

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2229253656
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Plains Pipeline, L.P.	OGRID	34053
Contact Name	Karolanne Hudgens	Contact Telephone	575-200-5517
Contact email	khudgens@paalp.com	Incident # <i>(assigned by OCD)</i>	nAPP2229253656
Contact mailing address	1106 Griffith Drive, Midland, TX 79706		

Location of Release Source

Latitude 32.1388868 Longitude -103.3580480
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Plains Montera 6" Release	Site Type	Pipeline
Date Release Discovered	10/18/2022	API#	(if applicable)

Unit Letter	Section	Township	Range	County
N	10	25S	35E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name: Tap Rock NM 10 Minerals, LLC*)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 21.1 bbls	Volume Recovered (bbls) 21.1 bbls
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

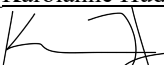
Cause of Release	Internal corrosion of crude oil pipeline.
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Karolanne Hudgens</u>	Title: <u>HSE Remediation Specialist II</u>
Signature: 	Date: <u>10/20/2022</u>
email: <u>khudgens@paalp.com</u>	Telephone: <u>575-200-5517</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

State of New Mexico
Oil Conservation Division

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>55</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karolanne Hudgens

Title: HSE Remediation Specialist

Signature: 

Date: 9/18/23

email: khudgens@plains.com

Telephone: 575-200-5517

OCD Only

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

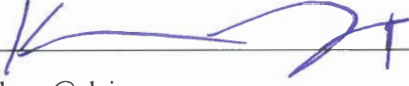
Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karolanne Hudgens

Title: HSE Remediation Specialist

Signature: 

Date: 9/10/23

email: khudgens@plains.com

Telephone: 575-200-5517

OCD Only

Received by: Shelly Wells

Date: 10/6/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____

Date: _____

2135 S. Loop 250 W
Midland, Texas 79703
United States
www.GHD.com

Our Ref.: 12615440-NMOCD-1

September 14, 2023

New Mexico Oil Conservation Division - District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Site Assessment Report
Montera 6-Inch Release Site
Plains Pipeline, L.P.
SRS#2022-077
Incident Identification: nAPP2229253656
N-10-25S-35E, Lea County, New Mexico

Dear Sir or Madam:

1. Introduction

GHD Services Inc. (GHD), on behalf of Plains Pipeline, L.P. (Plains), submits this *Site Assessment Report* to the New Mexico Oil Conservation Division (NMOCD) District 1 Office. This Report provides documentation of additional soil sampling activities and installation of a depth to groundwater (DTW) determination boring at the Plains Montera 6-Inch Release Site (Site). The Site is located within Unit Letter N Section 10 of Township 25 South and Range 35 East in Lea County, New Mexico. The GPS coordinates for the release Site are 32.138887 N Latitude and 103.358048 W Longitude. The release was discovered on October 18, 2022, on private land owned by Tap Rock New Mexico 10 Minerals, LLC. Figure 1 depicts the Site location and Figure 2 depicts Site details.

2. Background Information

A Form C-141-Release Notification (Form C-141) was submitted to the NMOCD on October 20, 2022, which stated that the release was due to internal corrosion of the Plains 6-inch crude oil pipeline. The release was reported as 21.1 barrels (bbls). The release falls under the jurisdiction of the NMOCD District 1 Office in Hobbs, New Mexico, and was subsequently assigned the NMOCD Incident Number nAPP2229253656. Initial assessment and remediation activities were conducted by Lighthouse Environmental Services, Inc. (Lighthouse) and were documented in the previously submitted *Interim Remediation Summary and Proposed Site Investigation Workplan*, dated March 14, 2023. In June 2023, Plains transitioned this Site from Lighthouse to GHD. Details of the additional assessment activities conducted by GHD and proposed activities to achieve regulatory closure of the Site are present herein. The Release Notification, Site Assessment/Characterization and Remediation Plan portions of the Form C-141 are attached to the front of this report.

3. Depth to Groundwater Determination

On July 17, 2023, White Drilling (White) and GHD mobilized to the Site to install a DTW determination boring. The soil boring was advanced to approximately 55 feet below ground surface (bgs) and is located at the following global positioning system (GPS) coordinates: 32.140026 N Latitude and 103.357778 W Longitude. The boring was left open for approximately 72 hours and a water level meter was utilized to determine the presence or absence of groundwater in the soil column. The boring was gauged on July 20, 2023, and no groundwater was detected in the boring, so the boring was plugged and abandoned by White during this time. Based on the DTW determination boring, the DTW for the Site is greater than approximately 55 feet bgs. Although the Site has groundwater deeper than 55 feet bgs and there are no drainage features observed across the Site area, there is an ephemeral watercourse traversing the project area based on the United States Geological Survey (USGS) topographic map. Therefore, the closure criteria are listed below.

Table 3.1 General Site Characterization and Groundwater

Site Characterization	Average Groundwater Depth (feet)
Ephemeral Watercourse	51-<100

Table 3.2 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12)

Regulatory Standard	Chloride (mg/kg)	TPH (GRO+DRO+MRO) (mg/kg)	TPH (GRO+DRO) (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)
19.15.29.13 Restoration, Reclamation and Re-Vegetation (Impacted Area 0 to 4 feet).	600	100	---	50	10
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release.	600	100	---	50	10
Notes: --- = not defined mg/kg = milligrams per kilogram TPH = total petroleum hydrocarbons GRO+DRO+MRO = Gasoline Range Organics + Diesel Range Organics + Motor Oil/Lube Range Organics BTEX = benzene, toluene, ethylbenzene, and xylene					

4. Summary of Drilling and Sampling Activities

4.1 Drilling Activities

On July 17, 2023, GHD and White mobilized to the Site to install five (5) soil borings (SB-1 through SB-5) to delineate the horizontal and vertical extent of the affected soils. Soil boring locations are shown on Figure 2. Soil borings were advanced to depths ranging from approximately 15 to 50 feet bgs. Soil samples were collected at various depth intervals based on field screening activities. The soil sample intervals were as follows:

- Soil boring SB-1 was sampled at approximately 18 to 20 feet bgs and approximately 58 feet bgs.
- Soil boring SB-2 was sampled at approximately 22 to 24 feet bgs and approximately 28 feet bgs.
- Soil boring SB-3 was sampled at approximately 20 to 22 feet bgs and approximately 33 feet bgs.
- Soil boring SB-4 was sampled at approximately 10 to 12 feet bgs and approximately 15 feet bgs.
- Soil boring SB-5 was sampled at approximately 12 to 14 feet bgs and approximately 16 feet bgs.

All samples were placed in laboratory-provided containers, which were immediately labelled, sealed, and stored/transported in a cooler containing ice to a laboratory certified by the National Environmental Laboratory Program (NELAP) for analysis. Samples were submitted to Pace Analytical in Mount Juliet, Tennessee and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by the United States Environmental Protection Agency (EPA) SW846 Method 8260B, total petroleum hydrocarbons (TPH) by EPA SW46 Method 8015B Modified, and chloride by EPA Method 9056A.

