	**0.761**	**0.172**	**0.36**	**4.20**	**1.41**	**15.0**	**0.138**	117	0.313	**4.20**
10/26/2022	--	417.18	—	—	**0.05850**	**4.44**	**0.603**	**6.34**	**0.06240**	143	0.04040	**1.62**
04/27/2023	--	--	**0.845**	**0.152**	**0.174**	**4.14**	**1.22**	**13.4**	**0.09230**	81.9	0.157	**3.20**
07/25/2023	--	418.06	**1.22**	**0.294**	**0.433**	**3.97**	**1.66**	**16.5**	**0.17**	89.7	0.0930	**4.34**
08/16/2023	--	417.81	**0.677**	**0.163**	**0.02190**	**4.34**	**0.606**	**8.10**	**0.08860**	51.9	0.0027900	**1.14**
09/27/2023	--	417.93	0.03090	**0.141**	**0.03120**	**2.44**	**0.193**	**6.54**	**0.05050**	73.5	0.0012800	**0.282**
10/24/2023	--	--	**0.27**	**0.06210**	**0.02150**	**2.44**	**0.337**	**4.61**	**0.01620**	96.2	0.0052200	**0.712**
06/10/2024	--	416.50	0.05280	0.01690	**0.0054900**	0.891	**0.03960**	1.35	0.000142000	44.6	0.0041500	0.155
MW17-2												
03/29/2018	--	--	—	—	U (0.30)	**12.0**	U (0.30)	**22.0**	—	—	**2.70**	**2.11**
09/07/2018	--	--	—	—	**0.18**	**15.0**	**0.66**	**17.0**	—	—	**3.20**	**4.50**
03/14/2019	--	415.28	—	—	**0.0470**	**10.0**	**0.0940**	**4.20**	—	—	0.94	**1.49**
07/29/2019	--	416.35	—	—	U (0.15)	**8.50**	**0.50**	**16.0**	—	—	**1.80**	**3.90**
08/04/2020	--	419.67	—	—	**0.05050**	**20.5**	**0.236**	**5.03**	—	—	0.477	**415**
10/15/2020	--	418.62	—	—	0.00395 J	**8.25**	**0.05080**	0.601	—	—	0.02350	**0.218**
03/30/2021	--	415.35	—	—	0.000952 J	**7.78**	0.01320	0.309	—	—	U (0.001)	0.02640
10/12/2021	--	418.57	—	—	0.00157 J	**3.22**	0.00324 J	0.0560 B,J	—	—	0.005900	0.0107 J
05/17/2022	--	418.02	**0.241**	**0.06790**	0.0032500	**7.44**	**0.618**	**4.50**	**0.02690**	70.9	0.0041700	**1.50**
09/21/2022	--	417.49	0.0020800	0.000324000	**0.03270**	**3.13**	0.0070200	0.194	0.000392000	206	0.001100	0.01980
10/26/2022	--	417.16	—	—	**0.04850**	**1.76**	0.0063800	0.227	U	146	0.000738000	0.01930
06/06/2023	--	417.83	0.04270	0.02320	**0.06030**	**2.43**	**0.182**	**2.38**	**0.02070**	133	0.0010700	**0.447**
07/25/2023	--	417.49	0.0031800	0.002300	**0.0081500**	0.866	0.003700	U(2.00)	0.0010400	90.4	U(0.00100)	0.0062100
08/16/2023	--	417.74	0.0056700	0.0039400	0.0042500	U(0.800)	0.0047700	0.168	**0.0029800**	71.8	U(0.00100)	0.007700

Unit	Well Screen Interval ft	Ground Water Elevation ft	124-TMB ppm	135-TMB ppm	Benzene ppm	DRO ppm	Ethylbenzene ppm	GRO ppm	Naphthalene ppm	Sodium ppm	Toluene ppm	Xylenes ppm
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
09/27/2023	--	417.95	0.000885000	0.0011300	**0.0053900**	0.628	0.000505000	0.222	0.000349000	69.4	U(0.00100)	0.0011300
10/24/2023	--	--	0.0021300	0.0025400	**0.0060900**	1.26	0.0015400	0.231	U(0.000250)	96.8	U(0.00100)	0.0032800
05/21/2024	--	416.16	0.01210	0.0091300	**0.149**	**1.71**	**0.02720**	0.54	**0.0065400**	94.1	0.000555000	0.04350
06/10/2024	--	416.36	0.01050	0.0086200	**0.105**	**2.00**	**0.02610**	0.466	**0.0061500**	101	0.00071000	0.04550
MW-10												
03/10/1994	--	418.07	—	—	**19.0**	—	**2.30**	—	—	—	**24.0**	**19.0**
09/09/1994	--	419.89	—	—	**15.2**	—	**0.90**	—	—	—	**18.0**	**14.9**
12/12/1994	--	418.10	—	—	**16.7**	—	**2.10**	—	—	—	**20.0**	**15.5**
08/15/1997	--	415.92	—	—	**8.30**	—	**1.16**	**77.0**	—	—	**14.4**	**9.35**
05/27/1999	--	415.09	—	—	**6.88**	**12.8**	**1.35**	**64.0**	—	—	**13.4**	**7.17**
04/17/2000	--	413.89	—	—	**1.86**	**5.84**	**0.887**	**35.0**	—	—	**7.06**	**3.47**
10/26/2000	--	417.44	—	—	**1.88**	**9.04**	**0.914**	**39.7**	—	—	**7.20**	**5.53**
12/13/2001	--	413.14	—	—	**2.70**	**10.1**	**1.59**	**53.8**	—	—	**9.60**	**7.73**
05/01/2002	--	414.55	—	—	**0.01220**	**1.96**	0.01370	1.10	—	—	0.007400	0.117
08/19/2002	--	417.86	—	—	**1.92**	**15.9**	**0.664**	**27.5**	—	—	**3.55**	**3.512**
11/05/2002	--	417.06	—	—	**0.04560**	**6.78**	**0.03680**	1.70	—	—	0.0053300	0.1189
03/19/2003	--	416.21	—	—	**0.477**	**12.9**	**0.319**	**8.80**	—	—	0.313	**1.404**
08/05/2003	--	418.43	—	—	**2.54**	**17.6**	**0.876**	**61.8**	—	—	**8.79**	**7.09**
03/08/2004	--	414.92	—	—	**0.198**	**10.3**	U (0.025)	**12.8**	—	—	0.912	**2.89**
09/15/2004	--	416.64	—	—	**0.08020**	**6.01**	**0.04970**	2.06	—	—	0.0023400	**0.446**
07/15/2005	--	417.82	—	—	**0.416**	**14.9**	**0.513**	**25.6**	—	—	**3.37**	**3.63**
07/27/2006	--	417.06	—	—	**0.413**	**16.3**	**0.714**	**32.5**	—	—	**5.30**	**4.88**
03/02/2007	--	414.23	—	—	**0.203**	**8.80**	**0.545**	**32.8**	—	—	**2.33**	**3.90**
10/17/2007	--	416.47	—	—	0.0032400	**6.43**	0.01050	1.15	—	—	0.0010200	0.04060
06/05/2008	--	415.69	—	—	**0.23**	**10.2**	**1.18**	**38.4**	—	—	**2.90**	**8.14**
09/29/2008	--	417.20	—	—	0.0013900	**3.67**	0.0120	1.18	—	—	0.0040300	0.07770
02/25/2009	--	--	—	—	**0.07780**	**30.3**	**1.18**	**43.4**	—	—	**2.70**	**8.89**
07/21/2009	--	416.71	—	—	**0.0140**	**11.8**	**1.26**	**47.3**	—	—	**1.77**	**12.2**
03/17/2010	--	413.98	—	—	0.002700	**16.2**	**1.20**	**92.0**	—	—	**1.50**	**9.50**
09/15/2010	--	416.60	—	—	**0.0063500**	**21.3**	**0.776**	**16.2**	—	—	0.09020	**4.06**
03/22/2011	--	414.01	—	—	0.0042500	**17.4**	**0.678**	**16.0**	—	—	0.01950	**3.15**
09/01/2011	--	417.49	—	—	**0.0067300**	**30.5**	**0.498**	**22.5**	—	—	0.09080	**3.00**
03/13/2012	--	414.42	—	—	U (0.010)	**10.3**	**0.118**	**4.24**	—	—	U (0.010)	**0.679**
07/23/2012	--	416.97	—	—	0.0022600	**2.57**	0.0016100	0.32	—	—	0.001200	U (0.0030)
02/21/2013	--	414.24	—	—	0.000877000	**4.55**	0.0070200	**2.69**	—	—	0.0015600	0.166
08/13/2013	--	416.54	—	—	0.0024500	**10.3**	**0.02160**	1.59	—	—	0.0045500	0.07550
03/19/2014	--	414.30	—	—	0.000642000	**7.82**	0.01450	1.98	—	—	0.0040400	0.119
07/31/2014	--	419.65	—	—	**0.0110**	**10.0**	**0.0470**	**5.00**	—	—	0.002400	**1.20**
03/03/2015	--	414.98	—	—	0.00067000	**3.20**	0.00200	0.23	—	—	U (0.0005)	0.006300
07/27/2015	--	416.16	—	—	0.001200	**4.00**	0.003700	0.65	—	—	0.00200	0.0110

	Well Screen Interval	Ground Water Elevation	124-TMB	135-TMB	Benzene	DRO	Ethylbenzene	GRO	Naphthalene	Sodium	Toluene	Xylenes
Unit	**ft**	**ft**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
02/23/2016	--	415.20	—	—	U (0.001)	**2.70**	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
10/06/2016	--	418.72	—	—	U (0.001)	**2.30**	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
03/16/2017	--	414.92	—	—	**0.0110**	**6.70**	**0.16**	**3.70**	—	—	0.002700	**0.489**
03/29/2018	--	414.60	—	—	**0.0220**	**13.0**	**0.35**	**9.60**	—	—	0.0100	**1.30**
09/07/2018	--	418.69	—	—	**0.0270**	**13.0**	**0.27**	**5.20**	—	—	0.005200	**1.283**
03/13/2019	--	415.23	—	—	**0.0160**	**8.00**	**0.21**	**3.50**	—	—	U (0.002)	**0.726**
07/29/2019	--	416.33	—	—	U (0.15)	**13.0**	**0.20**	**5.60**	—	—	U (0.1)	**0.82**
08/04/2020	--	419.74	—	—	**0.05770**	**1.90**	**0.597**	**4.20**	—	—	0.142	**1.89**
10/15/2020	--	418.63	—	—	**0.0050600**	**1.74**	**0.06490**	1.12	—	—	0.03870	**0.198**
10/12/2021	--	417.98	—	—	0.000209 J,Q	**2.43**	0.00142 J	0.280 B,J	—	—	U (0.005)	0.00214 J
05/17/2022	--	418.01	**0.06940**	0.01850	0.0014700	**3.65**	**0.03180**	0.858	**0.0028600**	68.8	0.00300	0.09130
09/20/2022	--	417.45	0.02010	0.0059600	0.002100	1.34	0.0095500	0.105	0.001500	111	0.000407000	0.0250
04/27/2023	--	--	0.02660	0.0071800	**0.0072900**	1.43	**0.02070**	0.568	**0.0041500**	80.5	0.000835000	0.04210
07/25/2023	--	417.87	0.02650	0.0086600	**0.01410**	**1.88**	U(0.00100)	0.556	**0.0025700**	62.6	U(0.00100)	0.03110
10/24/2023	--	--	0.04050	0.01380	0.0027100	0.354	**0.02050**	0.461	0.000436000	68.3	U(0.00100)	0.02760
06/10/2024	--	415.95	**0.487**	**0.184**	0.001300	1.33	**0.04770**	**6.72**	**0.02570**	55.4	0.000294000	0.09020
MW-12												
09/28/2012	--	416.30	—	—	0.0043800	**2.74**	**3.51**	**165**	—	—	**13.9**	**19.5**
02/21/2013	--	414.30	—	—	**0.0120**	**3.66**	**2.69**	**71.1**	—	—	**7.69**	**12.8**
08/13/2013	--	416.54	—	—	**0.03340**	**6.05**	**1.00**	**22.6**	—	—	**7.30**	**6.21**
09/24/2013	--	--	—	—	**0.0091300**	**7.11**	**0.344**	**8.35**	—	—	**1.65**	**1.72**
11/19/2013	--	415.65	—	—	**0.01170**	**11.7**	**0.527**	**13.5**	—	—	**1.83**	**2.19**
03/19/2014	--	414.40	—	—	**0.01280**	**11.4**	**0.663**	**27.9**	—	—	**2.24**	**5.34**
07/31/2014	--	419.67	—	—	U (0.0005)	0.50	0.002700	0.18	—	—	0.006300	0.0150
03/03/2015	--	416.05	—	—	U (0.0005)	1.20	**0.0220**	**6.80**	—	—	0.0100	**0.24**
07/27/2015	--	416.21	—	—	0.00057000	0.99	**0.0260**	**3.20**	—	—	0.0110	0.19
02/23/2016	--	415.28	—	—	U (0.001)	0.32	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
10/06/2016	--	418.79	—	—	U (0.001)	0.39	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
03/16/2017	--	415.00	—	—	U (0.02)	1.50	**0.30**	**3.80**	—	—	U (0.02)	**0.52**
07/07/2017	--	417.04	—	—	U (0.002)	1.40	**0.13**	**2.80**	—	—	U (0.04)	**0.38**
03/29/2018	--	414.69	—	—	U (0.003)	0.58	U (0.003)	2.00	—	—	U (0.002)	U (0.002)
09/07/2018	--	418.78	—	—	U (0.0004)	0.56	**0.0190**	1.10	—	—	U (0.001)	0.0630
03/13/2019	--	415.30	—	—	U (0.003)	0.78	0.0100	1.30	—	—	U (0.002)	0.0550
07/30/2019	--	416.38	—	—	U (0.003)	0.47	U (0.003)	0.26	—	—	U (0.002)	0.003900
08/03/2020	--	422.58	—	—	0.000353000	0.852	**0.05380**	1.23	—	—	0.03640	**0.487**
10/14/2020	--	418.68	—	—	**0.01920**	0.658 J	**0.123**	1.08	—	—	0.000817 J	**0.425**
03/30/2021	--	415.36	—	—	0.000395 J	1.26	**0.02210**	**2.30**	—	—	0.000853 J	0.06760
10/12/2021	--	418.00	—	—	0.000217 J	0.989	**0.07220**	1.93	—	—	0.0021500	**0.50**
05/17/2022	--	418.03	**0.116**	0.0250	0.000342000	0.745	**0.01840**	0.547	0.000545000	66.9	0.000613000	0.0940
09/21/2022	--	417.55	**0.05720**	0.02380	**0.0240**	0.787	**0.0980**	0.528	**0.005800**	66.5	0.0024300	0.188