Analytical results indicated two (2) of the ten (10) collected samples from the soil borings advanced at the Site exhibited total TPH concentrations above the Table I Closure Criteria (SB-1 18 to 20 feet bgs and SB-3 20 to 22 feet bgs). Analytical results are shown in Table 1 and the laboratory analytical report is included as Attachment A. The stratigraphic boring logs are included as Attachment B.

4.2 Excavation Soil Sampling

On July 20, 2023, GHD personnel collected 20 additional soil samples from the remedial excavation at the Site. Composite soil samples represented areas no greater than 200 square feet. Samples were placed in laboratory-provided containers, which were immediately labelled, sealed, and stored/transported in a cooler containing ice to a laboratory certified by NELAP for analysis. Samples were submitted to Pace Analytical in Mount Juliet, Tennessee and analyzed for BTEX by EPA SW846 Method 8260B, TPH by EPA SW846 Method 8015B Modified, and chloride by EPA Method 300.

Analytical results indicated 16 of the 20 soil samples collected from the on-Site excavation exhibited total TPH concentrations above the Table I Closure Criteria. Sample locations are presented on Figure 2. Analytical results are shown in Table 1 and the laboratory analytical reports are included as Attachment A.

5. nAPP2307442828 Proposed Remediation Work Plan

GHD, on behalf of Plains, proposes the following activities be conducted at the Site:

- Areas exhibiting concentrations above the Table I Closure Criteria will be further excavated and sampled until concentrations are below Table I Closure Criteria or excavation is not able to be performed due to safety concerns/hazards.
- Previously excavated soils that were removed as part of the construction of an access ramp into the excavation will be sampled to ensure compliance with Table I Closure Criteria. One composite soil sample will be collected for each 25 cubic yards of stockpiled material. Samples will be placed in laboratory-provided containers, which will be immediately labelled, sealed, and stored/transported in a cooler containing ice to a NELAP certified laboratory for analysis. Samples will be submitted to Pace Analytical in Mount Juliet, Tennessee and analyzed for BTEX by EPA SW846 Method 8260B, TPH by EPA SW846 Method 8015B Modified, and chloride by EPA Method 300.
- Areas that have not been sampled will be field screened, excavated (if necessary), and sampled.

Composite confirmation samples will continue to be collected from the excavation sidewalls and floor from areas representing no more than 200 square feet. Discrete soil samples will be collected from the excavation sidewalls if any staining is observed. All confirmation samples will be taken to a NELAP certified laboratory and analyzed for BTEX by EPA SW846 Method 8260B, TPH by EPA SW846 Method 8015B Modified, and chloride by EPA Method 300.

The proposed remediation activities will be performed within 90 days after the work plan has been approved. Once analytical results are below the Table I Closure Criteria, a detailed report will be submitted to the NMOCD requesting Site closure.

Excavated soils will be transported off-Site for disposal to a NMOCD approved disposal facility. The excavation will be backfilled with non-impacted soil obtained from local and off-Site sources upon receipt of positive laboratory analytical results and NMOCD approval for Site closure.

Should you have any questions or comments concerning this Site Assessment Report, please do not hesitate to contact our GHD Midland office at (432) 686-0086.

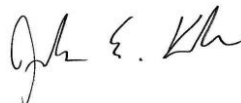
Regards,

GHD



J.T. Murrey
Senior Project Manager

(423) 203-8664
JT.Murrey@GHD.com



Joseph E. Kraska
Project Director

(832) 380-7649
Joseph.Kraska@GHD.com

JT/jlf/1

Encl.: Table 1 - Summary of Soil Analytical Data
 Figure 1 - Site Location Map
 Figure 2 - Site Details Map
 Figure 3 - Sample Location Map
 Attachment A - Laboratory Analytical Reports and Chain-of-Custody Documentation
 Attachment B - Stratigraphic Logs

Copy to: Karolanne Hudgens - Plains Pipeline, L.P.

Summary of Soil Analytical Data
Plains Pipeline, L.P.
Plains Montera 6" Release SRS#2022-077
Incident ID: nAPP2229253656
Lea County, New Mexico