Unit	Well Screen Interval ft	Ground Water Elevation ft	124-TMB ppm	135-TMB ppm	Benzene ppm	DRO ppm	Ethylbenzene ppm	GRO ppm	Naphthalene ppm	Sodium ppm	Toluene ppm	Xylenes ppm
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
04/27/2023	--	--	0.04830	0.04420	U(0.00100)	0.614	**0.01980**	0.662	**0.0073700**	56.0	0.000298000	0.02720
07/25/2023	--	417.81	0.01680	0.01040	**0.0079600**	0.336	**0.06610**	0.43	**0.0039700**	56.3	U(0.00100)	0.118
10/24/2023	--	--	U(0.00100)	0.0010900	**0.0054300**	U(0.840)	**0.02920**	0.196	0.000731000	110	0.0013400	0.0083800
06/10/2024	--	416.44	0.000641000	U(0.00100)	0.000214000	0.231	0.01240	0.574	0.000763000	108	0.001600	0.02570
MW-13												
09/28/2012	--	416.31	—	—	U (0.0005)	0.738	**0.02630**	**8.11**	—	—	0.03160	**0.609**
02/21/2013	--	414.31	—	—	0.001300	**1.90**	0.01250	0.649	—	—	U (0.0005)	0.167
08/13/2013	--	416.55	—	—	U (0.0005)	0.839	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
09/24/2013	--	--	—	—	U (0.0005)	0.736	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
11/19/2013	--	415.48	—	—	U (0.0005)	0.478	U (0.0005)	U (0.05)	—	—	0.000751000	0.0016800
03/18/2014	--	414.42	—	—	0.000671000	1.13	U (0.0005)	0.05930	—	—	0.000846000	0.0020800
07/31/2014	--	419.67	—	—	U (0.0005)	U (0.42)	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)
03/03/2015	--	415.04	—	—	**0.0200**	0.62	**0.0280**	0.82	—	—	U (0.0005)	0.13
07/27/2015	--	416.24	—	—	U (0.0005)	0.58	0.001400	U (0.05)	—	—	U (0.0005)	0.004600
02/23/2016	--	415.31	—	—	U (0.001)	**2.30**	0.009600	1.00	—	—	U (0.001)	0.0730
10/06/2016	--	418.80	—	—	U (0.001)	0.65	U (0.001)	U (0.05)	—	—	U (0.001)	0.005800
03/16/2017	--	415.02	—	—	U (0.002)	0.44	U (0.0053)	0.15	—	—	U (0.002)	0.0130
07/07/2017	--	417.06	—	—	U (0.002)	0.32	U (0.003)	U (1.0)	—	—	U (0.002)	U (0.002)
03/29/2018	--	414.70	—	—	U (0.003)	0.45	U (0.003)	U (1)	—	—	U (0.002)	U (0.002)
09/07/2018	--	418.76	—	—	U (0.0004)	0.43	U (0.001)	U (0.15)	—	—	U (0.001)	U (0.002)
03/13/2019	--	415.34	—	—	U (0.003)	0.36	0.007200	U (1.3)	—	—	U (0.002)	0.009400
07/29/2019	--	416.37	—	—	U (0.003)	1.10	0.008500	0.45	—	—	U (0.002)	0.02140
08/03/2020	--	419.57	—	—	0.000323000	0.554	**0.04390**	1.01	—	—	0.03510	**0.454**
10/14/2020	--	418.67	—	—	**0.0180**	1.30	**0.155**	1.86	—	—	0.01080	**0.63**
03/30/2021	--	415.41	—	—	0.00019 J	0.341 J	0.0036100	0.139 B	—	—	U (0.001)	0.0070500
10/12/2021	--	418.00	—	—	U (0.001)	0.538 J	0.000274 J	0.0684 B,J	—	—	U (0.001)	0.0076900
09/21/2022	--	417.54	0.01530	0.0074900	**0.0079700**	0.569	**0.03090**	0.293	U(0.000250)	64.1	0.001200	0.07240
06/06/2023	--	417.91	0.000842000	0.00014000	0.000573000	0.659	0.0120	0.218	0.0013400	85.2	U(0.00100)	0.01010
07/25/2023	--	416.86	0.0034300	0.0022400	0.0022500	0.356	**0.01640**	0.20	U(0.000250)	55.2	U(0.00100)	0.02290
10/24/2023	--	--	0.0064400	0.0036700	0.0029900	U(0.840)	**0.01570**	0.111	U(0.000250)	140	0.000576000	0.02250
06/10/2024	--	416.37	0.0011900	0.00059000	0.000235000	0.451	0.0026300	0.442	U(0.000250)	91.9	0.000302000	0.0042600
MW-16												
02/26/1992	--	418.29	—	—	0.00400	—	U	—	—	—	U	U
06/04/1992	--	418.41	—	—	0.00300	—	U	—	—	—	U	0.00700
11/30/1992	--	416.60	—	—	**0.51**	—	**0.0560**	—	—	—	0.0940	0.15
02/24/1993	--	418.13	—	—	**0.41**	—	**0.0360**	—	—	—	0.0330	0.0840
08/18/1993	--	420.26	—	—	**0.0990**	—	U	—	—	—	U	0.0140
11/23/1993	--	419.59	—	—	**0.0390**	—	U	—	—	—	U	0.00400
03/10/1994	--	418.28	—	—	**0.00500**	—	U	—	—	—	0.00100	U
06/01/1994	--	418.82	—	—	**0.0220**	—	0.00300	—	—	—	U	0.00300

Unit	Well Screen Interval ft	Ground Water Elevation ft	124-TMB ppm	135-TMB ppm	Benzene ppm	DRO ppm	Ethylbenzene ppm	GRO ppm	Naphthalene ppm	Sodium ppm	Toluene ppm	Xylenes ppm
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
09/08/1994	--	420.22	—	—	U	—	U	—	—	—	U	U
12/14/1994	--	418.22	—	—	**0.0120**	—	0.00100	—	—	—	U	U
12/20/1995	--	414.53	—	—	**0.0550**	—	U	—	—	—	U	0.00300
05/16/1996	--	415.78	—	—	**0.00700**	—	U	—	—	—	U	U
08/15/1996	--	416.58	—	—	U	—	U	—	—	—	U	U
12/09/1996	--	415.43	—	—	**0.007100**	—	U	—	—	—	U	U
03/20/1997	--	414.40	—	—	**0.005600**	—	U	—	—	—	U	U
11/18/1997	--	415.22	—	—	0.0013400	—	U	U	—	—	0.0010100	0.0013500
05/01/1998	--	414.38	—	—	**0.0056700**	0.534	0.0019300	0.0890	—	—	0.0030800	0.0073900
10/14/1998	--	416.59	—	—	U	0.281	U	U	—	—	U	0.0022200
05/27/1999	--	415.29	—	—	0.0020300	**2.64**	U	U	—	—	U	U
11/05/1999	--	415.51	—	—	U	**13.0**	U	U	—	—	U	U
04/17/2000	--	414.15	—	—	0.0030500	**3.66**	U	U	—	—	U	U
10/26/2000	--	417.47	—	—	0.0018600	**3.98**	U	U	—	—	0.0026100	0.00300
05/30/2001	--	413.63	—	—	0.0007000	**6.65**	U	U	—	—	U	U
12/13/2001	--	413.23	—	—	**0.0480**	**5.29**	0.01090	0.90	—	—	0.302	0.05540
08/19/2002	--	417.85	—	—	U (0.0005)	U (0.5)	U (0.002)	U (0.09)	—	—	U (0.002)	0.0089600
11/05/2002	--	417.07	—	—	0.000589000	0.595	U (0.002)	U (0.09)	—	—	U (0.002)	0.0023400
03/19/2003	--	416.23	—	—	0.000531000	1.10	U (0.002)	U (0.09)	—	—	0.0065300	0.0046900
03/08/2004	--	414.95	—	—	U (0.0005)	**2.85**	U (0.0005)	0.0720	—	—	0.02880	U (0.001)
09/15/2004	--	416.65	—	—	0.0006000	1.36	U (0.0005)	0.05210	—	—	0.01430	U (0.0015)
01/10/2005	--	414.70	—	—	0.000648000	1.24	U (0.0005)	0.175	—	—	0.08860	0.0022100
07/15/2005	--	417.99	—	—	0.0007000	1.06	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
02/16/2006	--	414.58	—	—	U (0.0005)	**2.09**	U (0.0005)	0.06410	—	—	0.02250	U (0.0015)
07/27/2006	--	417.08	—	—	0.000638000	1.06	U (0.0005)	U (0.05)	—	—	0.01080	U (0.0015)
03/02/2007	--	414.25	—	—	U (0.0005)	**1.95**	U (0.0005)	U (0.05)	—	—	0.0020600	U (0.0015)
10/17/2007	--	416.62	—	—	U (0.0025)	**6.53**	U (0.0025)	U (0.25)	—	—	0.0031800	U (0.0075)
06/05/2008	--	415.88	—	—	U (0.0005)	**4.40**	U (0.0005)	0.07610	—	—	0.01170	U (0.0015)
09/29/2008	--	417.26	—	—	U (0.0005)	**2.69**	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
02/25/2009	--	414.49	—	—	U (0.0005)	**3.44**	U (0.0005)	0.06330	—	—	0.01350	U (0.0015)
07/21/2009	--	416.76	—	—	U (0.0005)	0.564	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.003)
03/17/2010	--	413.98	—	—	U (0.001)	0.586	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.002)
09/15/2010	--	416.52	—	—	U (0.0005)	**2.35**	0.000796000	U (0.05)	—	—	U (0.0005)	0.0050800
03/22/2011	--	413.98	—	—	U (0.0005)	**2.82**	U (0.0005)	0.221	—	—	0.08520	U (0.0015)
09/01/2011	--	417.42	—	—	U (0.0005)	**2.38**	U (0.0005)	U (0.05)	—	—	U (0.0005)	U (0.0015)
03/13/2012	--	414.39	—	—	U (0.0005)	**4.18**	U (0.0005)	0.241	—	—	0.08450	U (0.0015)
07/23/2012	--	417.64	—	—	U (0.0005)	1.04	U (0.0010)	U (0.05)	—	—	U (0.0010)	U (0.0030)
02/21/2013	--	414.34	—	—	U (0.0005)	1.38	U (0.0005)	0.182	—	—	0.0660	U (0.0015)
08/13/2013	--	416.56	—	—	U (0.0005)	**3.61**	U (0.0005)	U (0.05)	—	—	0.0014300	U (0.0015)
03/18/2014	--	414.51	—	—	U (0.0005)	**3.17**	U (0.0005)	0.178	—	—	0.06940	U (0.0015)
07/31/2014	--	419.70	—	—	U (0.0005)	**2.30**	U (0.001)	U (0.05)	—	—	U (0.001)	U (0.001)

	Well Screen Interval	Ground Water Elevation	124-TMB	135-TMB	Benzene	DRO	Ethylbenzene	GRO	Naphthalene	Sodium	Toluene	Xylenes
Unit	**ft**	**ft**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
03/03/2015	--	415.20	—	—	**0.0150**	1.30	0.007300	0.74	—	—	0.0390	0.13
07/27/2015	--	416.22	—	—	**0.006800**	0.81	0.005700	0.42	—	—	0.001600	0.0710
02/23/2016	--	415.26	—	—	U (0.001)	0.40	U (0.001)	U (0.05)	—	—	U (0.001)	0.005800
10/06/2016	--	418.77	—	—	U (0.001)	0.35	U (0.001)	U (0.05)	—	—	U (0.001)	0.002400
03/16/2017	--	414.98	—	—	U (0.002)	0.88	U (0.003)	U (0.05)	—	—	U (0.002)	U (0.002)
07/07/2017	--	417.02	—	—	U (0.002)	**3.70**	U (0.003)	U (1.0)	—	—	U (0.002)	U (0.003)
09/07/2018	--	418.73	—	—	U (0.0004)	0.34	U (0.001)	U (0.15)	—	—	U (0.001)	U (0.002)
03/13/2019	--	415.27	—	—	U(0.003)	**1.90**	U (0.003)	U (1.3)	—	—	U (0.002)	U (0.003)
07/30/2019	--	415.37	—	—	U(0.003)	0.39	U (0.003)	U (0.25)	—	—	U (0.002)	0.00300
10/14/2020	--	418.63	—	—	**0.01440**	0.918	0.000399 J	0.0468 J	—	—	0.000556 J	0.02410
03/30/2021	--	415.38	—	—	U (0.001)	0.97	U (0.001)	0.0233 BJ	—	—	U (0.001)	0.000994 J
10/12/2021	--	418.00	—	—	U (0.001)	**1.57**	U (0.001)	U (0.1)	—	—	U (0.001)	0.000223 J
05/17/2022	--	418.08	0.000654000	0.000128000	U(0.00100)	0.967	U(0.00100)	0.02970	U(0.000250)	40.4	U(0.00100)	0.000339000
09/20/2022	*FP*	417.51	*FP*	*FP*	*FP*	*FP*	*FP*	*FP*	*FP*	*FP*	*FP*	*FP*
04/27/2023	--	--	U(0.00100)	U(0.00100)	0.000111000	**3.48**	U(0.00100)	0.03310	U(0.000250)	48.8	0.00072000	U(0.00300)
07/25/2023	--	417.94	U(0.00100)	U(0.00100)	U(0.00100)	0.84	U(0.00100)	U(0.100)	U(0.000250)	63.7	U(0.00100)	U(0.00100)
10/24/2023	--	--	U(0.00100)	U(0.00100)	U(0.00100)	0.497	U(0.00100)	U(0.100)	U(0.000250)	43.5	U(0.00100)	U(0.00100)
06/10/2024	--	416.38	U(0.00100)	U(0.00100)	U(0.00100)	0.854	U(0.00100)	U(0.100)	U(0.000250)	43.0	U(0.00100)	U(0.00100)
RM-1												
10/10/2012	--	416.29	—	—	**0.04250**	1.40	**0.0840**	**7.60**	—	—	**6.09**	**1.80**
02/21/2013	--	414.27	—	—	0.000539000	0.92	**0.942**	**9.80**	—	—	**15.4**	**0.51**
08/13/2013	--	416.55	—	—	0.00072000	1.30	**3.08**	1.80	—	—	0.09220	**6.83**
09/24/2013	--	--	—	—	**0.006700**	**1.70**	**0.131**	**27.2**	—	—	0.23	**16.7**
11/19/2013	--	415.53	—	—	**0.0550**	**12.6**	**0.20**	**175**	—	—	0.33	**1.32**
03/19/2014	--	414.37	—	—	**0.02130**	**10.8**	U (0.001)	**2.81**	—	—	0.68	**2.06**
07/31/2014	--	419.58	—	—	**0.02510**	1.23	**0.0960**	**4.70**	—	—	**2.83**	**0.71**
03/03/2015	--	402.63	—	—	0.00261 J	1.20	**0.593**	**3.50**	—	—	**7.25**	**1.60**
07/27/2015	--	--	—	—	U (0.15)	0.74	**2.14**	**8.40**	—	—	0.137	**5.09**
02/23/2016	--	414.75	—	—	**0.008700**	1.50	**0.246**	**14.7**	—	—	0.40	**11.3**
10/06/2016	--	417.91	—	—	**0.0840**	**17.5**	**0.23**	**69.9**	—	—	0.69	**1.89**
07/07/2017	--	417.04	—	—	**0.02680**	**10.7**	**0.45**	**4.26**	—	—	0.77	**1.55**
09/06/2017	--	--	—	—	**0.04320**	**2.31**	**0.36**	**6.10**	—	—	0.201	**2.73**
09/07/2018	--	413.04	—	—	0.000358 J	1.10	**0.568**	**12.0**	—	—	**12.2**	**2.90**
07/30/2019	--	415.38	—	—	(0.003) U	**3.30**	**1.80**	**12.0**	—	—	0.000503 J	**2.55**
10/24/2019	--	--	—	—	**0.00500**	**5.20**	**0.142**	**11.9**	—	—	0.0380	**10.4**
08/04/2020	--	417.00	—	—	U (0.001)	**13.2**	**0.15**	**39.9**	—	—	0.74	**1.25**
10/15/2020	--	--	—	—	U (0.0005)	**9.27**	**0.27**	**5.34**	—	—	0.93	**1.49**
10/12/2021	--	417.82	—	—	**0.02460**	**2.22**	**0.20**	**4.30**	—	—	0.15	**2.00**
09/20/2022	--	417.43	**0.826**	**0.32**	0.000939000	**3.32**	**0.266**	**7.88**	**0.06990**	62.8	0.002600	**1.98**
06/06/2023	--	--	**0.795**	**0.331**	0.0011200	**4.11**	**0.281**	**6.84**	**0.06060**	58.6	0.0013900	**2.15**

	Well Screen Interval	Ground Water Elevation	124-TMB	135-TMB	Benzene	DRO	Ethylbenzene	GRO	Naphthalene	Sodium	Toluene	Xylenes
Unit	**ft**	**ft**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
GW Human Health Cleanup			0.056	0.06	0.0046	1.5	0.015	2.2	0.0017		1.1	0.19
07/25/2023	--	417.93	**0.805**	**0.349**	0.0011800	**3.18**	**0.331**	**6.52**	**0.09420**	81.6	0.0014300	**2.59**
08/16/2023	--	417.70	**0.597**	**0.235**	U(0.0200)	**1.52**	**0.163**	**5.03**	**0.06130**	66.1	U(0.00200)	**1.25**
10/24/2023	--	--	**0.477**	**0.266**	0.0026600	**2.35**	**0.186**	**5.53**	**0.03950**	85.6	U(0.00100)	**1.22**
05/21/2024	--	416.18	**0.696**	**0.31**	**0.0046300**	**3.25**	**0.19**	**5.52**	**0.06810**	64.7	0.0019800	**1.59**
06/10/2024	--	--	**0.668**	**0.301**	**0.0048600**	**2.45**	**0.226**	**7.09**	**0.08080**	63.1	0.0015100	**1.69**
RM-2												
08/29/2019	--	--	—	—	0.0017900	0.384 J	**0.01570**	0.479	—	—	0.0020900	0.06660
10/24/2019	--	--	—	—	0.004600	0.45	**0.0890**	2.00	—	—	0.0580	**0.342**
08/04/2020	--	--	—	—	U (0.001)	U (0.800)	0.000505000	0.01350	—	—	U (0.001)	0.000565000
10/15/2020	--	--	—	—	**0.02260**	1.49	**0.274**	**3.98**	—	—	0.413	**1.24**
03/30/2021	--	--	—	—	**0.02970**	1.21	**0.352**	**4.16**	—	—	0.05410	**0.74**
10/12/2021	--	417.79	—	—	0.000496 J	0.650 J	**0.04010**	0.645	—	—	U (0.001)	0.06170
05/17/2022	--	418.05	0.0014900	0.000547000	0.000133000	U(0.840)	0.004900	0.133	0.000327000	25.8	U(0.00100)	0.0018300
09/20/2022	--	--	**0.147**	0.05490	**0.04840**	0.95	**0.286**	**2.96**	**0.03740**	60.4	0.02710	**0.756**
04/27/2023	--	--	0.05360	0.03510	**0.0086100**	0.739	**0.199**	1.88	**0.03130**	51.4	0.000523000	**0.331**
06/06/2023	--	--	0.05470	0.02860	0.0029400	0.824	**0.154**	1.15	**0.01820**	58.5	0.000349000	**0.395**
07/25/2023	--	417.51	**0.06850**	0.03750	**0.02290**	0.417	**0.204**	1.80	**0.03050**	54.6	0.000486000	**0.443**
08/16/2023	--	417.31	**0.05940**	0.03060	**0.01890**	U(0.800)	**0.183**	1.82	**0.02560**	47.9	0.0010700	**0.365**
09/27/2023	--	--	**0.06070**	0.02580	**0.01120**	0.869	**0.193**	1.38	**0.01830**	54.0	U(0.00100)	**0.309**
10/24/2023	--	--	0.05510	0.02710	**0.0130**	0.903	**0.197**	1.60	**0.01850**	56.0	U(0.00100)	**0.283**
05/21/2024	--	--	0.05190	0.01630	**0.01310**	0.529	**0.132**	1.15	**0.02340**	39.4	0.0065200	**0.211**
06/10/2024	--	--	0.04550	0.01640	**0.01350**	0.382	**0.166**	1.43	**0.03110**	43.5	0.01260	**0.213**

ANALYTICAL REPORT

June 06, 2024

Stantec - Anchorage, AK

Sample Delivery Group:	L1739791
Samples Received:	05/23/2024
Project Number:	203723766
Description:	
Site:	5315 (TNS 111)
Report To:	Mr. John Marshall 725 E Fireweed Lane Suite 200 Anchorage, AK 99503

Entire Report Reviewed By:

Craig Cothron
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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RM-2 L1739791-01 GW

Collected by: Remi Malenfant | Collected date/time: 05/21/24 11:15 | Received date/time: 05/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2295543	1	06/01/24 17:25	06/02/24 11:39	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2293128	1	05/25/24 11:41	05/25/24 11:41	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2295146	1	05/30/24 02:19	05/30/24 02:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2295616	1	05/31/24 06:25	05/31/24 06:25	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2296781	1	06/03/24 17:54	06/05/24 16:26	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2293573	1	05/28/24 07:42	05/28/24 19:11	NWH	Mt. Juliet, TN

MW17-2 L1739791-02 GW

Collected by: Remi Malenfant | Collected date/time: 05/21/24 11:54 | Received date/time: 05/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2295543	1	06/01/24 17:25	06/02/24 11:41	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2293128	1	05/25/24 12:08	05/25/24 12:08	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2295146	1	05/30/24 02:38	05/30/24 02:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2295616	1	05/31/24 06:46	05/31/24 06:46	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2296781	1	06/03/24 17:54	06/05/24 17:21	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2293573	1	05/28/24 07:42	05/28/24 19:30	NWH	Mt. Juliet, TN

DUP L1739791-03 GW

Collected by: Remi Malenfant | Collected date/time: 05/21/24 00:00 | Received date/time: 05/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2295543	1	06/01/24 17:25	06/02/24 11:43	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2296315	1	05/31/24 16:08	05/31/24 16:08	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2296731	1	06/02/24 23:45	06/02/24 23:45	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2296781	1	06/03/24 17:54	06/05/24 17:41	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2293573	1	05/28/24 07:42	05/28/24 19:50	NWH	Mt. Juliet, TN

RM-1 L1739791-04 GW

Collected by: Remi Malenfant | Collected date/time: 05/21/24 13:14 | Received date/time: 05/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2295543	1	06/01/24 17:25	06/02/24 11:44	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2296315	5	05/31/24 17:01	05/31/24 17:01	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2296731	5	06/03/24 04:10	06/03/24 04:10	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2296781	1.03	06/03/24 17:54	06/05/24 18:01	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2293573	1	05/28/24 07:42	05/28/24 20:09	NWH	Mt. Juliet, TN

TRIP BLANK L1739791-05 GW

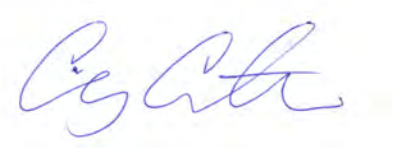
Collected by: Remi Malenfant | Collected date/time: 05/21/24 00:00 | Received date/time: 05/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2296731	1	06/02/24 22:03	06/02/24 22:03	ACG	Mt. Juliet, TN

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

CASE NARRATIVE

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



Craig Cothron
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	39.4		0.504	3.00	1	06/02/2024 11:39	WG2295543

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.15		0.0287	0.100	1	05/25/2024 11:41	WG2293128
(S) a,a,a-Trifluorotoluene(FID)	*93.2*			*50.0-150*		*05/25/2024 11:41*	WG2293128
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*		*05/25/2024 11:41*	WG2293128

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0131		0.0000941	0.00100	1	05/30/2024 02:19	WG2295146
n-Butylbenzene	0.00254		0.000157	0.00100	1	05/30/2024 02:19	WG2295146
sec-Butylbenzene	0.00352		0.000125	0.00100	1	05/30/2024 02:19	WG2295146
tert-Butylbenzene	0.000218	J	0.000127	0.00100	1	05/30/2024 02:19	WG2295146
Ethylbenzene	0.132		0.000137	0.00100	1	05/30/2024 02:19	WG2295146
Isopropylbenzene	0.0151		0.000105	0.00100	1	05/30/2024 02:19	WG2295146
Naphthalene	0.0275		0.00100	0.00500	1	05/30/2024 02:19	WG2295146
Toluene	0.00652		0.000278	0.00100	1	05/31/2024 06:25	WG2295616
1,2,4-Trimethylbenzene	0.0519		0.000322	0.00100	1	05/30/2024 02:19	WG2295146
1,3,5-Trimethylbenzene	0.0163		0.000104	0.00100	1	05/30/2024 02:19	WG2295146
m&p-Xylene	0.198		0.000430	0.00200	1	05/30/2024 02:19	WG2295146
o-Xylene	0.00379		0.000174	0.00100	1	05/30/2024 02:19	WG2295146
(S) Toluene-d8	*79.1*	J2		*80.0-120*		*05/30/2024 02:19*	WG2295146
(S) Toluene-d8	*95.6*			*80.0-120*		*05/31/2024 06:25*	WG2295616
(S) 4-Bromofluorobenzene	*89.5*			*77.0-126*		*05/30/2024 02:19*	WG2295146
(S) 4-Bromofluorobenzene	*98.7*			*77.0-126*		*05/31/2024 06:25*	WG2295616
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/30/2024 02:19*	WG2295146
(S) 1,2-Dichloroethane-d4	*131*	J1		*70.0-130*		*05/31/2024 06:25*	WG2295616

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.529	B J	0.170	0.800	1	06/05/2024 16:26	WG2296781
(S) o-Terphenyl	*65.7*			*50.0-150*		*06/05/2024 16:26*	WG2296781

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	05/28/2024 19:11	WG2293573
Acenaphthene	0.0000768		0.0000190	0.0000500	1	05/28/2024 19:11	WG2293573
Acenaphthylene	U		0.0000171	0.0000500	1	05/28/2024 19:11	WG2293573
Benzo(a)anthracene	U		0.0000203	0.0000500	1	05/28/2024 19:11	WG2293573
Benzo(a)pyrene	U		0.0000184	0.0000500	1	05/28/2024 19:11	WG2293573
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	05/28/2024 19:11	WG2293573
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	05/28/2024 19:11	WG2293573
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	05/28/2024 19:11	WG2293573
Chrysene	U		0.0000179	0.0000500	1	05/28/2024 19:11	WG2293573
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	05/28/2024 19:11	WG2293573
Fluoranthene	U		0.0000270	0.000100	1	05/28/2024 19:11	WG2293573
Fluorene	0.000197		0.0000169	0.0000500	1	05/28/2024 19:11	WG2293573
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	05/28/2024 19:11	WG2293573

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Naphthalene	0.0234		0.0000917	0.000250	1	05/28/2024 19:11	WG2293573
Phenanthrene	0.0000817		0.0000180	0.0000500	1	05/28/2024 19:11	WG2293573
Pyrene	U		0.0000169	0.0000500	1	05/28/2024 19:11	WG2293573
1-Methylnaphthalene	0.00746		0.0000687	0.000250	1	05/28/2024 19:11	WG2293573
2-Methylnaphthalene	0.00389		0.0000674	0.000250	1	05/28/2024 19:11	WG2293573
2-Chloronaphthalene	U		0.0000682	0.000250	1	05/28/2024 19:11	WG2293573
(S) Nitrobenzene-d5	*115*			*31.0-160*		*05/28/2024 19:11*	WG2293573
(S) 2-Fluorobiphenyl	*107*			*48.0-148*		*05/28/2024 19:11*	WG2293573
(S) p-Terphenyl-d14	*105*			*37.0-146*		*05/28/2024 19:11*	WG2293573

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	93.6		0.504	3.00	1	06/02/2024 11:41	WG2295543

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	0.540		0.0287	0.100	1	05/25/2024 12:08	WG2293128
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*50.0-150*		*05/25/2024 12:08*	WG2293128
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*		*05/25/2024 12:08*	WG2293128

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.149		0.0000941	0.00100	1	05/30/2024 02:38	WG2295146
n-Butylbenzene	0.000796	J	0.000157	0.00100	1	05/30/2024 02:38	WG2295146
sec-Butylbenzene	0.00121		0.000125	0.00100	1	05/30/2024 02:38	WG2295146
tert-Butylbenzene	0.000128	J	0.000127	0.00100	1	05/30/2024 02:38	WG2295146
Ethylbenzene	0.0272		0.000137	0.00100	1	05/30/2024 02:38	WG2295146
Isopropylbenzene	0.00510		0.000105	0.00100	1	05/30/2024 02:38	WG2295146
Naphthalene	0.0114		0.00100	0.00500	1	05/30/2024 02:38	WG2295146
Toluene	0.000540	J	0.000278	0.00100	1	05/31/2024 06:46	WG2295616
1,2,4-Trimethylbenzene	0.0121		0.000322	0.00100	1	05/30/2024 02:38	WG2295146
1,3,5-Trimethylbenzene	0.00913		0.000104	0.00100	1	05/30/2024 02:38	WG2295146
m&p-Xylene	0.0428		0.000430	0.00200	1	05/30/2024 02:38	WG2295146
o-Xylene	0.000761	J	0.000174	0.00100	1	05/30/2024 02:38	WG2295146
(S) Toluene-d8	*100*			*80.0-120*		*05/30/2024 02:38*	WG2295146
(S) Toluene-d8	*100*			*80.0-120*		*05/31/2024 06:46*	WG2295616
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*05/30/2024 02:38*	WG2295146
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*05/31/2024 06:46*	WG2295616
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*05/30/2024 02:38*	WG2295146
(S) 1,2-Dichloroethane-d4	*131*	J1		*70.0-130*		*05/31/2024 06:46*	WG2295616

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1.65	B	0.170	0.800	1	06/05/2024 17:21	WG2296781
(S) o-Terphenyl	*56.9*			*50.0-150*		*06/05/2024 17:21*	WG2296781

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	05/28/2024 19:30	WG2293573
Acenaphthene	U		0.0000190	0.0000500	1	05/28/2024 19:30	WG2293573
Acenaphthylene	U		0.0000171	0.0000500	1	05/28/2024 19:30	WG2293573
Benzo(a)anthracene	U		0.0000203	0.0000500	1	05/28/2024 19:30	WG2293573
Benzo(a)pyrene	U		0.0000184	0.0000500	1	05/28/2024 19:30	WG2293573
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	05/28/2024 19:30	WG2293573
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	05/28/2024 19:30	WG2293573
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	05/28/2024 19:30	WG2293573
Chrysene	U		0.0000179	0.0000500	1	05/28/2024 19:30	WG2293573
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	05/28/2024 19:30	WG2293573
Fluoranthene	U		0.0000270	0.000100	1	05/28/2024 19:30	WG2293573
Fluorene	0.000101		0.0000169	0.0000500	1	05/28/2024 19:30	WG2293573
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	05/28/2024 19:30	WG2293573

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Naphthalene	0.00276		0.0000917	0.000250	1	05/28/2024 19:30	WG2293573
Phenanthrene	U		0.0000180	0.0000500	1	05/28/2024 19:30	WG2293573
Pyrene	U		0.0000169	0.0000500	1	05/28/2024 19:30	WG2293573
1-Methylnaphthalene	0.00110		0.0000687	0.000250	1	05/28/2024 19:30	WG2293573
2-Methylnaphthalene	0.000305		0.0000674	0.000250	1	05/28/2024 19:30	WG2293573
2-Chloronaphthalene	U		0.0000682	0.000250	1	05/28/2024 19:30	WG2293573
(S) Nitrobenzene-d5	*96.8*			*31.0-160*		*05/28/2024 19:30*	WG2293573
(S) 2-Fluorobiphenyl	*98.4*			*48.0-148*		*05/28/2024 19:30*	WG2293573
(S) p-Terphenyl-d14	*90.0*			*37.0-146*		*05/28/2024 19:30*	WG2293573