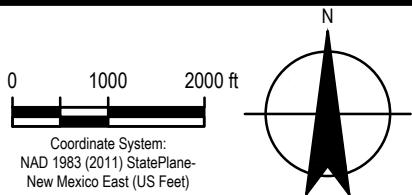
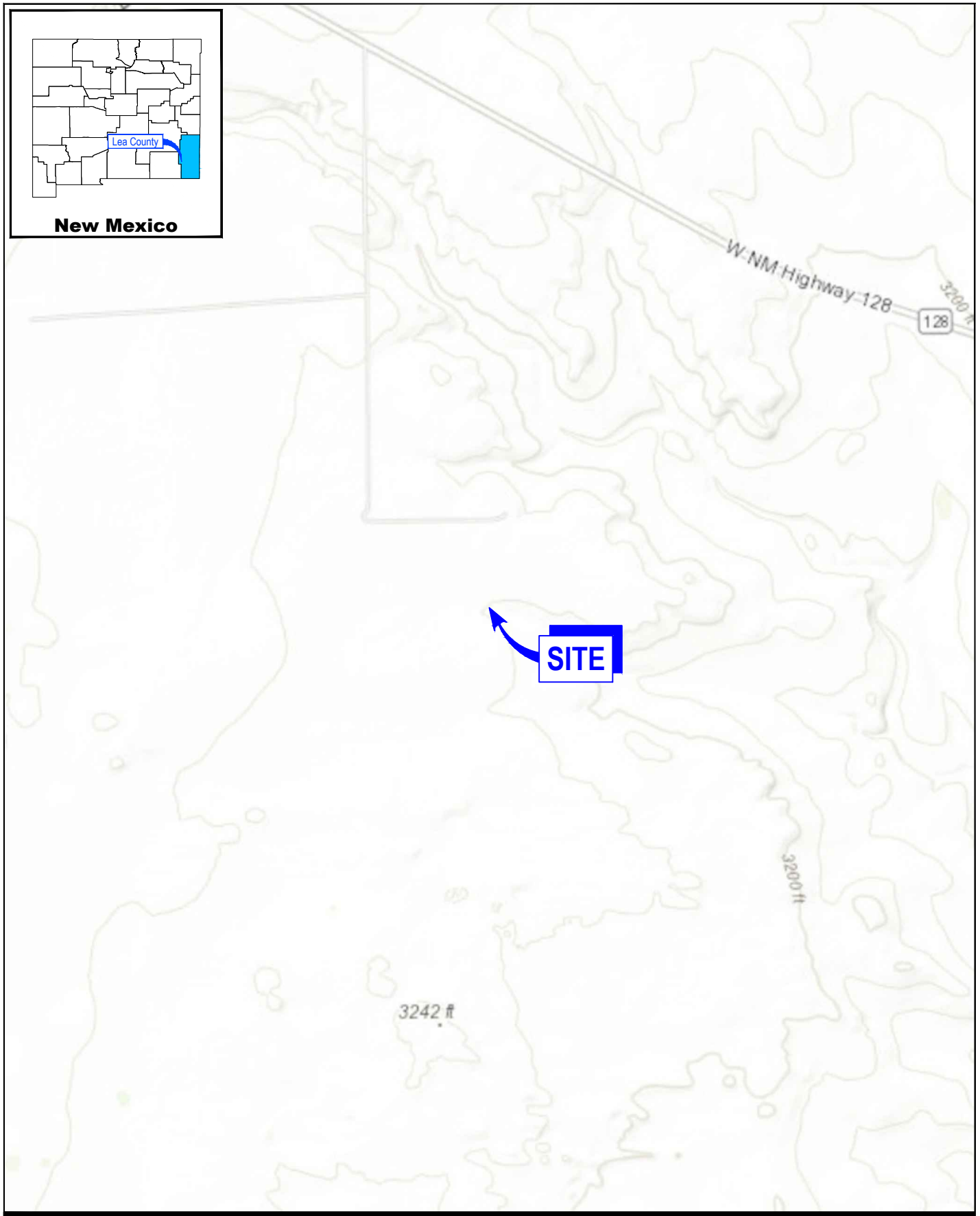
Location	Sample Identification	Date	Depth	Chemical Name:	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX	TPH (C6-C10) GRO	TPH (>C10-C28) DRO	TPH (>C28-C36) ORO	Total TPH	Chloride
NMAC 19.15.29.12 Table 1 Closure Criteria (GW ≤50 feet):					10				50				100	600
Lighthouse Environmental Collected Samples														
CS-1	CS-1	12/29/2022	36"		NS	NS	NS	NS	NS	343	2330	<49.9	2670	<5.00
CS-2	CS-2	12/29/2022	36"		NS	NS	NS	NS	NS	<49.9	<49.9	<49.9	<49.9	<5.04
CS-3	CS-3	12/29/2022	30"		NS	NS	NS	NS	NS	<49.9	<49.9	<49.9	<49.9	<5.03
CS-4	CS-4	12/29/2022	30"		NS	NS	NS	NS	NS	2410	4040	<49.8	6450	<5.05
CS-5	CS-5	12/29/2022	30"		NS	NS	NS	NS	NS	<49.9	<49.9 U	<49.9	<49.9	<4.95
CS-6	CS-6	12/29/2022	0-6"		NS	NS	NS	NS	NS	64	1600	<50.0	1660	<5.03
CS-7	CS-7	12/29/2022	0-6"		NS	NS	NS	NS	NS	<50.0	91.2	<50.0	91	37
CS-8	CS-8	12/29/2022	36"		NS	NS	NS	NS	NS	2820	5230		8050	<5.00
CS-9	CS-9	12/29/2022	36"		NS	NS	NS	NS	NS	3020	6470	<250	9490	<4.96
CS-10	CS-10	12/29/2022	12-14"		NS	NS	NS	NS	NS	<50.0	295	<50.0	295	<4.96
CS-11	CS-11	12/29/2022	0-6"		NS	NS	NS	NS	NS	1380	3610	<50.0	4990	<4.95
CS-12	CS-12	12/29/2022	6-12"		NS	NS	NS	NS	NS	629	3590	<49.9	4220	5.95
CS-13	CS-13	12/29/2022	24"		NS	NS	NS	NS	NS	150	2280	<49.9	2430	<5.03
CS-14	CS-14	12/29/2022	5'		NS	NS	NS	NS	NS	<50.0	297	<50.0	297	<5.01
CS-15	CS-15	12/29/2022	48"		NS	NS	NS	NS	NS	1110	5210	<250	6320	<5.01
CS-16	CS-16	12/29/2022	18'		NS	NS	NS	NS	NS	65	253	<50.0	318	5
CS-17	CS-17	12/29/2022	18'		NS	NS	NS	NS	NS	417	1300	<50.0	1720	14
CS-18	CS-18	12/29/2022	18'		NS	NS	NS	NS	NS	3800	4600	<250	8400	31
CS-19	CS-19	12/29/2022	18'		NS	NS	NS	NS	NS	5270	6230	<249	11500	5
CS-20	CS-20	12/29/2022	18'		NS	NS	NS	NS	NS	1930	3790	<49.9	5720	54
CS-21	CS-21	12/29/2022	18'		NS	NS	NS	NS	NS	1140	11700	1440	14300	36
CS-22	CS-22	12/29/2022	18'		NS	NS	NS	NS	NS	4700	19500	2430	26600	74
CS-23	CS-23	12/29/2022	18'		NS	NS	NS	NS	NS	2340	15300	1750	19400	66
CS-24	CS-24	12/29/2022	18'		NS	NS	NS	NS	NS	2590	11300	1340	15200	60
CS-25	CS-25	12/29/2022	18'		NS	NS	NS	NS	NS	6120	17300	2120	25500	45.5
CS-26	CS-26	12/29/2022	18'		NS	NS	NS	NS	NS	<50.0	<50.0	<50.0	<50.0	69
CS-27	CS-27	12/29/2022	18'		NS	NS	NS	NS	NS	<50.0	106	<50.0	106	48.4
CS-28	CS-28	12/29/2022	8'		NS	NS	NS	NS	NS	<50.0	<50.0	<50.0	<50.0	<5.01
CS-29	CS-29	12/29/2022	8'		NS	NS	NS	NS	NS	<50.0	<50.0	<50.0	<50.0	<4.97
CS-30	CS-30	12/29/2022	0-6"		NS	NS	NS	NS	NS	<50.0	299	<50.0	299	<4.98
CS-31	CS-31	12/29/2022	0-6"		NS	NS	NS	NS	NS	<50.0	<50.0	<50.0	<50.0	36
Soil Borings														
SB-1	SB-1 (18')	07/17/2023	18 - 20 ft bgs		0.0310	2.35	3.36	15.3	21.01	765	5450	2640	8855	47.0
SB-1	SB-1 (58')	07/17/2023	58 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	4.20	4.66	8.86	<20.0
SB-2	SB-2 (22')	07/17/2023	22 - 24 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	<100
SB-2	SB-2 (28')	07/17/2023	28 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	35.7
SB-3	SB-3 (20')	07/17/2023	20 - 22 ft bgs		<0.00100	0.00990	0.00663	0.0304	0.04693	27.0 B	228	143	371	<20.0
SB-3	SB-3 (33')	07/17/2023	33 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	<20.4
SB-4	SB-4 (10')	07/17/2023	10 -12 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	<20.4
SB-4	SB-4 (15')	07/17/2023	15 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	<20.2
SB-5	SB-5 (12')	07/17/2023	12 -14 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	62.2
SB-5	SB-5 (16')	07/17/2023	16 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	146

Summary of Soil Analytical Data
Plains Pipeline, L.P.
Plains Montera 6" Release SRS#2022-077
Incident ID: nAPP2229253656
Lea County, New Mexico