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	94.1		0.504	3.00	1	06/02/2024 11:43	WG2295543

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	0.384		0.0287	0.100	1	05/31/2024 16:08	WG2296315
(S) a,a,a-Trifluorotoluene(FID)	*71.4*			*50.0-150*		*05/31/2024 16:08*	WG2296315
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*		*05/31/2024 16:08*	WG2296315

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.129		0.0000941	0.00100	1	06/02/2024 23:45	WG2296731
n-Butylbenzene	0.000463	J	0.000157	0.00100	1	06/02/2024 23:45	WG2296731
sec-Butylbenzene	0.000947	J	0.000125	0.00100	1	06/02/2024 23:45	WG2296731
tert-Butylbenzene	U		0.000127	0.00100	1	06/02/2024 23:45	WG2296731
Ethylbenzene	0.0272		0.000137	0.00100	1	06/02/2024 23:45	WG2296731
Isopropylbenzene	0.00533		0.000105	0.00100	1	06/02/2024 23:45	WG2296731
Naphthalene	0.00964	C3	0.00100	0.00500	1	06/02/2024 23:45	WG2296731
Toluene	0.000555	J	0.000278	0.00100	1	06/02/2024 23:45	WG2296731
1,2,4-Trimethylbenzene	0.00852		0.000322	0.00100	1	06/02/2024 23:45	WG2296731
1,3,5-Trimethylbenzene	0.00658		0.000104	0.00100	1	06/02/2024 23:45	WG2296731
m&p-Xylene	0.0403		0.000430	0.00200	1	06/02/2024 23:45	WG2296731
o-Xylene	0.000501	J	0.000174	0.00100	1	06/02/2024 23:45	WG2296731
(S) Toluene-d8	*101*			*80.0-120*		*06/02/2024 23:45*	WG2296731
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*06/02/2024 23:45*	WG2296731
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*06/02/2024 23:45*	WG2296731

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1.71	B	0.170	0.800	1	06/05/2024 17:41	WG2296781
(S) o-Terphenyl	*58.4*			*50.0-150*		*06/05/2024 17:41*	WG2296781

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	05/28/2024 19:50	WG2293573
Acenaphthene	U		0.0000190	0.0000500	1	05/28/2024 19:50	WG2293573
Acenaphthylene	U		0.0000171	0.0000500	1	05/28/2024 19:50	WG2293573
Benzo(a)anthracene	U		0.0000203	0.0000500	1	05/28/2024 19:50	WG2293573
Benzo(a)pyrene	U		0.0000184	0.0000500	1	05/28/2024 19:50	WG2293573
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	05/28/2024 19:50	WG2293573
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	05/28/2024 19:50	WG2293573
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	05/28/2024 19:50	WG2293573
Chrysene	U		0.0000179	0.0000500	1	05/28/2024 19:50	WG2293573
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	05/28/2024 19:50	WG2293573
Fluoranthene	U		0.0000270	0.000100	1	05/28/2024 19:50	WG2293573
Fluorene	0.000174		0.0000169	0.0000500	1	05/28/2024 19:50	WG2293573
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	05/28/2024 19:50	WG2293573
Naphthalene	0.00654		0.0000917	0.000250	1	05/28/2024 19:50	WG2293573
Phenanthrene	U		0.0000180	0.0000500	1	05/28/2024 19:50	WG2293573
Pyrene	U		0.0000169	0.0000500	1	05/28/2024 19:50	WG2293573

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1-Methylnaphthalene	0.00276		0.0000687	0.000250	1	05/28/2024 19:50	WG2293573
2-Methylnaphthalene	0.00197		0.0000674	0.000250	1	05/28/2024 19:50	WG2293573
2-Chloronaphthalene	U		0.0000682	0.000250	1	05/28/2024 19:50	WG2293573
(S) Nitrobenzene-d5	*109*			*31.0-160*		*05/28/2024 19:50*	WG2293573
(S) 2-Fluorobiphenyl	*98.9*			*48.0-148*		*05/28/2024 19:50*	WG2293573
(S) p-Terphenyl-d14	*88.4*			*37.0-146*		*05/28/2024 19:50*	WG2293573

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	64.7		0.504	3.00	1	06/02/2024 11:44	WG2295543

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	5.52		0.143	0.500	5	05/31/2024 17:01	WG2296315
(S) a,a,a-Trifluorotoluene(FID)	*76.6*			*50.0-150*		*05/31/2024 17:01*	WG2296315
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*		*05/31/2024 17:01*	WG2296315

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00463	J	0.000471	0.00500	5	06/03/2024 04:10	WG2296731
n-Butylbenzene	0.00772		0.000785	0.00500	5	06/03/2024 04:10	WG2296731
sec-Butylbenzene	0.0148		0.000625	0.00500	5	06/03/2024 04:10	WG2296731
tert-Butylbenzene	0.00229	J	0.000635	0.00500	5	06/03/2024 04:10	WG2296731
Ethylbenzene	0.190		0.000685	0.00500	5	06/03/2024 04:10	WG2296731
Isopropylbenzene	0.0793		0.000525	0.00500	5	06/03/2024 04:10	WG2296731
Naphthalene	0.0545	C3	0.00500	0.0250	5	06/03/2024 04:10	WG2296731
Toluene	0.00198	J	0.00139	0.00500	5	06/03/2024 04:10	WG2296731
1,2,4-Trimethylbenzene	0.696		0.00161	0.00500	5	06/03/2024 04:10	WG2296731
1,3,5-Trimethylbenzene	0.310		0.000520	0.00500	5	06/03/2024 04:10	WG2296731
m&p-Xylene	1.55		0.00215	0.0100	5	06/03/2024 04:10	WG2296731
o-Xylene	0.0488		0.000870	0.00500	5	06/03/2024 04:10	WG2296731
(S) Toluene-d8	*102*			*80.0-120*		*06/03/2024 04:10*	WG2296731
(S) 4-Bromofluorobenzene	*98.9*			*77.0-126*		*06/03/2024 04:10*	WG2296731
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*06/03/2024 04:10*	WG2296731

Sample Narrative:

L1739791-04 WG2296731: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	3.25		0.175	0.824	1.03	06/05/2024 18:01	WG2296781
(S) o-Terphenyl	*64.4*			*50.0-150*		*06/05/2024 18:01*	WG2296781

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	05/28/2024 20:09	WG2293573
Acenaphthene	0.000831		0.0000190	0.0000500	1	05/28/2024 20:09	WG2293573
Acenaphthylene	U		0.0000171	0.0000500	1	05/28/2024 20:09	WG2293573
Benzo(a)anthracene	U		0.0000203	0.0000500	1	05/28/2024 20:09	WG2293573
Benzo(a)pyrene	U		0.0000184	0.0000500	1	05/28/2024 20:09	WG2293573
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	05/28/2024 20:09	WG2293573
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	05/28/2024 20:09	WG2293573
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	05/28/2024 20:09	WG2293573
Chrysene	U		0.0000179	0.0000500	1	05/28/2024 20:09	WG2293573
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	05/28/2024 20:09	WG2293573
Fluoranthene	U		0.0000270	0.000100	1	05/28/2024 20:09	WG2293573
Fluorene	0.00328		0.0000169	0.0000500	1	05/28/2024 20:09	WG2293573
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	05/28/2024 20:09	WG2293573

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Naphthalene	0.0681		0.0000917	0.000250	1	05/28/2024 20:09	WG2293573
Phenanthrene	0.00122		0.0000180	0.0000500	1	05/28/2024 20:09	WG2293573
Pyrene	U		0.0000169	0.0000500	1	05/28/2024 20:09	WG2293573
1-Methylnaphthalene	0.0827		0.0000687	0.000250	1	05/28/2024 20:09	WG2293573
2-Methylnaphthalene	0.0932		0.0000674	0.000250	1	05/28/2024 20:09	WG2293573
2-Chloronaphthalene	U		0.0000682	0.000250	1	05/28/2024 20:09	WG2293573
(S) Nitrobenzene-d5	*112*			*31.0-160*		*05/28/2024 20:09*	WG2293573
(S) 2-Fluorobiphenyl	*94.2*			*48.0-148*		*05/28/2024 20:09*	WG2293573
(S) p-Terphenyl-d14	*99.5*			*37.0-146*		*05/28/2024 20:09*	WG2293573

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	06/02/2024 22:03	WG2296731
n-Butylbenzene	U		0.000157	0.00100	1	06/02/2024 22:03	WG2296731
sec-Butylbenzene	U		0.000125	0.00100	1	06/02/2024 22:03	WG2296731
tert-Butylbenzene	U		0.000127	0.00100	1	06/02/2024 22:03	WG2296731
Ethylbenzene	U		0.000137	0.00100	1	06/02/2024 22:03	WG2296731
Isopropylbenzene	U		0.000105	0.00100	1	06/02/2024 22:03	WG2296731
Naphthalene	U	C3	0.00100	0.00500	1	06/02/2024 22:03	WG2296731
Toluene	0.000578	J	0.000278	0.00100	1	06/02/2024 22:03	WG2296731
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/02/2024 22:03	WG2296731
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/02/2024 22:03	WG2296731
m&p-Xylene	U		0.000430	0.00200	1	06/02/2024 22:03	WG2296731
o-Xylene	U		0.000174	0.00100	1	06/02/2024 22:03	WG2296731
(S) Toluene-d8	*103*			*80.0-120*		*06/02/2024 22:03*	WG2296731
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*06/02/2024 22:03*	WG2296731
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*06/02/2024 22:03*	WG2296731

Method Blank (MB)

(MB) R4076279-1 06/02/24 11:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sodium	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4076279-2 06/02/24 11:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sodium	10.0	10.3	103	80.0-120	

L1739777-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1739777-01 06/02/24 11:19 • (MS) R4076279-4 06/02/24 11:23 • (MSD) R4076279-5 06/02/24 11:24

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 %
Sodium	10.0	342	345	345	27.1	25.7	1	75.0-125	V	V	0.0383	20

Method Blank (MB)

(MB) R4075938-3 05/24/24 20:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPHGAK C6 to C10	U		0.0287	0.100
(S) a,a,a-Trifluorotoluene(FID)	*90.7*			*60.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*

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

(LCS) R4075938-1 05/24/24 19:37 • (LCSD) R4075938-2 05/24/24 20:04

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 %
TPHGAK C6 to C10	5.00	5.26	5.43	105	109	60.0-120			3.18	20
(S) a,a,a-Trifluorotoluene(FID)				*100*	*96.9*	*60.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*0.000*	*0.000*	*79.0-125*	J2	J2		

Method Blank (MB)

(MB) R4075959-3 05/31/24 13:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPHGAK C6 to C10	U		0.0287	0.100
(S) a,a,a-Trifluorotoluene(FID)	*68.8*			*60.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*0.000*	J2		*79.0-125*

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

(LCS) R4075959-1 05/31/24 12:08 • (LCSD) R4075959-2 05/31/24 12:35

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 %
TPHGAK C6 to C10	5.00	3.95	3.91	79.0	78.2	60.0-120			1.02	20
(S) a,a,a-Trifluorotoluene(FID)				*72.3*	*70.5*	*60.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*0.000*	*0.000*	*79.0-125*	J2	J2		

Method Blank (MB)

(MB) R4075289-2 05/29/24 18:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Ethylbenzene	U		0.000137	0.00100
Isopropylbenzene	U		0.000105	0.00100
Naphthalene	U		0.00100	0.00500
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
m&p-Xylene	U		0.000430	0.00200
o-Xylene	U		0.000174	0.00100
(S) Toluene-d8	*97.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*126*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4075289-1 05/29/24 17:13

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00500	100	70.0-123	
n-Butylbenzene	0.00500	0.00447	89.4	73.0-125	
sec-Butylbenzene	0.00500	0.00518	104	75.0-125	
tert-Butylbenzene	0.00500	0.00481	96.2	76.0-124	
Ethylbenzene	0.00500	0.00432	86.4	79.0-123	
Isopropylbenzene	0.00500	0.00438	87.6	76.0-127	
Naphthalene	0.00500	0.00420	84.0	54.0-135	J
1,2,4-Trimethylbenzene	0.00500	0.00512	102	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00512	102	76.0-122	
m&p-Xylene	0.0100	0.00881	88.1	80.0-122	
o-Xylene	0.00500	0.00443	88.6	80.0-122	
(S) Toluene-d8			*95.8*	*80.0-120*	
(S) 4-Bromofluorobenzene			*92.6*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*119*	*70.0-130*	

Method Blank (MB)

(MB) R4075852-3 05/30/24 22:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Toluene	U		0.000278	0.00100
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*130*			*70.0-130*

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

(LCS) R4075852-1 05/30/24 20:52 • (LCSD) R4075852-2 05/30/24 21:23

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 %
Toluene	0.00500	0.00464	0.00434	92.8	86.8	79.0-120			6.68	20
(S) Toluene-d8				*98.9*	*100*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.9*	*96.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*125*	*126*	*70.0-130*				

Method Blank (MB)

(MB) R4076396-3 06/02/24 20:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Ethylbenzene	U		0.000137	0.00100
Isopropylbenzene	U		0.000105	0.00100
Naphthalene	U		0.00100	0.00500
Toluene	U		0.000278	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
m&p-Xylene	U		0.000430	0.00200
o-Xylene	U		0.000174	0.00100
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*99.7*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*90.6*			*70.0-130*

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

(LCS) R4076396-1 06/02/24 18:33 • (LCSD) R4076396-2 06/02/24 18:53

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 %
Benzene	0.00500	0.00481	0.00495	96.2	99.0	70.0-123			2.87	20
n-Butylbenzene	0.00500	0.00428	0.00445	85.6	89.0	73.0-125			3.89	20
sec-Butylbenzene	0.00500	0.00464	0.00469	92.8	93.8	75.0-125			1.07	20
tert-Butylbenzene	0.00500	0.00472	0.00480	94.4	96.0	76.0-124			1.68	20
Ethylbenzene	0.00500	0.00480	0.00499	96.0	99.8	79.0-123			3.88	20
Isopropylbenzene	0.00500	0.00489	0.00498	97.8	99.6	76.0-127			1.82	20
Naphthalene	0.00500	0.00333	0.00367	66.6	73.4	54.0-135	J	J	9.71	20
Toluene	0.00500	0.00479	0.00505	95.8	101	79.0-120			5.28	20
1,2,4-Trimethylbenzene	0.00500	0.00443	0.00462	88.6	92.4	76.0-121			4.20	20
1,3,5-Trimethylbenzene	0.00500	0.00455	0.00463	91.0	92.6	76.0-122			1.74	20
m&p-Xylene	0.0100	0.00960	0.0101	96.0	101	80.0-122			5.08	20
o-Xylene	0.00500	0.00469	0.00477	93.8	95.4	80.0-122			1.69	20
(S) Toluene-d8				*102*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*102*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*95.3*	*95.4*	*70.0-130*				

Method Blank (MB)

(MB) R4077846-5 06/05/24 14:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
AK102 DRO C10-C25	0.227	J	0.170	0.800
(S) o-Terphenyl	*60.0*			*60.0-120*

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

(LCS) R4077846-1 06/05/24 11:40 • (LCSD) R4077846-2 06/05/24 12:00

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 %
AK102 DRO C10-C25	6.00	4.89	5.34	81.5	89.0	75.0-125			8.80	20
(S) o-Terphenyl				*23.3*	*32.5*	*60.0-120*	J2	J2		

L1739666-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1739666-01 06/05/24 12:20 • (MS) R4077846-3 06/05/24 12:40 • (MSD) R4077846-4 06/05/24 13:00

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 %
AK102 DRO C10-C25	6.00	1.74	6.18	6.08	74.0	72.3	1	75.0-125	J6	J6	1.63	20
(S) o-Terphenyl					*42.3*	*35.3*		*50.0-150*	J2	J2		

Method Blank (MB)

(MB) R4075111-3 05/28/24 17:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*106*			*31.0-160*
(S) 2-Fluorobiphenyl	*110*			*48.0-148*
(S) p-Terphenyl-d14	*108*			*37.0-146*

Method Blank (MB)

(MB) R4075389-1 05/30/24 01:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100

Method Blank (MB)

(MB) R4075389-1 05/30/24 01:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*74.0*			*31.0-160*
(S) 2-Fluorobiphenyl	*97.5*			*48.0-148*
(S) p-Terphenyl-d14	*96.0*			*37.0-146*

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

(LCS) R4075111-1 05/28/24 16:35 • (LCSD) R4075111-2 05/28/24 16:55

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 %
Anthracene	0.00200	0.00201	0.00196	100	98.0	67.0-150			2.52	20
Acenaphthene	0.00200	0.00205	0.00205	103	103	65.0-138			0.000	20
Acenaphthylene	0.00200	0.00206	0.00204	103	102	66.0-140			0.976	20
Benzo(a)anthracene	0.00200	0.00198	0.00192	99.0	96.0	61.0-140			3.08	20
Benzo(a)pyrene	0.00200	0.00192	0.00189	96.0	94.5	60.0-143			1.57	20
Benzo(b)fluoranthene	0.00200	0.00212	0.00208	106	104	58.0-141			1.90	20
Benzo(g,h,i)perylene	0.00200	0.00191	0.00185	95.5	92.5	52.0-153			3.19	20
Benzo(k)fluoranthene	0.00200	0.00204	0.00199	102	99.5	58.0-148			2.48	20
Chrysene	0.00200	0.00209	0.00205	104	103	64.0-144			1.93	20
Dibenz(a,h)anthracene	0.00200	0.00185	0.00181	92.5	90.5	52.0-155			2.19	20
Fluoranthene	0.00200	0.00214	0.00210	107	105	69.0-153			1.89	20
Fluorene	0.00200	0.00226	0.00224	113	112	64.0-136			0.889	20
Indeno(1,2,3-cd)pyrene	0.00200	0.00178	0.00172	89.0	86.0	54.0-153			3.43	20
Naphthalene	0.00200	0.00213	0.00209	106	104	61.0-137			1.90	20
Phenanthrene	0.00200	0.00222	0.00217	111	108	62.0-137			2.28	20
Pyrene	0.00200	0.00227	0.00224	114	112	60.0-142			1.33	20
1-Methylnaphthalene	0.00200	0.00226	0.00218	113	109	66.0-142			3.60	20
2-Methylnaphthalene	0.00200	0.00217	0.00209	108	104	62.0-136			3.76	20
2-Chloronaphthalene	0.00200	0.00217	0.00216	108	108	64.0-140			0.462	20
(S) Nitrobenzene-d5				*107*	*101*	*31.0-160*				
(S) 2-Fluorobiphenyl				*106*	*103*	*48.0-148*				
(S) p-Terphenyl-d14				*102*	*98.0*	*37.0-146*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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:
Stantec - Anchorage, AK

725 E Fireweed Lane
Suite 200
Anchorage, AK 99503

Billing Information:
Accounts Payable
725 E Fireweed Lane
Suite 200
Anchorage, AK 99503

Pres Chk

Report to: Mr. John Marshall ~~FNS 112/5310~~

Email To: craig.cothron@pacelabs.com

AKST

Project Description: ~~FNS III / 5315~~ ~~TNS-101/IFC 203723629~~ ~~203723706~~

City/State Collected: Fairbanks, AK

Please Circle: PT MT CT ET

Phone: 907-266-1108

Client Project # 203723766

Lab Project # ~~STAAAKSSA-TNS101~~

Collected by (print): Remi Malenfant

Site/Facility ID # 5315 (TNS III)

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Standard

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	AK101 40mlAmb HCl	AK102 100ml Amb HCl	NAICP 250mlHDPE-HNO3	PAHSIMLVID 40mlAmb-NoPres-WT	V8260C 40mlAmb-HCl	V8260C 40mlAmb-HCl-Blk					Remarks	Sample # (lab only)
RM-2	G	GW	—	5/21/24	1115	11	X	X	X	X	X							-01
MW17-2	G	GW	—		1154	11	X	X	X	X	X							-02
DUP	G	GW	—		—	11	X	X	X	X	X							-03
RM-1	G	GW	—		1314	11	X	X	X	X	X							-04
Trip Blank	G	GW	—	—	—	~~11~~ 1	X	X	X	X	X	X						-05
		GW				~~11~~	X	X	X	X	X							
		GW				~~11~~	X	X	X	X	X							
		GW				~~11~~	X	X	X	X	X							
		GW				~~11~~	X	X	X	X	X							
		GW				~~11~~	X	X	X	X	X							

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

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

SDG # 17391
B159

Acctnum: STAAAKSSA
Template: T253299
Prelogin: P1076451
PM: 034 - Craig Cothron
PB: 5/17/24 Cam
Shipped Via: FedEX 2nd Day

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 7315 3196 2313

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No (HCl) / MeoH TBR
	5/21/24 5/20/24 ZM	1600		1
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: EDAB .17.1= .2
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-23-24 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

July 05, 2024

Stantec - Anchorage, AK

Sample Delivery Group:	L1746200
Samples Received:	06/12/2024
Project Number:	203723766
Description:	Speedway 5315 - Fairbanks, AK

Report To:

Ms. Sydney Souza
725 E Fireweed Lane
Suite 200
Anchorage, AK 99503

Entire Report Reviewed By:

Craig Cothron
Project Manager

TABLE OF CONTENTS

MW-13 L1746200-01 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 13:00 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:50	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/14/24 23:24	06/14/24 23:24	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 12:04	06/20/24 12:04	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/20/24 22:46	06/20/24 22:46	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 17:22	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 12:24	DSH	Mt. Juliet, TN

MW-16 L1746200-02 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 13:25 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:52	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/14/24 23:51	06/14/24 23:51	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 12:24	06/20/24 12:24	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/20/24 23:05	06/20/24 23:05	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 19:23	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 12:42	DSH	Mt. Juliet, TN

RM-2 L1746200-03 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 10:29 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:53	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 00:19	06/15/24 00:19	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 12:48	06/20/24 12:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/20/24 23:25	06/20/24 23:25	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 17:42	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 12:59	DSH	Mt. Juliet, TN

G5 L1746200-04 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 11:50 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:55	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 00:46	06/15/24 00:46	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 13:05	06/20/24 13:05	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/20/24 23:44	06/20/24 23:44	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 18:02	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 13:17	DSH	Mt. Juliet, TN

RM-1 L1746200-05 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 12:07 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:57	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	5	06/15/24 05:43	06/15/24 05:43	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	5	06/20/24 15:48	06/20/24 15:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	5	06/21/24 05:13	06/21/24 05:13	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 18:22	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 13:35	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	10	06/15/24 16:14	06/18/24 22:47	JRM	Mt. Juliet, TN

MW-10 L1746200-06 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 10:58 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 19:59	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 01:13	06/15/24 01:13	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 13:25	06/20/24 13:25	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	20	06/21/24 05:32	06/21/24 05:32	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 18:42	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 13:53	DSH	Mt. Juliet, TN

MW-17-2 L1746200-07 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 11:45 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 20:04	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 01:40	06/15/24 01:40	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 13:45	06/20/24 13:45	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/21/24 00:04	06/21/24 00:04	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2304549	1	06/14/24 08:04	06/16/24 19:03	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 14:11	DSH	Mt. Juliet, TN

MW-17-1 L1746200-08 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 10:46 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 20:05	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 02:07	06/15/24 02:07	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 14:05	06/20/24 14:05	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/21/24 00:24	06/21/24 00:24	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2309332	1	06/24/24 06:51	06/25/24 01:24	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 14:28	DSH	Mt. Juliet, TN

MW-12 L1746200-09 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 12:27 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 20:07	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 02:34	06/15/24 02:34	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 14:26	06/20/24 14:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/21/24 00:43	06/21/24 00:43	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2309332	1	06/24/24 06:51	06/25/24 01:44	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 14:46	DSH	Mt. Juliet, TN

DUP-1 L1746200-10 GW

Collected by: Remi Malenfant | Collected date/time: 06/10/24 00:00 | Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 20:09	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 03:01	06/15/24 03:01	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 14:46	06/20/24 14:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/21/24 01:02	06/21/24 01:02	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2309332	1	06/24/24 06:51	06/25/24 02:05	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 15:04	DSH	Mt. Juliet, TN

DUP-3 L1746200-11 GW

Collected by: Remi Malenfant
Collected date/time: 06/10/24 00:00
Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2309704	1	06/22/24 11:15	06/22/24 20:10	DJS	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/15/24 03:28	06/15/24 03:28	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 15:07	06/20/24 15:07	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2309187	1	06/21/24 01:22	06/21/24 01:22	DYW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG2309332	1	06/24/24 06:51	06/25/24 02:25	MAA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM	WG2305851	1	06/15/24 16:14	06/16/24 15:22	DSH	Mt. Juliet, TN

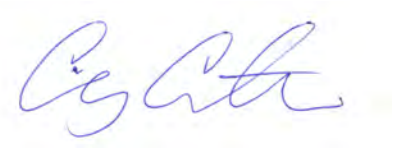
TRIP BLANK L1746200-12 GW

Collected by: Remi Malenfant
Collected date/time: 06/10/24 00:00
Received date/time: 06/12/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2305589	1	06/14/24 22:57	06/14/24 22:57	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG2308576	1	06/20/24 10:22	06/20/24 10:22	ACG	Mt. Juliet, TN