Location	Sample Identification	Date	Depth	Chemical Name:	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total BTEX	TPH (C6-C10) GRO	TPH (>C10-C28) DRO	TPH (>C28-C36) ORO	Total TPH	Chloride
NMAC 19.15.29.12 Table 1 Closure Criteria (GW ≤50 feet):					10				50				100	600
Excavation Bottom Soil Samples														
BH-1	BH-1	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	0.00268	0.0597	0.06238	0.217	70.2	31.0	101.417	<20.0
BH-2	BH-2	07/20/2023	2-3.5 ft bgs		<0.00100	0.00587	0.00553	0.0344	0.0458	0.247	199	148	347.247	<20.0
BH-3	BH-3	07/20/2023	2-3.5 ft bgs		<0.00100	0.0301	0.0192	0.455	0.5043	0.780	501	383	884.78	<20.0
BH-4	BH-4	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	<4.00	<4.00	<4.00	<20.0
BH-5	BH-5	07/20/2023	2-3.5 ft bgs		<0.00100	0.0216	0.0147	0.229	0.2653	0.532	147	93.1	240.632	<20.0
BH-6	BH-6	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	0.0129	0.220	0.2329	0.454	453	307	760.454	<2000
BH-7	BH-7	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<0.100	9.21	7.77	16.98	<20.0
BH-8	BH-8	07/20/2023	2-3.5 ft bgs		<0.00100	0.0327	0.0539	0.423	0.5096	0.780	72.4	32.6	105.78	<20.0
BH-9	BH-9	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	0.0613	0.0613	0.142	69.4	49.4	118.942	<20.0
BH-10	BH-10	07/20/2023	2-3.5 ft bgs		<0.00100	0.00820	<0.00250	<0.00650	<0.00650	<0.100	10.3	7.88	18.18	<20.0
BH-11	BH-11	07/20/2023	2-3.5 ft bgs		<0.00100	0.0573	0.0676	0.590	0.7149	10.2	73.6	37.8	121.6	<20.0
BH-12	BH-12	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	0.00328	0.00668	0.00996	<2.50	520	450	970	<20.0
BH-13	BH-13	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	0.0244	0.0244	4.05	535	451	990.05	<20.0
BH-14	BH-14	07/20/2023	2-3.5 ft bgs		<0.00100	0.0128	0.0383	0.299	0.3501	10.4	1280	720	2010.4	<20.0
BH-15	BH-15	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	0.00658	0.00658	<2.50	316	202	518	<20.0
BH-16	BH-16	07/20/2023	2-3.5 ft bgs		<0.00100	<0.00500	<0.00250	<0.00650	<0.00650	<2.50	90.7	82.7	173.4	<20.0
BH-17	BH-17	07/20/2023	2-3.5 ft bgs		0.00188	0.0415	0.0966	0.663	0.80298	16.9	2750	1690	4456.9	<20.0
BH-18	BH-18	07/20/2023	2-3.5 ft bgs		<0.00100	0.00733	0.00778	0.130	0.14511	5.40	268	219	492.4	<20.0
BH-19	BH-19	07/20/2023	2-3.5 ft bgs		<0.00100	0.00513	<0.00250	0.00696	0.01209	<0.100	34.4	26.4	60.8	<20.0
BH-20	BH-20	07/20/2023	2-3.5 ft bgs		<0.00100	0.0594	0.0553	0.410	0.5247	9.75	405	301	715.75	<20.0

Notes:

- Values reported in milligrams per kilogram (mg/kg).
- < = Value Less than Reporting Limit (RL).
- Bold Indicates Analyte Detected.
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) analyses by EPA Method SW 8260B.
- Total Petroleum Hydrocarbons (TPH) analyses by EPA SW846 Method 8015 Mod.
- Gasoline Range Organics (GRO); Diesel Range Organics (DRO); Motor Oil Range Organics (ORO).
- Chlorides by EPA Method 300.0.
- Light Gray shaded cells indicate analytical samples that exceed the New Mexico Administrative Code (NMAC) 19.15.29.12 Table 1 Closure Criteria for the Site.
- Dark Gray shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table 1 Closure Criteria for the site (Surface to 4 Feet Below Grade).
- bgs - below ground surface.
- ft - feet.
- NS - Not Sampled.
- GW - Groundwater.



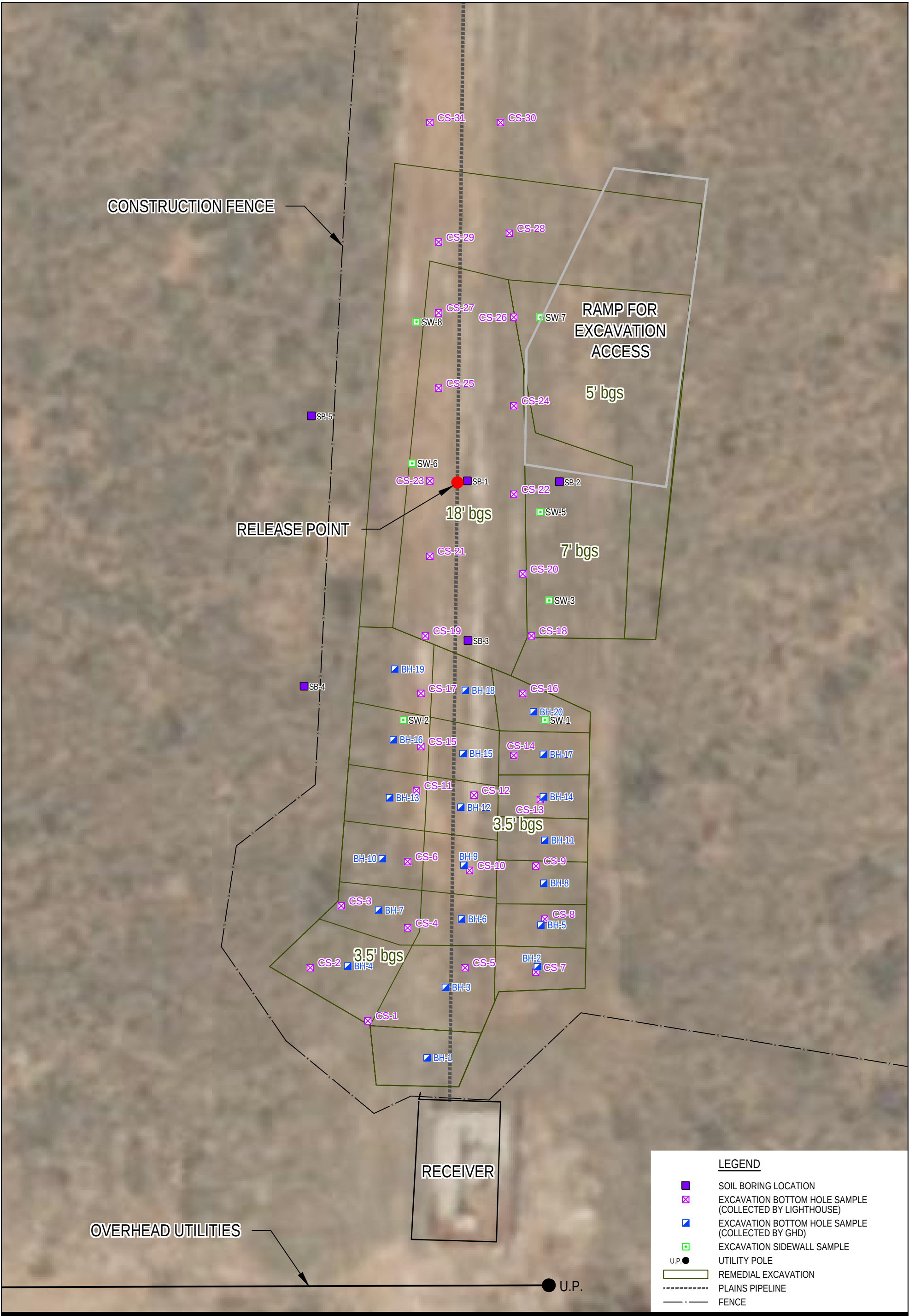
PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
MONTERA 6" RELEASE - SRS#2022-077
INCIDENT ID: NAPP2229253656

Project No. 12615440
Date September 2023

SITE LOCATION MAP

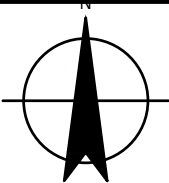
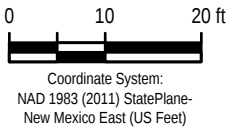
FIGURE 1





NOTE:

SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.



PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
MONTERA 6" RELEASE - SRS#2022-077
INCIDENT ID: NAPP2229253656

Project No. 12615440
Date September 2023

SAMPLE LOCATIONS MAP

FIGURE 3

Attachment A

Laboratory Analytical Reports and Chain-of-Custody Documentation



ANALYTICAL REPORT

August 02, 2023

Revised Report

Plains All American, LP - GHD

Sample Delivery Group: L1637501
Samples Received: 07/20/2023
Project Number: SRS #2022-077
Description: Plains Montera 6" Release
Site: SRS #2022-077
Report To: J.T. Murrey
2135 S Loop 250 W
Midland, TX 79703

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Entire Report Reviewed By:

Brittnie L Boyd
Project Manager

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

Pace Analytical National

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

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	5	
Sr: Sample Results	6	³ Ss
SB-1 (20 FT) L1637501-01	6	
SB-2 (22 FT) L1637501-02	7	⁴ Cn
SB-3 (20 FT) L1637501-03	8	⁵ Sr
SB-4 (10 FT) L1637501-04	9	
SB-5 (12 FT) L1637501-05	10	⁶ Qc
SB-1 (58') L1637501-06	11	
SB-2 (28') L1637501-07	12	⁷ Gl
SB-3 (33') L1637501-08	13	⁸ Al
SB-4 (15') L1637501-09	14	
SB-5 (16') L1637501-10	15	⁹ Sc
Qc: Quality Control Summary	16	
Wet Chemistry by Method 9056A	16	
Volatile Organic Compounds (GC) by Method 8015D/GRO	17	
Volatile Organic Compounds (GC/MS) by Method 8260B	20	
Semi-Volatile Organic Compounds (GC) by Method 8015M	22	
Gl: Glossary of Terms	25	
Al: Accreditations & Locations	26	
Sc: Sample Chain of Custody	27	

SB-1 (20 FT) L1637501-01 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 16:40
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 20:07	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100805	200	07/22/23 22:12	07/25/23 07:51	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	20	07/22/23 22:12	07/23/23 06:56	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	50	07/26/23 07:37	07/26/23 21:50	KAP	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

SB-2 (22 FT) L1637501-02 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 16:00
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	5	07/27/23 11:45	07/27/23 20:24	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100146	1	07/22/23 22:12	07/24/23 05:29	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 01:13	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 17:49	KAP	Mt. Juliet, TN

SB-3 (20 FT) L1637501-03 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 15:30
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 20:40	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100805	100	07/22/23 22:12	07/25/23 08:09	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2103055	1	07/22/23 22:12	07/28/23 13:26	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 20:25	KAP	Mt. Juliet, TN

SB-4 (10 FT) L1637501-04 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 14:00
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1.02	07/27/23 11:45	07/27/23 20:57	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 01:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 01:32	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 18:31	KAP	Mt. Juliet, TN

SB-5 (12 FT) L1637501-05 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 14:30
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 21:14	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 01:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 01:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 19:14	KAP	Mt. Juliet, TN

SB-1 (58') L1637501-06 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 16:45
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 21:31	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 02:09	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 02:11	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 18:03	KAP	Mt. Juliet, TN

SB-2 (28') L1637501-07 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 16:05
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 21:48	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 02:31	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 02:30	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100888	1	07/26/23 07:37	07/26/23 18:17	KAP	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

SB-3 (33') L1637501-08 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 15:35
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1.02	07/27/23 11:45	07/27/23 22:39	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 02:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 02:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2100286	1	07/26/23 05:11	07/26/23 16:51	JAS	Mt. Juliet, TN

SB-4 (15') L1637501-09 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 14:05
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1.01	07/27/23 11:45	07/27/23 22:56	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 03:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 03:07	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2101627	1	07/26/23 07:48	07/26/23 18:45	KAP	Mt. Juliet, TN

SB-5 (16') L1637501-10 Solid

Collected by Mitchell Clemens
Collected date/time 07/17/23 14:35
Received date/time 07/20/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2101827	1	07/27/23 11:45	07/27/23 23:13	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2100819	1	07/22/23 22:12	07/26/23 03:39	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2099949	1	07/22/23 22:12	07/23/23 03:26	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2101627	1	07/26/23 07:48	07/26/23 18:58	KAP	Mt. Juliet, TN

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



Brittnie L Boyd
Project Manager

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

Report Revision History

Level II Report - Version 1: 07/31/23 10:46

Project Narrative

Changes to Sample IDs

Collected date/time: 07/17/23 16:40

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	47.0		20.0	1	07/27/2023 20:07	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	765		20.0	200	07/25/2023 07:51	WG2100805
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		07/25/2023 07:51	WG2100805

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.0310		0.0200	20	07/23/2023 06:56	WG2099949
Toluene	2.35		0.100	20	07/23/2023 06:56	WG2099949
Ethylbenzene	3.36		0.0500	20	07/23/2023 06:56	WG2099949
Total Xylenes	15.3		0.130	20	07/23/2023 06:56	WG2099949
(S) Toluene-d8	100		75.0-131		07/23/2023 06:56	WG2099949
(S) 4-Bromofluorobenzene	99.6		67.0-138		07/23/2023 06:56	WG2099949
(S) 1,2-Dichloroethane-d4	108		70.0-130		07/23/2023 06:56	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	5450		200	50	07/26/2023 21:50	WG2100888
C28-C36 Motor Oil Range	2640		200	50	07/26/2023 21:50	WG2100888
(S) o-Terphenyl	4890	J7	18.0-148		07/26/2023 21:50	WG2100888

Collected date/time: 07/17/23 16:00

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	ND		100	5	07/27/2023 20:24	WG2101827

Sample Narrative:

L1637501-02 WG2101827: Dilution due to matrix interference.