CASE NARRATIVE

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



Craig Cothron
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	91.9		0.504	3.00	1	06/22/2024 19:50	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	0.442		0.0287	0.100	1	06/14/2024 23:24	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*82.9*			*50.0-150*		*06/14/2024 23:24*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*99.6*			*79.0-125*		*06/14/2024 23:24*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000235	J	0.0000941	0.00100	1	06/20/2024 12:04	WG2308576
n-Butylbenzene	0.000742	J	0.000157	0.00100	1	06/20/2024 22:46	WG2309187
sec-Butylbenzene	0.000445	J	0.000125	0.00100	1	06/20/2024 22:46	WG2309187
tert-Butylbenzene	0.000141	J	0.000127	0.00100	1	06/20/2024 22:46	WG2309187
Ethylbenzene	0.00263		0.000137	0.00100	1	06/20/2024 22:46	WG2309187
Isopropylbenzene	0.000874	J	0.000105	0.00100	1	06/20/2024 12:04	WG2308576
Naphthalene	0.00289	J	0.00100	0.00500	1	06/20/2024 12:04	WG2308576
Toluene	0.000302	J	0.000278	0.00100	1	06/20/2024 22:46	WG2309187
1,2,4-Trimethylbenzene	0.00119		0.000322	0.00100	1	06/20/2024 12:04	WG2308576
1,3,5-Trimethylbenzene	0.000590	J	0.000104	0.00100	1	06/20/2024 12:04	WG2308576
Total Xylenes	0.00426		0.000174	0.00300	1	06/20/2024 22:46	WG2309187
(S) Toluene-d8	*97.2*			*80.0-120*		*06/20/2024 12:04*	WG2308576
(S) Toluene-d8	*105*			*80.0-120*		*06/20/2024 22:46*	WG2309187
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/20/2024 12:04*	WG2308576
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/20/2024 22:46*	WG2309187
(S) 1,2-Dichloroethane-d4	*91.6*			*70.0-130*		*06/20/2024 12:04*	WG2308576
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*06/20/2024 22:46*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.451	J	0.170	0.800	1	06/16/2024 17:22	WG2304549
(S) o-Terphenyl	*67.3*			*50.0-150*		*06/16/2024 17:22*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 12:24	WG2305851
Acenaphthene	0.0000324	J	0.0000190	0.0000500	1	06/16/2024 12:24	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 12:24	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 12:24	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 12:24	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 12:24	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 12:24	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 12:24	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 12:24	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 12:24	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 12:24	WG2305851
Fluorene	0.0000491	J	0.0000169	0.0000500	1	06/16/2024 12:24	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 12:24	WG2305851
Naphthalene	U		0.0000917	0.000250	1	06/16/2024 12:24	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Phenanthrene	0.0000664		0.0000180	0.0000500	1	06/16/2024 12:24	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 12:24	WG2305851
1-Methylnaphthalene	0.000272		0.0000687	0.000250	1	06/16/2024 12:24	WG2305851
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2024 12:24	WG2305851
(S) Nitrobenzene-d5	*133*			*31.0-160*		*06/16/2024 12:24*	WG2305851
(S) 2-Fluorobiphenyl	*106*			*48.0-148*		*06/16/2024 12:24*	WG2305851
(S) p-Terphenyl-d14	*96.3*			*37.0-146*		*06/16/2024 12:24*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	43.0		0.504	3.00	1	06/22/2024 19:52	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		0.0287	0.100	1	06/14/2024 23:51	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*90.2*			*50.0-150*		*06/14/2024 23:51*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*103*			*79.0-125*		*06/14/2024 23:51*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	06/20/2024 12:24	WG2308576
n-Butylbenzene	U	J4	0.000157	0.00100	1	06/20/2024 12:24	WG2308576
sec-Butylbenzene	U		0.000125	0.00100	1	06/20/2024 12:24	WG2308576
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 12:24	WG2308576
Ethylbenzene	U		0.000137	0.00100	1	06/20/2024 12:24	WG2308576
Isopropylbenzene	U		0.000105	0.00100	1	06/20/2024 12:24	WG2308576
Naphthalene	U		0.00100	0.00500	1	06/20/2024 12:24	WG2308576
Toluene	U		0.000278	0.00100	1	06/20/2024 12:24	WG2308576
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/20/2024 12:24	WG2308576
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/20/2024 12:24	WG2308576
Total Xylenes	U		0.000174	0.00300	1	06/20/2024 23:05	WG2309187
(S) Toluene-d8	*99.4*			*80.0-120*		*06/20/2024 12:24*	WG2308576
(S) Toluene-d8	*106*			*80.0-120*		*06/20/2024 23:05*	WG2309187
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/20/2024 12:24*	WG2308576
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*06/20/2024 23:05*	WG2309187
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*06/20/2024 12:24*	WG2308576
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*06/20/2024 23:05*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.854		0.170	0.800	1	06/16/2024 19:23	WG2304549
(S) o-Terphenyl	*86.8*			*50.0-150*		*06/16/2024 19:23*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 12:42	WG2305851
Acenaphthene	U		0.0000190	0.0000500	1	06/16/2024 12:42	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 12:42	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 12:42	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 12:42	WG2305851
Benzo(b)fluoranthene	0.0000387	J	0.0000168	0.0000500	1	06/16/2024 12:42	WG2305851
Benzo(g,h,i)perylene	0.0000755		0.0000184	0.0000500	1	06/16/2024 12:42	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 12:42	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 12:42	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 12:42	WG2305851
Fluoranthene	0.0000316	J	0.0000270	0.000100	1	06/16/2024 12:42	WG2305851
Fluorene	U		0.0000169	0.0000500	1	06/16/2024 12:42	WG2305851
Indeno(1,2,3-cd)pyrene	0.0000247	J	0.0000158	0.0000500	1	06/16/2024 12:42	WG2305851
Naphthalene	U		0.0000917	0.000250	1	06/16/2024 12:42	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2024 12:42	WG2305851
Pyrene	0.0000789		0.0000169	0.0000500	1	06/16/2024 12:42	WG2305851
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2024 12:42	WG2305851
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2024 12:42	WG2305851
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2024 12:42*	WG2305851
(S) 2-Fluorobiphenyl	*126*			*48.0-148*		*06/16/2024 12:42*	WG2305851
(S) p-Terphenyl-d14	*93.7*			*37.0-146*		*06/16/2024 12:42*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	43.5		0.504	3.00	1	06/22/2024 19:53	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.43		0.0287	0.100	1	06/15/2024 00:19	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*87.6*			*50.0-150*		*06/15/2024 00:19*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*99.4*			*79.0-125*		*06/15/2024 00:19*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0128		0.0000941	0.00100	1	06/20/2024 12:48	WG2308576
n-Butylbenzene	0.00383		0.000157	0.00100	1	06/20/2024 23:25	WG2309187
sec-Butylbenzene	0.00456		0.000125	0.00100	1	06/20/2024 23:25	WG2309187
tert-Butylbenzene	0.000315	J	0.000127	0.00100	1	06/20/2024 23:25	WG2309187
Ethylbenzene	0.153		0.000137	0.00100	1	06/20/2024 12:48	WG2308576
Isopropylbenzene	0.0198		0.000105	0.00100	1	06/20/2024 12:48	WG2308576
Naphthalene	0.0347		0.00100	0.00500	1	06/20/2024 12:48	WG2308576
Toluene	0.0114		0.000278	0.00100	1	06/20/2024 12:48	WG2308576
1,2,4-Trimethylbenzene	0.0449		0.000322	0.00100	1	06/20/2024 12:48	WG2308576
1,3,5-Trimethylbenzene	0.0161		0.000104	0.00100	1	06/20/2024 12:48	WG2308576
Total Xylenes	0.199		0.000174	0.00300	1	06/20/2024 12:48	WG2308576
(S) Toluene-d8	*97.8*			*80.0-120*		*06/20/2024 12:48*	WG2308576
(S) Toluene-d8	*101*			*80.0-120*		*06/20/2024 23:25*	WG2309187
(S) 4-Bromofluorobenzene	*99.5*			*77.0-126*		*06/20/2024 12:48*	WG2308576
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*06/20/2024 23:25*	WG2309187
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*		*06/20/2024 12:48*	WG2308576
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*06/20/2024 23:25*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.382	J	0.170	0.800	1	06/16/2024 17:42	WG2304549
(S) o-Terphenyl	*101*			*50.0-150*		*06/16/2024 17:42*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 12:59	WG2305851
Acenaphthene	0.0000833		0.0000190	0.0000500	1	06/16/2024 12:59	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 12:59	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 12:59	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 12:59	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 12:59	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 12:59	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 12:59	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 12:59	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 12:59	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 12:59	WG2305851
Fluorene	0.000204		0.0000169	0.0000500	1	06/16/2024 12:59	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 12:59	WG2305851
Naphthalene	0.0305		0.0000917	0.000250	1	06/16/2024 12:59	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.0000713		0.0000180	0.0000500	1	06/16/2024 12:59	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 12:59	WG2305851
1-Methylnaphthalene	0.00857		0.0000687	0.000250	1	06/16/2024 12:59	WG2305851
2-Methylnaphthalene	0.00479		0.0000674	0.000250	1	06/16/2024 12:59	WG2305851
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2024 12:59*	WG2305851
(S) 2-Fluorobiphenyl	*117*			*48.0-148*		*06/16/2024 12:59*	WG2305851
(S) p-Terphenyl-d14	*116*			*37.0-146*		*06/16/2024 12:59*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	63.4		0.504	3.00	1	06/22/2024 19:55	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.06		0.0287	0.100	1	06/15/2024 00:46	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*87.5*			*50.0-150*		*06/15/2024 00:46*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*102*			*79.0-125*		*06/15/2024 00:46*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00529		0.0000941	0.00100	1	06/20/2024 13:05	WG2308576
n-Butylbenzene	U		0.000157	0.00100	1	06/20/2024 23:44	WG2309187
sec-Butylbenzene	0.00186		0.000125	0.00100	1	06/20/2024 23:44	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 23:44	WG2309187
Ethylbenzene	0.0775		0.000137	0.00100	1	06/20/2024 13:05	WG2308576
Isopropylbenzene	0.0114		0.000105	0.00100	1	06/20/2024 13:05	WG2308576
Naphthalene	0.0255		0.00100	0.00500	1	06/20/2024 13:05	WG2308576
Toluene	0.00410		0.000278	0.00100	1	06/20/2024 13:05	WG2308576
1,2,4-Trimethylbenzene	0.120		0.000322	0.00100	1	06/20/2024 13:05	WG2308576
1,3,5-Trimethylbenzene	0.0329		0.000104	0.00100	1	06/20/2024 13:05	WG2308576
Total Xylenes	0.137		0.000174	0.00300	1	06/20/2024 13:05	WG2308576
(S) Toluene-d8	*98.2*			*80.0-120*		*06/20/2024 13:05*	WG2308576
(S) Toluene-d8	*104*			*80.0-120*		*06/20/2024 23:44*	WG2309187
(S) 4-Bromofluorobenzene	*99.7*			*77.0-126*		*06/20/2024 13:05*	WG2308576
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/20/2024 23:44*	WG2309187
(S) 1,2-Dichloroethane-d4	*87.4*			*70.0-130*		*06/20/2024 13:05*	WG2308576
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/20/2024 23:44*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.586	J	0.170	0.800	1	06/16/2024 18:02	WG2304549
(S) o-Terphenyl	*102*			*50.0-150*		*06/16/2024 18:02*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 13:17	WG2305851
Acenaphthene	0.0000990		0.0000190	0.0000500	1	06/16/2024 13:17	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 13:17	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 13:17	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 13:17	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 13:17	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 13:17	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 13:17	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 13:17	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 13:17	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 13:17	WG2305851
Fluorene	0.000457		0.0000169	0.0000500	1	06/16/2024 13:17	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 13:17	WG2305851
Naphthalene	U		0.0000917	0.000250	1	06/16/2024 13:17	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.000129		0.0000180	0.0000500	1	06/16/2024 13:17	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 13:17	WG2305851
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2024 13:17	WG2305851
2-Methylnaphthalene	0.000305		0.0000674	0.000250	1	06/16/2024 13:17	WG2305851
(S) Nitrobenzene-d5	*137*			*31.0-160*		*06/16/2024 13:17*	WG2305851
(S) 2-Fluorobiphenyl	*114*			*48.0-148*		*06/16/2024 13:17*	WG2305851
(S) p-Terphenyl-d14	*107*			*37.0-146*		*06/16/2024 13:17*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	63.1		0.504	3.00	1	06/22/2024 19:57	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	7.09		0.143	0.500	5	06/15/2024 05:43	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*89.0*			*50.0-150*		*06/15/2024 05:43*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*102*			*79.0-125*		*06/15/2024 05:43*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00486	J	0.000471	0.00500	5	06/20/2024 15:48	WG2308576
n-Butylbenzene	0.0138		0.000785	0.00500	5	06/21/2024 05:13	WG2309187
sec-Butylbenzene	0.0180		0.000625	0.00500	5	06/21/2024 05:13	WG2309187
tert-Butylbenzene	0.00309	J	0.000635	0.00500	5	06/21/2024 05:13	WG2309187
Ethylbenzene	0.226		0.000685	0.00500	5	06/20/2024 15:48	WG2308576
Isopropylbenzene	0.0822		0.000525	0.00500	5	06/20/2024 15:48	WG2308576
Naphthalene	0.0841		0.00500	0.0250	5	06/20/2024 15:48	WG2308576
Toluene	0.00151	J	0.00139	0.00500	5	06/20/2024 15:48	WG2308576
1,2,4-Trimethylbenzene	0.668		0.00161	0.00500	5	06/20/2024 15:48	WG2308576
1,3,5-Trimethylbenzene	0.301		0.000520	0.00500	5	06/20/2024 15:48	WG2308576
Total Xylenes	1.69		0.000870	0.0150	5	06/20/2024 15:48	WG2308576
(S) Toluene-d8	*96.4*			*80.0-120*		*06/20/2024 15:48*	WG2308576
(S) Toluene-d8	*103*			*80.0-120*		*06/21/2024 05:13*	WG2309187
(S) 4-Bromofluorobenzene	*99.8*			*77.0-126*		*06/20/2024 15:48*	WG2308576
(S) 4-Bromofluorobenzene	*98.3*			*77.0-126*		*06/21/2024 05:13*	WG2309187
(S) 1,2-Dichloroethane-d4	*86.9*			*70.0-130*		*06/20/2024 15:48*	WG2308576
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*06/21/2024 05:13*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	2.45		0.170	0.800	1	06/16/2024 18:22	WG2304549
(S) o-Terphenyl	*78.2*			*50.0-150*		*06/16/2024 18:22*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 13:35	WG2305851
Acenaphthene	0.00112		0.0000190	0.0000500	1	06/16/2024 13:35	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 13:35	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 13:35	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 13:35	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 13:35	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 13:35	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 13:35	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 13:35	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 13:35	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 13:35	WG2305851
Fluorene	0.00438		0.0000169	0.0000500	1	06/16/2024 13:35	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 13:35	WG2305851
Naphthalene	0.0808		0.0000917	0.000250	1	06/16/2024 13:35	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.00171		0.0000180	0.0000500	1	06/16/2024 13:35	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 13:35	WG2305851
1-Methylnaphthalene	0.0677		0.000687	0.00250	10	06/18/2024 22:47	WG2305851
2-Methylnaphthalene	0.0761		0.000674	0.00250	10	06/18/2024 22:47	WG2305851
(S) Nitrobenzene-d5	*100*			*31.0-160*		*06/18/2024 22:47*	WG2305851
(S) Nitrobenzene-d5	*146*			*31.0-160*		*06/16/2024 13:35*	WG2305851
(S) 2-Fluorobiphenyl	*93.2*			*48.0-148*		*06/18/2024 22:47*	WG2305851
(S) 2-Fluorobiphenyl	*121*			*48.0-148*		*06/16/2024 13:35*	WG2305851
(S) p-Terphenyl-d14	*63.7*			*37.0-146*		*06/18/2024 22:47*	WG2305851
(S) p-Terphenyl-d14	*115*			*37.0-146*		*06/16/2024 13:35*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	55.4		0.504	3.00	1	06/22/2024 19:59	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	6.72		0.0287	0.100	1	06/15/2024 01:13	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*82.8*			*50.0-150*		*06/15/2024 01:13*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*101*			*79.0-125*		*06/15/2024 01:13*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00130		0.0000941	0.00100	1	06/20/2024 13:25	WG2308576
n-Butylbenzene	0.0143	J	0.00314	0.0200	20	06/21/2024 05:32	WG2309187
sec-Butylbenzene	0.00721	J	0.00250	0.0200	20	06/21/2024 05:32	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 13:25	WG2308576
Ethylbenzene	0.0477		0.000137	0.00100	1	06/20/2024 13:25	WG2308576
Isopropylbenzene	0.0282		0.000105	0.00100	1	06/20/2024 13:25	WG2308576
Naphthalene	0.0428		0.00100	0.00500	1	06/20/2024 13:25	WG2308576
Toluene	0.000294	J	0.000278	0.00100	1	06/20/2024 13:25	WG2308576
1,2,4-Trimethylbenzene	0.487		0.00644	0.0200	20	06/21/2024 05:32	WG2309187
1,3,5-Trimethylbenzene	0.184		0.000104	0.00100	1	06/20/2024 13:25	WG2308576
Total Xylenes	0.0902		0.000174	0.00300	1	06/20/2024 13:25	WG2308576
(S) Toluene-d8	*93.3*			*80.0-120*		*06/20/2024 13:25*	WG2308576
(S) Toluene-d8	*106*			*80.0-120*		*06/21/2024 05:32*	WG2309187
(S) 4-Bromofluorobenzene	*95.7*			*77.0-126*		*06/20/2024 13:25*	WG2308576
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*06/21/2024 05:32*	WG2309187
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*06/20/2024 13:25*	WG2308576
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*06/21/2024 05:32*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1.33		0.170	0.800	1	06/16/2024 18:42	WG2304549
(S) o-Terphenyl	*98.3*			*50.0-150*		*06/16/2024 18:42*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.0000195	J	0.0000190	0.0000500	1	06/16/2024 13:53	WG2305851
Acenaphthene	0.000343		0.0000190	0.0000500	1	06/16/2024 13:53	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 13:53	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 13:53	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 13:53	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 13:53	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 13:53	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 13:53	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 13:53	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 13:53	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 13:53	WG2305851
Fluorene	0.00103		0.0000169	0.0000500	1	06/16/2024 13:53	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 13:53	WG2305851
Naphthalene	0.0257		0.0000917	0.000250	1	06/16/2024 13:53	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.000210		0.0000180	0.0000500	1	06/16/2024 13:53	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 13:53	WG2305851
1-Methylnaphthalene	0.0228		0.0000687	0.000250	1	06/16/2024 13:53	WG2305851
2-Methylnaphthalene	0.0142		0.0000674	0.000250	1	06/16/2024 13:53	WG2305851
(S) Nitrobenzene-d5	*134*			*31.0-160*		*06/16/2024 13:53*	WG2305851
(S) 2-Fluorobiphenyl	*118*			*48.0-148*		*06/16/2024 13:53*	WG2305851
(S) p-Terphenyl-d14	*112*			*37.0-146*		*06/16/2024 13:53*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	101		0.504	3.00	1	06/22/2024 20:04	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	0.466		0.0287	0.100	1	06/15/2024 01:40	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*86.7*			*50.0-150*		*06/15/2024 01:40*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*99.2*			*79.0-125*		*06/15/2024 01:40*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.105		0.0000941	0.00100	1	06/20/2024 13:45	WG2308576
n-Butylbenzene	0.000897	J	0.000157	0.00100	1	06/21/2024 00:04	WG2309187
sec-Butylbenzene	0.00132		0.000125	0.00100	1	06/21/2024 00:04	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/21/2024 00:04	WG2309187
Ethylbenzene	0.0261		0.000137	0.00100	1	06/20/2024 13:45	WG2308576
Isopropylbenzene	0.00538		0.000105	0.00100	1	06/20/2024 13:45	WG2308576
Naphthalene	0.0150		0.00100	0.00500	1	06/20/2024 13:45	WG2308576
Toluene	0.000710	J	0.000278	0.00100	1	06/20/2024 13:45	WG2308576
1,2,4-Trimethylbenzene	0.0105		0.000322	0.00100	1	06/21/2024 00:04	WG2309187
1,3,5-Trimethylbenzene	0.00862		0.000104	0.00100	1	06/20/2024 13:45	WG2308576
Total Xylenes	0.0455		0.000174	0.00300	1	06/20/2024 13:45	WG2308576
(S) Toluene-d8	*95.8*			*80.0-120*		*06/20/2024 13:45*	WG2308576
(S) Toluene-d8	*103*			*80.0-120*		*06/21/2024 00:04*	WG2309187
(S) 4-Bromofluorobenzene	*99.1*			*77.0-126*		*06/20/2024 13:45*	WG2308576
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*		*06/21/2024 00:04*	WG2309187
(S) 1,2-Dichloroethane-d4	*90.7*			*70.0-130*		*06/20/2024 13:45*	WG2308576
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/21/2024 00:04*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	2.00		0.170	0.800	1	06/16/2024 19:03	WG2304549
(S) o-Terphenyl	*77.9*			*50.0-150*		*06/16/2024 19:03*	WG2304549

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 14:11	WG2305851
Acenaphthene	0.0000491	J	0.0000190	0.0000500	1	06/16/2024 14:11	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 14:11	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 14:11	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 14:11	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 14:11	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 14:11	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 14:11	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 14:11	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 14:11	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 14:11	WG2305851
Fluorene	0.000182		0.0000169	0.0000500	1	06/16/2024 14:11	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 14:11	WG2305851
Naphthalene	0.00615		0.0000917	0.000250	1	06/16/2024 14:11	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.0000473	J	0.0000180	0.0000500	1	06/16/2024 14:11	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 14:11	WG2305851
1-Methylnaphthalene	0.00264		0.0000687	0.000250	1	06/16/2024 14:11	WG2305851
2-Methylnaphthalene	0.00174		0.0000674	0.000250	1	06/16/2024 14:11	WG2305851
(S) Nitrobenzene-d5	*141*			*31.0-160*		*06/16/2024 14:11*	WG2305851
(S) 2-Fluorobiphenyl	*113*			*48.0-148*		*06/16/2024 14:11*	WG2305851
(S) p-Terphenyl-d14	*102*			*37.0-146*		*06/16/2024 14:11*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	44.5		0.504	3.00	1	06/22/2024 20:05	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.35		0.0287	0.100	1	06/15/2024 02:07	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*91.7*			*50.0-150*		*06/15/2024 02:07*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*100*			*79.0-125*		*06/15/2024 02:07*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00549		0.0000941	0.00100	1	06/20/2024 14:05	WG2308576
n-Butylbenzene	U		0.000157	0.00100	1	06/21/2024 00:24	WG2309187
sec-Butylbenzene	0.00152		0.000125	0.00100	1	06/21/2024 00:24	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 14:05	WG2308576
Ethylbenzene	0.0396		0.000137	0.00100	1	06/20/2024 14:05	WG2308576
Isopropylbenzene	0.00760		0.000105	0.00100	1	06/20/2024 14:05	WG2308576
Naphthalene	0.0179		0.00100	0.00500	1	06/20/2024 14:05	WG2308576
Toluene	0.00415		0.000278	0.00100	1	06/20/2024 14:05	WG2308576
1,2,4-Trimethylbenzene	0.0528		0.000322	0.00100	1	06/20/2024 14:05	WG2308576
1,3,5-Trimethylbenzene	0.0169		0.000104	0.00100	1	06/20/2024 14:05	WG2308576
Total Xylenes	0.155		0.000174	0.00300	1	06/20/2024 14:05	WG2308576
(S) Toluene-d8	*97.7*			*80.0-120*		*06/20/2024 14:05*	WG2308576
(S) Toluene-d8	*103*			*80.0-120*		*06/21/2024 00:24*	WG2309187
(S) 4-Bromofluorobenzene	*99.0*			*77.0-126*		*06/20/2024 14:05*	WG2308576
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*06/21/2024 00:24*	WG2309187
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*06/20/2024 14:05*	WG2308576
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/21/2024 00:24*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.891		0.170	0.800	1	06/25/2024 01:24	WG2309332
(S) o-Terphenyl	*92.9*			*50.0-150*		*06/25/2024 01:24*	WG2309332

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 14:28	WG2305851
Acenaphthene	0.0000414	J	0.0000190	0.0000500	1	06/16/2024 14:28	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 14:28	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 14:28	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 14:28	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 14:28	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 14:28	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 14:28	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 14:28	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 14:28	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 14:28	WG2305851
Fluorene	0.0000673		0.0000169	0.0000500	1	06/16/2024 14:28	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 14:28	WG2305851
Naphthalene	0.000142	J	0.0000917	0.000250	1	06/16/2024 14:28	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2024 14:28	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 14:28	WG2305851
1-Methylnaphthalene	0.000103	J	0.0000687	0.000250	1	06/16/2024 14:28	WG2305851
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2024 14:28	WG2305851
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2024 14:28*	WG2305851
(S) 2-Fluorobiphenyl	*117*			*48.0-148*		*06/16/2024 14:28*	WG2305851
(S) p-Terphenyl-d14	*109*			*37.0-146*		*06/16/2024 14:28*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	108		0.504	3.00	1	06/22/2024 20:07	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	0.574		0.0287	0.100	1	06/15/2024 02:34	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*89.2*			*50.0-150*		*06/15/2024 02:34*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*102*			*79.0-125*		*06/15/2024 02:34*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000214	J	0.0000941	0.00100	1	06/20/2024 14:26	WG2308576
n-Butylbenzene	U		0.000157	0.00100	1	06/21/2024 00:43	WG2309187
sec-Butylbenzene	0.000483	J	0.000125	0.00100	1	06/21/2024 00:43	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 14:26	WG2308576
Ethylbenzene	0.0124		0.000137	0.00100	1	06/20/2024 14:26	WG2308576
Isopropylbenzene	0.00127		0.000105	0.00100	1	06/20/2024 14:26	WG2308576
Naphthalene	0.00320	J	0.00100	0.00500	1	06/20/2024 14:26	WG2308576
Toluene	0.00160		0.000278	0.00100	1	06/20/2024 14:26	WG2308576
1,2,4-Trimethylbenzene	0.000641	J	0.000322	0.00100	1	06/20/2024 14:26	WG2308576
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/20/2024 14:26	WG2308576
Total Xylenes	0.0257		0.000174	0.00300	1	06/20/2024 14:26	WG2308576
(S) Toluene-d8	*94.3*			*80.0-120*		*06/20/2024 14:26*	WG2308576
(S) Toluene-d8	*102*			*80.0-120*		*06/21/2024 00:43*	WG2309187
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*06/20/2024 14:26*	WG2308576
(S) 4-Bromofluorobenzene	*95.1*			*77.0-126*		*06/21/2024 00:43*	WG2309187
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*06/20/2024 14:26*	WG2308576
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/21/2024 00:43*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.231	J	0.170	0.800	1	06/25/2024 01:44	WG2309332
(S) o-Terphenyl	*102*			*50.0-150*		*06/25/2024 01:44*	WG2309332

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 14:46	WG2305851
Acenaphthene	U		0.0000190	0.0000500	1	06/16/2024 14:46	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 14:46	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 14:46	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 14:46	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 14:46	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 14:46	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 14:46	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 14:46	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 14:46	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 14:46	WG2305851
Fluorene	U		0.0000169	0.0000500	1	06/16/2024 14:46	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 14:46	WG2305851
Naphthalene	0.000763		0.0000917	0.000250	1	06/16/2024 14:46	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2024 14:46	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 14:46	WG2305851
1-Methylnaphthalene	0.000670		0.0000687	0.000250	1	06/16/2024 14:46	WG2305851
2-Methylnaphthalene	0.000331		0.0000674	0.000250	1	06/16/2024 14:46	WG2305851
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2024 14:46*	WG2305851
(S) 2-Fluorobiphenyl	*117*			*48.0-148*		*06/16/2024 14:46*	WG2305851
(S) p-Terphenyl-d14	*113*			*37.0-146*		*06/16/2024 14:46*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	44.6		0.504	3.00	1	06/22/2024 20:09	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.26		0.0287	0.100	1	06/15/2024 03:01	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*87.3*			*50.0-150*		*06/15/2024 03:01*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*99.8*			*79.0-125*		*06/15/2024 03:01*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00486		0.0000941	0.00100	1	06/20/2024 14:46	WG2308576
n-Butylbenzene	U		0.000157	0.00100	1	06/21/2024 01:02	WG2309187
sec-Butylbenzene	0.00178		0.000125	0.00100	1	06/21/2024 01:02	WG2309187
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 14:46	WG2308576
Ethylbenzene	0.0373		0.000137	0.00100	1	06/20/2024 14:46	WG2308576
Isopropylbenzene	0.00772		0.000105	0.00100	1	06/20/2024 14:46	WG2308576
Naphthalene	0.0174		0.00100	0.00500	1	06/20/2024 14:46	WG2308576
Toluene	0.00380		0.000278	0.00100	1	06/20/2024 14:46	WG2308576
1,2,4-Trimethylbenzene	0.0518		0.000322	0.00100	1	06/20/2024 14:46	WG2308576
1,3,5-Trimethylbenzene	0.0163		0.000104	0.00100	1	06/20/2024 14:46	WG2308576
Total Xylenes	0.151		0.000174	0.00300	1	06/20/2024 14:46	WG2308576
(S) Toluene-d8	*96.6*			*80.0-120*		*06/20/2024 14:46*	WG2308576
(S) Toluene-d8	*100*			*80.0-120*		*06/21/2024 01:02*	WG2309187
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/20/2024 14:46*	WG2308576
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*06/21/2024 01:02*	WG2309187
(S) 1,2-Dichloroethane-d4	*89.7*			*70.0-130*		*06/20/2024 14:46*	WG2308576
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*06/21/2024 01:02*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.717	J	0.170	0.800	1	06/25/2024 02:05	WG2309332
(S) o-Terphenyl	*92.6*			*50.0-150*		*06/25/2024 02:05*	WG2309332

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 15:04	WG2305851
Acenaphthene	0.0000323	J	0.0000190	0.0000500	1	06/16/2024 15:04	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 15:04	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 15:04	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 15:04	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 15:04	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 15:04	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 15:04	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 15:04	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 15:04	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 15:04	WG2305851
Fluorene	0.0000233	J	0.0000169	0.0000500	1	06/16/2024 15:04	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 15:04	WG2305851
Naphthalene	U		0.0000917	0.000250	1	06/16/2024 15:04	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2024 15:04	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 15:04	WG2305851
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2024 15:04	WG2305851
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2024 15:04	WG2305851
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2024 15:04*	WG2305851
(S) 2-Fluorobiphenyl	*117*			*48.0-148*		*06/16/2024 15:04*	WG2305851
(S) p-Terphenyl-d14	*111*			*37.0-146*		*06/16/2024 15:04*	WG2305851

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium	42.4		0.504	3.00	1	06/22/2024 20:10	WG2309704

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	1.43		0.0287	0.100	1	06/15/2024 03:28	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*87.3*			*50.0-150*		*06/15/2024 03:28*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*99.6*			*79.0-125*		*06/15/2024 03:28*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0135		0.0000941	0.00100	1	06/20/2024 15:07	WG2308576
n-Butylbenzene	0.00385		0.000157	0.00100	1	06/21/2024 01:22	WG2309187
sec-Butylbenzene	0.00445		0.000125	0.00100	1	06/21/2024 01:22	WG2309187
tert-Butylbenzene	0.000306	J	0.000127	0.00100	1	06/21/2024 01:22	WG2309187
Ethylbenzene	0.166		0.000137	0.00100	1	06/20/2024 15:07	WG2308576
Isopropylbenzene	0.0218		0.000105	0.00100	1	06/20/2024 15:07	WG2308576
Naphthalene	0.0360		0.00100	0.00500	1	06/20/2024 15:07	WG2308576
Toluene	0.0126		0.000278	0.00100	1	06/20/2024 15:07	WG2308576
1,2,4-Trimethylbenzene	0.0455		0.000322	0.00100	1	06/20/2024 15:07	WG2308576
1,3,5-Trimethylbenzene	0.0164		0.000104	0.00100	1	06/20/2024 15:07	WG2308576
Total Xylenes	0.213		0.000174	0.00300	1	06/20/2024 15:07	WG2308576
(S) Toluene-d8	*98.4*			*80.0-120*		*06/20/2024 15:07*	WG2308576
(S) Toluene-d8	*102*			*80.0-120*		*06/21/2024 01:22*	WG2309187
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/20/2024 15:07*	WG2308576
(S) 4-Bromofluorobenzene	*98.5*			*77.0-126*		*06/21/2024 01:22*	WG2309187
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*06/20/2024 15:07*	WG2308576
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*06/21/2024 01:22*	WG2309187

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	0.330	J	0.170	0.800	1	06/25/2024 02:25	WG2309332
(S) o-Terphenyl	*92.6*			*50.0-150*		*06/25/2024 02:25*	WG2309332

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2024 15:22	WG2305851
Acenaphthene	0.0000809		0.0000190	0.0000500	1	06/16/2024 15:22	WG2305851
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2024 15:22	WG2305851
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2024 15:22	WG2305851
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2024 15:22	WG2305851
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2024 15:22	WG2305851
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2024 15:22	WG2305851
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2024 15:22	WG2305851
Chrysene	U		0.0000179	0.0000500	1	06/16/2024 15:22	WG2305851
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2024 15:22	WG2305851
Fluoranthene	U		0.0000270	0.000100	1	06/16/2024 15:22	WG2305851
Fluorene	0.000220		0.0000169	0.0000500	1	06/16/2024 15:22	WG2305851
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2024 15:22	WG2305851
Naphthalene	0.0311		0.0000917	0.000250	1	06/16/2024 15:22	WG2305851

Semi Volatile Organic Compounds (GC/MS) by Method 8270D-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Phenanthrene	0.0000789		0.0000180	0.0000500	1	06/16/2024 15:22	WG2305851
Pyrene	U		0.0000169	0.0000500	1	06/16/2024 15:22	WG2305851
1-Methylnaphthalene	0.00875		0.0000687	0.000250	1	06/16/2024 15:22	WG2305851
2-Methylnaphthalene	0.00517		0.0000674	0.000250	1	06/16/2024 15:22	WG2305851
(S) Nitrobenzene-d5	*133*			*31.0-160*		*06/16/2024 15:22*	WG2305851
(S) 2-Fluorobiphenyl	*109*			*48.0-148*		*06/16/2024 15:22*	WG2305851
(S) p-Terphenyl-d14	*109*			*37.0-146*		*06/16/2024 15:22*	WG2305851

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		0.0287	0.100	1	06/14/2024 22:57	WG2305589
(S) a,a,a-Trifluorotoluene(FID)	*91.8*			*50.0-150*		*06/14/2024 22:57*	WG2305589
(S) a,a,a-Trifluorotoluene(PID)	*103*			*79.0-125*		*06/14/2024 22:57*	WG2305589

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	06/20/2024 10:22	WG2308576
n-Butylbenzene	U	J4	0.000157	0.00100	1	06/20/2024 10:22	WG2308576
sec-Butylbenzene	U		0.000125	0.00100	1	06/20/2024 10:22	WG2308576
tert-Butylbenzene	U		0.000127	0.00100	1	06/20/2024 10:22	WG2308576
Ethylbenzene	U		0.000137	0.00100	1	06/20/2024 10:22	WG2308576
Isopropylbenzene	U		0.000105	0.00100	1	06/20/2024 10:22	WG2308576
Naphthalene	U		0.00100	0.00500	1	06/20/2024 10:22	WG2308576
Toluene	U		0.000278	0.00100	1	06/20/2024 10:22	WG2308576
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/20/2024 10:22	WG2308576
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/20/2024 10:22	WG2308576
Total Xylenes	U		0.000174	0.00300	1	06/20/2024 10:22	WG2308576
(S) Toluene-d8	*103*			*80.0-120*		*06/20/2024 10:22*	WG2308576
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/20/2024 10:22*	WG2308576
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*		*06/20/2024 10:22*	WG2308576

Method Blank (MB)

(MB) R4085282-1 06/22/24 19:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sodium	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4085282-2 06/22/24 19:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sodium	10.0	10.5	105	80.0-120	

L1746113-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1746113-02 06/22/24 19:26 • (MS) R4085282-4 06/22/24 19:30 • (MSD) R4085282-5 06/22/24 19:32