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/24/2023 05:29	WG2100146
(S) a,a,a-Trifluorotoluene(FID)	95.7		77.0-120		07/24/2023 05:29	WG2100146

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/23/2023 01:13	WG2099949
Toluene	ND		0.00500	1	07/23/2023 01:13	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 01:13	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 01:13	WG2099949
(S) Toluene-d8	110		75.0-131		07/23/2023 01:13	WG2099949
(S) 4-Bromofluorobenzene	88.6		67.0-138		07/23/2023 01:13	WG2099949
(S) 1,2-Dichloroethane-d4	109		70.0-130		07/23/2023 01:13	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 17:49	WG2100888
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 17:49	WG2100888
(S) o-Terphenyl	64.4		18.0-148		07/26/2023 17:49	WG2100888

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

Collected date/time: 07/17/23 15:30

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 20:40	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	27.0	B	10.0	100	07/25/2023 08:09	WG2100805
(S) a,a,a-Trifluorotoluene(FID)	98.9		77.0-120		07/25/2023 08:09	WG2100805

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/28/2023 13:26	WG2103055
Toluene	0.00990		0.00500	1	07/28/2023 13:26	WG2103055
Ethylbenzene	0.00663		0.00250	1	07/28/2023 13:26	WG2103055
Total Xylenes	0.0304		0.00650	1	07/28/2023 13:26	WG2103055
(S) Toluene-d8	108		75.0-131		07/28/2023 13:26	WG2103055
(S) 4-Bromofluorobenzene	105		67.0-138		07/28/2023 13:26	WG2103055
(S) 1,2-Dichloroethane-d4	82.6		70.0-130		07/28/2023 13:26	WG2103055

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	228		4.00	1	07/26/2023 20:25	WG2100888
C28-C36 Motor Oil Range	143		4.00	1	07/26/2023 20:25	WG2100888
(S) o-Terphenyl	35.5		18.0-148		07/26/2023 20:25	WG2100888

Collected date/time: 07/17/23 14:00

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.4	1.02	07/27/2023 20:57	WG2101827

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 01:23	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	84.6		77.0-120		07/26/2023 01:23	WG2100819

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 01:32	WG2099949
Toluene	ND		0.00500	1	07/23/2023 01:32	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 01:32	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 01:32	WG2099949
(S) Toluene-d8	115		75.0-131		07/23/2023 01:32	WG2099949
(S) 4-Bromofluorobenzene	96.1		67.0-138		07/23/2023 01:32	WG2099949
(S) 1,2-Dichloroethane-d4	105		70.0-130		07/23/2023 01:32	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 18:31	WG2100888
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 18:31	WG2100888
(S) o-Terphenyl	52.6		18.0-148		07/26/2023 18:31	WG2100888

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/17/23 14:30

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	62.2		20.0	1	07/27/2023 21:14	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 01:46	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	84.7		77.0-120		07/26/2023 01:46	WG2100819

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 01:52	WG2099949
Toluene	ND		0.00500	1	07/23/2023 01:52	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 01:52	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 01:52	WG2099949
(S) Toluene-d8	110		75.0-131		07/23/2023 01:52	WG2099949
(S) 4-Bromofluorobenzene	88.0		67.0-138		07/23/2023 01:52	WG2099949
(S) 1,2-Dichloroethane-d4	107		70.0-130		07/23/2023 01:52	WG2099949

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 19:14	WG2100888
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 19:14	WG2100888
(S) o-Terphenyl	70.6		18.0-148		07/26/2023 19:14	WG2100888

Collected date/time: 07/17/23 16:45

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	ND		20.0	1	07/27/2023 21:31	WG2101827

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 02:09	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	85.0		77.0-120		07/26/2023 02:09	WG2100819

⁶ Qc

⁷ Gl

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	07/23/2023 02:11	WG2099949
Toluene	ND		0.00500	1	07/23/2023 02:11	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 02:11	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 02:11	WG2099949
(S) Toluene-d8	111		75.0-131		07/23/2023 02:11	WG2099949
(S) 4-Bromofluorobenzene	90.6		67.0-138		07/23/2023 02:11	WG2099949
(S) 1,2-Dichloroethane-d4	109		70.0-130		07/23/2023 02:11	WG2099949

⁸ Al

⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.20		4.00	1	07/26/2023 18:03	WG2100888
C28-C36 Motor Oil Range	4.66		4.00	1	07/26/2023 18:03	WG2100888
(S) o-Terphenyl	54.5		18.0-148		07/26/2023 18:03	WG2100888

Collected date/time: 07/17/23 16:05

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	35.7		20.0	1	07/27/2023 21:48	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 02:31	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	84.7		77.0-120		07/26/2023 02:31	WG2100819

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 02:30	WG2099949
Toluene	ND		0.00500	1	07/23/2023 02:30	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 02:30	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 02:30	WG2099949
(S) Toluene-d8	112		75.0-131		07/23/2023 02:30	WG2099949
(S) 4-Bromofluorobenzene	90.6		67.0-138		07/23/2023 02:30	WG2099949
(S) 1,2-Dichloroethane-d4	105		70.0-130		07/23/2023 02:30	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 18:17	WG2100888
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 18:17	WG2100888
(S) o-Terphenyl	82.1		18.0-148		07/26/2023 18:17	WG2100888

Collected date/time: 07/17/23 15:35

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.4	1.02	07/27/2023 22:39	WG2101827

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 02:54	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	84.6		77.0-120		07/26/2023 02:54	WG2100819

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 02:48	WG2099949
Toluene	ND		0.00500	1	07/23/2023 02:48	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 02:48	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 02:48	WG2099949
(S) Toluene-d8	110		75.0-131		07/23/2023 02:48	WG2099949
(S) 4-Bromofluorobenzene	89.9		67.0-138		07/23/2023 02:48	WG2099949
(S) 1,2-Dichloroethane-d4	109		70.0-130		07/23/2023 02:48	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 16:51	WG2100286
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 16:51	WG2100286
(S) o-Terphenyl	57.5		18.0-148		07/26/2023 16:51	WG2100286

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/17/23 14:05

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.2	1.01	07/27/2023 22:56	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 03:16	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	85.3		77.0-120		07/26/2023 03:16	WG2100819

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 03:07	WG2099949
Toluene	ND		0.00500	1	07/23/2023 03:07	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 03:07	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 03:07	WG2099949
(S) Toluene-d8	111		75.0-131		07/23/2023 03:07	WG2099949
(S) 4-Bromofluorobenzene	90.0		67.0-138		07/23/2023 03:07	WG2099949
(S) 1,2-Dichloroethane-d4	106		70.0-130		07/23/2023 03:07	WG2099949

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 18:45	WG2101627
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 18:45	WG2101627
(S) o-Terphenyl	47.6		18.0-148		07/26/2023 18:45	WG2101627

Collected date/time: 07/17/23 14:35

L1637501

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	146		20.0	1	07/27/2023 23:13	WG2101827

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/26/2023 03:39	WG2100819
(S) a,a,a-Trifluorotoluene(FID)	85.1		77.0-120		07/26/2023 03:39	WG2100819

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/23/2023 03:26	WG2099949
Toluene	ND		0.00500	1	07/23/2023 03:26	WG2099949
Ethylbenzene	ND		0.00250	1	07/23/2023 03:26	WG2099949
Total Xylenes	ND		0.00650	1	07/23/2023 03:26	WG2099949
(S) Toluene-d8	113		75.0-131		07/23/2023 03:26	WG2099949
(S) 4-Bromofluorobenzene	92.5		67.0-138		07/23/2023 03:26	WG2099949
(S) 1,2-Dichloroethane-d4	107		70.0-130		07/23/2023 03:26	WG2099949

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/26/2023 18:58	WG2101627
C28-C36 Motor Oil Range	ND		4.00	1	07/26/2023 18:58	WG2101627
(S) o-Terphenyl	53.3		18.0-148		07/26/2023 18:58	WG2101627

Wet Chemistry by Method 9056A

[L1637501-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3954065-1 07/27/23 16:44

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chloride	U		9.20	20.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1637461-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1637461-15 07/27/23 17:34 • (DUP) R3954065-3 07/27/23 17:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	ND	ND	100	0.000		15

L1638358-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1638358-06 07/28/23 00:20 • (DUP) R3954065-6 07/28/23 00:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	ND	ND	100	0.000		15

Sample Narrative:

OS: Dilution due to matrix interference.

Laboratory Control Sample (LCS)

(LCS) R3954065-2 07/27/23 17:01

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	197	98.4	80.0-120	

L1637461-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637461-15 07/27/23 17:34 • (MS) R3954065-4 07/27/23 18:08 • (MSD) R3954065-5 07/27/23 18:25

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	ND	ND	ND	191	186	100	80.0-120	J5	J5	2.34	15

Sample Narrative:

MS: Matrix spike failure due to matrix interference.

MSD: Matrix spike failure due to matrix interference.

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

[L1637501-02](#)

Method Blank (MB)

(MB) R3952730-2 07/23/23 21:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0217		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3952730-1 07/23/23 20:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.32	78.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			98.4	77.0-120	

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1637501-01,03](#)

Method Blank (MB)

(MB) R3952341-2 07/25/23 00:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	1.46	⬇	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3952341-1 07/24/23 23:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.45	99.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			110	77.0-120	

L1637397-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637397-01 07/25/23 03:34 • (MS) R3952341-3 07/25/23 08:27 • (MSD) R3952341-4 07/25/23 08:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	110	ND	83.0	81.0	97.7	95.3	25	10.0-151			2.44	28
(S) a,a,a-Trifluorotoluene(FID)					110	106		77.0-120				

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

[L1637501-04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3952779-3 07/25/23 20:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	85.3			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3952779-2 07/25/23 19:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.10	74.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			91.4	77.0-120	

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

[L1637501-01,02,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3953588-3 07/23/23 00:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	91.7			67.0-138
(S) 1,2-Dichloroethane-d4	106			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

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

(LCS) R3953588-1 07/22/23 22:33 • (LCSD) R3953588-2 07/22/23 22:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.117	0.118	93.6	94.4	70.0-123			0.851	20
Toluene	0.125	0.113	0.115	90.4	92.0	75.0-121			1.75	20
Ethylbenzene	0.125	0.119	0.122	95.2	97.6	74.0-126			2.49	20
Total Xylenes	0.375	0.339	0.333	90.4	88.8	72.0-127			1.79	20
(S) Toluene-d8				107	105	75.0-131				
(S) 4-Bromofluorobenzene				89.2	90.3	67.0-138				
(S) 1,2-Dichloroethane-d4				108	107	70.0-130				

⁷Gl

⁸Al

⁹Sc

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

L1637501-03

Method Blank (MB)

(MB) R3954094-3 07/28/23 10:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	97.6			67.0-138
(S) 1,2-Dichloroethane-d4	76.1			70.0-130

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

(LCS) R3954094-1 07/28/23 08:58 • (LCSD) R3954094-2 07/28/23 09:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.112	0.109	89.6	87.2	70.0-123			2.71	20
Toluene	0.125	0.121	0.122	96.8	97.6	75.0-121			0.823	20
Ethylbenzene	0.125	0.112	0.112	89.6	89.6	74.0-126			0.000	20
Total Xylenes	0.375	0.336	0.338	89.6	90.1	72.0-127			0.593	20
(S) Toluene-d8				106	107	75.0-131				
(S) 4-Bromofluorobenzene				105	102	67.0-138				
(S) 1,2-Dichloroethane-d4				90.9	88.9	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M L1637501-08

Method Blank (MB)

(MB) R3953102-1 07/26/23 12:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	64.6			18.0-148

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Laboratory Control Sample (LCS)

(LCS) R3953102-2 07/26/23 12:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.1	68.2	50.0-150	
(S) o-Terphenyl			61.9	18.0-148	

L1636862-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1636862-02 07/26/23 17:04 • (MS) R3953102-3 07/26/23 17:17 • (MSD) R3953102-4 07/26/23 17:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.8	7.81	40.8	38.3	67.6	62.5	1	50.0-150			6.32	20
(S) o-Terphenyl					48.5	49.5		18.0-148				

Semi-Volatile Organic Compounds (GC) by Method 8015M [L1637501-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R3953366-1 07/26/23 17:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	75.7			18.0-148

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Laboratory Control Sample (LCS)

(LCS) R3953366-2 07/26/23 17:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.6	89.2	50.0-150	
(S) o-Terphenyl			84.4	18.0-148	

L1637378-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637378-01 07/26/23 19:42 • (MS) R3953366-3 07/26/23 19:57 • (MSD) R3953366-4 07/26/23 20:11

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.8	ND	37.5	31.0	75.3	62.0	1	50.0-150			19.0	20
(S) o-Terphenyl					65.7	57.7		18.0-148				

Semi-Volatile Organic Compounds (GC) by Method 8015M

L1637501-09,10

Method Blank (MB)

(MB) R3953262-1 07/26/23 18:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	55.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3953262-2 07/26/23 18:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	30.8	61.6	50.0-150	
(S) o-Terphenyl			58.7	18.0-148	

L1637533-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637533-05 07/26/23 22:16 • (MS) R3953262-3 07/26/23 22:29 • (MSD) R3953262-4 07/26/23 22:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	41.7	2830	2180	2090	0.000	0.000	100	50.0-150	V	V	4.22	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Company Name/Address:

Plains Pipeline, L.P. - GHD
2135 S Loop 250 West
Midland, TX 79703

Billing Information:

Karolanne Hudgens
1106 Griffith Drive
Midland, TX 79706

Pres
Chk

Analysis / Container / Preservative

Chain of Custody



12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 #

E071

Acctnum: PLAINSGHD

Template:

Prelogin:

PM: 829-Brittanie L Boyd

PB:

Shipped Via:

Remarks

Sample # (lab only)

Report to:

J.T Murrey

Email to:

JT.Murrey@ghd.com

Project Description:

Plains Montera 6" Release

City/State
Collected: Lea County, NMPlease Circle:
PT MT CT ET

Phone: (361) 252-6136

Client Project #
SRS 2022-077

Lab Project #

Collected by (print):

Mitchell Clemens

Site/Facility ID #
SRS 2022-077P.O. #
SRS 2022-077

Collected by (signature):

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Standard TAT

No.
of
Cntrs

Immediately

Packed on Ice N ___ Y ___ X

Sample ID

Comp/Grab

Matrix*

Depth

Date

Time

No.
of
Cntrs

SB-1 (2 ft.)

Grab

SS

2 ft.

7/17/23

16:40

1

SB-2 (4 ft.)

Grab

SS

4ft.

7/17/23

16:00

1

SB-3 (2 ft.)

Grab

SS

2 ft.

7/17/23

15:30

1

SB-4 (10 ft.)

Grab

SS

10. ft

7/17/23

14:00

1

SB-5 (12 ft.)

Grab

SS

12 ft.