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 %
Sodium	10.0	413	409	417	0.000	39.7	1	75.0-125	V	V	2.00	20

Method Blank (MB)

(MB) R4083488-3 06/14/24 22:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPHGAK C6 to C10	U		0.0287	0.100
(S) a,a,a-Trifluorotoluene(FID)	*89.5*			*60.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*103*			*79.0-125*

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

(LCS) R4083488-1 06/14/24 15:38 • (LCSD) R4083488-2 06/14/24 16:05

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 %
TPHGAK C6 to C10	5.00	4.85	4.59	97.0	91.8	60.0-120			5.51	20
(S) a,a,a-Trifluorotoluene(FID)				*90.4*	*92.7*	*60.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*114*	*113*	*79.0-125*				

Method Blank (MB)

(MB) R4084460-2 06/20/24 09:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Ethylbenzene	U		0.000137	0.00100
Isopropylbenzene	U		0.000105	0.00100
Naphthalene	U		0.00100	0.00500
Toluene	U		0.000278	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Total Xylenes	U		0.000174	0.00300
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*104*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4084460-1 06/20/24 09:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00595	119	70.0-123	
n-Butylbenzene	0.00500	0.00654	131	73.0-125	J4
sec-Butylbenzene	0.00500	0.00617	123	75.0-125	
tert-Butylbenzene	0.00500	0.00608	122	76.0-124	
Ethylbenzene	0.00500	0.00575	115	79.0-123	
Isopropylbenzene	0.00500	0.00585	117	76.0-127	
Naphthalene	0.00500	0.00576	115	54.0-135	
Toluene	0.00500	0.00581	116	79.0-120	
1,2,4-Trimethylbenzene	0.00500	0.00566	113	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00590	118	76.0-122	
Total Xylenes	0.0150	0.0175	117	79.0-123	
(S) Toluene-d8			*95.6*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.4*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*94.8*	*70.0-130*	

Method Blank (MB)

(MB) R4084705-3 06/20/24 22:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
1,2,4-Trimethylbenzene	U		0.000322	0.00100
Total Xylenes	U		0.000174	0.00300
(S) Toluene-d8	*107*			*80.0-120*
(S) 4-Bromofluorobenzene	*100*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*

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

(LCS) R4084705-1 06/20/24 21:11 • (LCSD) R4084705-2 06/20/24 21:30

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 %
n-Butylbenzene	0.00500	0.00528	0.00532	106	106	73.0-125			0.755	20
sec-Butylbenzene	0.00500	0.00560	0.00574	112	115	75.0-125			2.47	20
tert-Butylbenzene	0.00500	0.00549	0.00538	110	108	76.0-124			2.02	20
Ethylbenzene	0.00500	0.00516	0.00510	103	102	79.0-123			1.17	20
Toluene	0.00500	0.00509	0.00490	102	98.0	79.0-120			3.80	20
1,2,4-Trimethylbenzene	0.00500	0.00513	0.00522	103	104	76.0-121			1.74	20
Total Xylenes	0.0150	0.0157	0.0154	105	103	79.0-123			1.93	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*100*	*98.1*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*110*	*112*	*70.0-130*				

Method Blank (MB)

(MB) R4082681-1 06/15/24 13:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
AK102 DRO C10-C25	U		0.170	0.800
(S) o-Terphenyl	*97.1*			*60.0-120*

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

(LCS) R4082681-2 06/15/24 13:50 • (LCSD) R4082681-3 06/15/24 14:10

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	%	%	%			%	%
AK102 DRO C10-C25	6.00	4.60	4.80	76.7	80.0	75.0-125			4.26	20
(S) o-Terphenyl				*89.4*	*93.8*	*60.0-120*				

L1743426-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1743426-02 06/16/24 12:59 • (MS) R4082654-1 06/16/24 13:19 • (MSD) R4082654-2 06/16/24 13:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
AK102 DRO C10-C25	6.00	3.83	8.09	8.35	71.0	75.3	1	75.0-125	J6		3.16	20
(S) o-Terphenyl					*93.1*	*84.9*		*50.0-150*				

Method Blank (MB)

(MB) R4086231-1 06/25/24 00:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
AK102 DRO C10-C25	U		0.170	0.800
(S) o-Terphenyl	*113*			*60.0-120*

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

(LCS) R4086231-2 06/25/24 00:44 • (LCSD) R4086231-3 06/25/24 01:04

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	%	%	%			%	%
AK102 DRO C10-C25	6.00	4.81	4.87	80.2	81.2	75.0-125			1.24	20
(S) o-Terphenyl				*101*	*97.4*	*60.0-120*				

L1747940-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1747940-02 06/25/24 07:02 • (MS) R4086231-4 06/25/24 07:22 • (MSD) R4086231-5 06/25/24 07:42

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
AK102 DRO C10-C25	5.72	11.3	17.3	15.2	105	68.2	1	75.0-125		J6	12.9	20
(S) o-Terphenyl					*95.0*	*94.4*		*50.0-150*				

Method Blank (MB)

(MB) R4083122-3 06/16/24 12:06

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
(S) Nitrobenzene-d5	*135*			*31.0-160*
(S) 2-Fluorobiphenyl	*113*			*48.0-148*
(S) p-Terphenyl-d14	*121*			*37.0-146*

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

(LCS) R4083122-1 06/16/24 11:31 • (LCSD) R4083122-2 06/16/24 11:48

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 %
Anthracene	0.00200	0.00236	0.00231	118	115	67.0-150			2.14	20
Acenaphthene	0.00200	0.00237	0.00232	118	116	65.0-138			2.13	20
Acenaphthylene	0.00200	0.00251	0.00245	126	122	66.0-140			2.42	20
Benzo(a)anthracene	0.00200	0.00253	0.00240	126	120	61.0-140			5.27	20
Benzo(a)pyrene	0.00200	0.00230	0.00220	115	110	60.0-143			4.44	20
Benzo(b)fluoranthene	0.00200	0.00239	0.00225	119	112	58.0-141			6.03	20
Benzo(g,h,i)perylene	0.00200	0.00219	0.00210	109	105	52.0-153			4.20	20
Benzo(k)fluoranthene	0.00200	0.00224	0.00216	112	108	58.0-148			3.64	20
Chrysene	0.00200	0.00254	0.00243	127	122	64.0-144			4.43	20
Dibenz(a,h)anthracene	0.00200	0.00225	0.00218	112	109	52.0-155			3.16	20
Fluoranthene	0.00200	0.00256	0.00242	128	121	69.0-153			5.62	20
Fluorene	0.00200	0.00257	0.00256	129	128	64.0-136			0.390	20

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

(LCS) R4083122-1 06/16/24 11:31 • (LCSD) R4083122-2 06/16/24 11:48

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 %
Indeno(1,2,3-cd)pyrene	0.00200	0.00223	0.00213	111	106	54.0-153			4.59	20
Naphthalene	0.00200	0.00226	0.00222	113	111	61.0-137			1.79	20
Phenanthrene	0.00200	0.00246	0.00240	123	120	62.0-137			2.47	20
Pyrene	0.00200	0.00257	0.00247	129	123	60.0-142			3.97	20
1-Methylnaphthalene	0.00200	0.00229	0.00230	115	115	66.0-142			0.436	20
2-Methylnaphthalene	0.00200	0.00227	0.00227	114	114	62.0-136			0.000	20
(S) Nitrobenzene-d5				*143*	*136*	*31.0-160*				
(S) 2-Fluorobiphenyl				*126*	*120*	*48.0-148*				
(S) p-Terphenyl-d14				*121*	*113*	*37.0-146*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

B034

Section A — **Required** Client Information:

Company: Stantec
Address: 725 E Fireweed Lane, Suite 200
Anchorage, AK 99503
Email To: sydney.souza@stantec.com
Phone: 9072291514 Fax:
Requested Due Date/TAT: Standard

Section B — **Required** Project Information:

Report To: Mike Zidek
Copy To: jeremiah.malenfant@stantec.com
Workorder/Purchase Order No:
Project Name: Speedway 5315
Project Number / Store Number: 2037237766

Section C — Invoicing (Select 1)

7-Eleven and Speedway Projects:
- [X] ENFOS Invoice - Invoice 7-11; Lab Upload *WO Required*
- [ ] Paper Invoice - Invoice 7-11; Email to Consultant PM / MES
- [ ] Invoice Consultant - Email to Consultant PM *PO Required*

PO 2037237766 | WO 1107149579

REGULATORY AGENCY

- [ ] NPDES
- [X] GROUND WATER
- [ ] DRINKING WATER
- [ ] UST
- [ ] RCRA
- [ ] OTHER

Site Location STATE: Fairbanks, AK

Section D — **Required** Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other HNO_3	Analysis Test Y/N	AK 101 GRO	AK 102 DRO (2)	8260C BTEX	8270-SIM PAHs	Na ICP (2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-13	WT	G			6/10/24	1300		11	2		8				1		X	X	X	X	X		L1746200-01
2	MW-16						1325		11	2		8				1		X	X	X	X	X		-02
3	RM-2						1029		11	2		8				1		X	X	X	X	X		-03
4	GS						1150		11	2		8				1		X	X	X	X	X		-04
5	RM-1						1207		11	2		8				1		X	X	X	X	X		-05
6	MW-10						1058		11	2		8				1		X	X	X	X	X		-06
7	MW17-2						1145		11	2		8				1		X	X	X	X	X		-07
8	MW17-1						1046		11	2		8				1		X	X	X	X	X		-08
9	MW12						1227		11	2		8				1		X	X	X	X	X		-09
10	Dup 1						-		11	2		8				1		X	X	X	X	X		-10
11	Dup 3	"	"			"	-		11	2		8				1		X	X	X	X	X		-11
12	Trip Blank						-		1			1						X		X				-12

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Remi Malenfant / Stantec	6/11/24	0930	CBarnes	06/12/24	0900

PH-10BDH4321
TRC-3223A228

SAMPLE NAME AND SIGNATURE

PRINT Name of SAMPLER: Remi Malenfant
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 06/10/24

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Sample Receipt Checklist 0841 8345 3530

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres. Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

1.0+0.3=1.3 EDAQ

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Sydney Souza	**CS Site Name:**	Speedway 5315	**Lab Name:**	Pace Analytical
Title:	Environmental Geologist	**ADEC File No.:**	100.26.026	**Lab Report No.:**	L1739791
Consulting Firm:	Stantec Consulting Services Inc.	**Hazard ID No.:**	24247	**Lab Report Date:**	June 6, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: Samples were not transferred

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: Click or tap here to enter text.
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☒ No ☐ N/A ☐
   Cooler temperature(s): 1.3° C
   Comments: Click or tap here to enter text.

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Sample condition documented as OK

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: Case narrative documents no errors or discrepancies “unless qualified or notated within report”

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

d. What is the effect on data quality/usability according to the case narrative?
Comments: No effect on data quality/usability

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples submitted to the lab

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Click or tap here to enter text.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments:

v. Data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No affected samples

vii. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

vii. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☐ No ☐ N/A ☒
Comments: Not required

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☐ N/A ☒
Comments: Not required

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Not required

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒

Comments: Not required

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: No affected samples

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☐ No ☒ N/A ☐
Comments: 1,2,4-TMB and GRO were outside the RPD for this event.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Click or tap here to enter text.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☐ N/A ☒
Comments: Used disposable equipment

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: Used disposable equipment

iii. If above LoQ or RL, specify what samples are affected.
Comments: Click or tap here to enter text.

iv. Are data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	Sydney Souza	**CS Site Name:**	Speedway 5315	**Lab Name:**	Pace Analytical
Title:	Environmental Geologist	**ADEC File No.:**	100.26.026	**Lab Report No.:**	L1746200
Consulting Firm:	Stantec Consulting Services Inc.	**Hazard ID No.:**	24247	**Lab Report Date:**	July 5, 2024

Note: *Any N/A or No box checked must have an explanation in the comments box.*

1. **Laboratory**

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
   Yes ☐ No ☐ N/A ☒
   Comments: Samples were not transferred

2. **Chain of Custody (CoC)**

   a. Is the CoC information completed, signed, and dated (including released/received by)?
   Yes ☒ No ☐ N/A ☐
   Comments: Click or tap here to enter text.

   b. Were the correct analyses requested?
   Yes ☒ No ☐ N/A ☐
   Analyses requested: Click or tap here to enter text.
   Comments: Click or tap here to enter text.

3. **Laboratory Sample Receipt Documentation**

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?
   Yes ☐ No ☐ N/A ☒
   Cooler temperature(s): Click or tap here to enter text.
   Comments: Cooler temperature not noted on the CoC

b. Is the sample preservation acceptable – acidified waters, methanol preserved soil (GRO, BTEX, VOCs, etc.)?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

c. Is the sample condition documented – broken, leaking, zero headspace (VOA vials); canister vacuum/pressure checked and no open valves, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Sample condition documented as OK

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, canister not holding a vacuum, etc.?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

4. Case Narrative

a. Is the case narrative present and understandable?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are there discrepancies, errors, or QC failures identified by the lab?
Yes ☐ No ☒ N/A ☐
Comments: Case narrative documents no errors or discrepancies “unless qualified or notated within report”

c. Were all the corrective actions documented?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

d. What is the effect on data quality/usability according to the case narrative?
Comments: No effect on data quality/usability

5. Sample Results

a. Are the correct analyses performed/reported as requested on CoC?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

b. Are all applicable holding times met?
Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

c. Are all soils reported on a dry weight basis?
Yes ☐ No ☐ N/A ☒
Comments: No soil samples submitted to the lab

d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

e. Is the data quality or usability affected?
Yes ☐ No ☒ N/A ☐
Comments: Click or tap here to enter text.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all method blank results less than LOQ (or RL)?
Yes ☒ No ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments:

v. Data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are one LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)
Yes ☒ No ☐ N/A ☐

Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one LCS and one sample duplicate reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the RPD reported from LCS/LCSD, and or sample/sample duplicate? (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: No affected samples

vii. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

ii. Metals/Inorganics – Are one MS/MSD reported per matrix, analysis and 20 samples?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate.
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

v. If %R or RPD is outside of acceptable limits, what samples are affected?
Comments: N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

vii. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC, and laboratory samples?
Yes ☐ No ☐ N/A ☒
Comments: Not required

ii. Accuracy – Are all percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R for field samples and 60-120 %R for QC samples; all other analyses see the laboratory report pages)
Yes ☐ No ☐ N/A ☒
Comments: Not required

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?
Yes ☐ No ☐ N/A ☒
Comments: Not required

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒

Comments: Not required

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Are all results less than LoQ or RL?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: No affected samples

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis, and 10 project samples?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

ii. Was the duplicate submitted blind to lab?
Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water or air, 50% soil)

$$RPD\ (\%) = \left| \frac{R_1 - R_2}{\left(\frac{R_1 + R_2}{2}\right)} \right| X\ 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes ☒ No ☐ N/A ☐
Comments: Click or tap here to enter text.

iv. Is the data quality or usability affected? (Explain)
Yes ☐ No ☒ N/A ☐
Comments: Click or tap here to enter text.

g. Decontamination or Equipment Blanks

i. Were decontamination or equipment blanks collected?
Yes ☐ No ☐ N/A ☒
Comments: Used disposable equipment

ii. Are all results less than LoQ or RL?
Yes ☐ No ☐ N/A ☒
Comments: Used disposable equipment

iii. If above LoQ or RL, specify what samples are affected.
Comments: Click or tap here to enter text.

iv. Are data quality or usability affected?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Are they defined and appropriate?
Yes ☐ No ☐ N/A ☒
Comments: Click or tap here to enter text.