7/17/23

14:30

1

SB-1 (40')

40'

16:45

SB-2 (10')

10'

16:05

SB-3 (15')

15'

15:35

SB-4 (15')

15'

14:05

SB-5 (16')

16'

14:35

* Matrix:

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

Remarks:

Samples returned via:

___ UPS ___ FedEx ___ Courier ___

Tracking #

pH ___ Temp ___

Flow ___ Other ___

Sample Receipt Checklist

COC Seal Present/Intact: ___ NP ___ 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:

7-18-23

Time:

1030

Received by: (Signature)

Trip Blank Received: Yes/No
HCL/MeOH
TBR

Relinquished by: (Signature)

Date:

7/19/23

Time:

1700

Received by: (Signature)

Temp: 63.6°C
Bottles Received: 10
1.1+0=1.1

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

7-20-23 800

If preservation required by Login: Date/Time

Hold:

Condition:
NCF / OK



ANALYTICAL REPORT

August 04, 2023

Plains All American, LP - GHD

Sample Delivery Group: L1638358
Samples Received: 07/22/2023
Project Number: SRS #2022-077
Description: Plains Montera 6" Release
Site: SRS #2022-077
Report To: J.T. Murrey
2135 S Loop 250 W
Midland, TX 79703

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Entire Report Reviewed By:

A handwritten signature in blue ink that reads "Brittnie Boyd".

Brittnie L Boyd
Project Manager

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

Pace Analytical National

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

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¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

BH-1 L1638358-01 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:10
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2102351	1	07/27/23 02:40	07/27/23 06:21	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 08:02	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 17:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 17:38	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 23:13	JAS	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

BH-2 L1638358-02 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:20
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2102351	1	07/27/23 02:40	07/27/23 06:31	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 08:25	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 17:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 17:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	5	07/31/23 09:51	08/01/23 01:51	JAS	Mt. Juliet, TN

5Sr

6Qc

7Gl

8Al

9Sc

BH-3 L1638358-03 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:25
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2102351	1	07/27/23 02:40	07/27/23 06:41	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 08:48	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 18:00	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 18:18	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	10	07/31/23 09:51	08/01/23 13:52	JSS	Mt. Juliet, TN

BH-4 L1638358-04 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:30
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2102351	1	07/27/23 02:40	07/27/23 06:51	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2103423	1	07/27/23 10:26	07/28/23 23:04	NCC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2102922	1	07/27/23 10:26	07/27/23 13:18	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 20:14	JAS	Mt. Juliet, TN

BH-5 L1638358-05 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:35
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2102351	1	07/27/23 02:40	07/27/23 07:01	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 09:11	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 18:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106988	1	07/27/23 10:26	08/03/23 13:32	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	08/01/23 00:06	JAS	Mt. Juliet, TN

BH-6 L1638358-06 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:40
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2101827	100	07/27/23 11:45	07/28/23 00:20	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 09:34	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 18:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 18:37	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	10	07/31/23 09:51	08/01/23 13:39	JSS	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

BH-7 L1638358-07 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:45
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2101827	1	07/27/23 11:45	07/28/23 00:54	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104457	1	07/27/23 10:26	07/31/23 00:10	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2102922	1	07/27/23 10:26	07/27/23 13:38	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 21:54	JAS	Mt. Juliet, TN

5Sr

6Qc

7Gl

8Al

BH-8 L1638358-08 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:50
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 22:19	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 09:57	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 18:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 18:57	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 23:39	JAS	Mt. Juliet, TN

9Sc

BH-9 L1638358-09 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 11:55
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 22:29	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 10:21	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 19:16	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 19:16	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 23:52	JAS	Mt. Juliet, TN

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:00
Received date/time 07/22/23 15:45

BH-10 L1638358-10 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 22:39	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2105715	1	07/27/23 10:26	08/02/23 10:44	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 19:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 19:36	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 23:00	JAS	Mt. Juliet, TN

BH-11 L1638358-11 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:05
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 22:49	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 02:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 19:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 19:55	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	07/31/23 23:26	JAS	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

BH-12 L1638358-12 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:10
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 22:59	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 03:07	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 20:13	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 20:15	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	10	07/31/23 09:51	08/01/23 14:19	JSS	Mt. Juliet, TN

5Sr

6Qc

7Gl

8Al

BH-13 L1638358-13 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:15
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 23:09	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 03:26	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2105684	1	07/27/23 10:26	08/01/23 20:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106143	1	07/27/23 10:26	08/02/23 20:34	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	10	07/31/23 09:51	08/01/23 14:06	JSS	Mt. Juliet, TN

9Sc

BH-14 L1638358-14 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:20
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 23:19	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 03:44	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 18:53	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	5	07/31/23 09:51	08/01/23 02:05	JAS	Mt. Juliet, TN

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:25
Received date/time 07/22/23 15:45

BH-15 L1638358-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 23:49	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 04:02	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 19:12	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	1	07/31/23 09:51	08/01/23 00:19	JAS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103345	10	07/31/23 09:51	08/01/23 13:26	JSS	Mt. Juliet, TN

BH-16 L1638358-16 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:30
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/27/23 23:59	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 04:20	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 19:30	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	1	07/30/23 15:46	07/31/23 06:35	KAP	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

BH-17 L1638358-17 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:35
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/28/23 00:19	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 04:39	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 19:50	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	10	07/30/23 15:46	07/31/23 08:50	KAP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	100	07/30/23 15:46	08/01/23 11:54	KAP	Mt. Juliet, TN

BH-18 L1638358-18 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:40
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/28/23 00:29	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 04:57	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 20:09	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	1	07/30/23 15:46	07/31/23 06:52	KAP	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	10	07/30/23 15:46	08/01/23 11:02	KAP	Mt. Juliet, TN

BH-19 L1638358-19 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:45
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/28/23 00:39	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104461	1	07/27/23 10:26	07/31/23 00:33	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2106636	1	07/27/23 10:26	08/03/23 17:03	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	1	07/30/23 15:46	07/31/23 05:29	KAP	Mt. Juliet, TN

BH-20 L1638358-20 Solid

Collected by Mitchell Clemens
Collected date/time 07/20/23 12:50
Received date/time 07/22/23 15:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG2103193	1	07/27/23 20:30	07/28/23 00:49	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2104460	25	07/27/23 10:26	07/31/23 05:15	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2104608	1	07/27/23 10:26	07/31/23 20:28	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2103346	10	07/30/23 15:46	08/04/23 12:26	JAS	Mt. Juliet, TN

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



Brittnie L Boyd
Project Manager

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

Collected date/time: 07/20/23 11:10

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 06:21	WG2102351

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.217	B	0.100	1	08/02/2023 08:02	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	96.4		77.0-120		08/02/2023 08:02	WG2105715

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 17:22	WG2105684
Toluene	ND		0.00500	1	08/01/2023 17:22	WG2105684
Ethylbenzene	0.00268		0.00250	1	08/02/2023 17:38	WG2106143
Total Xylenes	0.0597		0.00650	1	08/02/2023 17:38	WG2106143
(S) Toluene-d8	109		75.0-131		08/01/2023 17:22	WG2105684
(S) Toluene-d8	104		75.0-131		08/02/2023 17:38	WG2106143
(S) 4-Bromofluorobenzene	101		67.0-138		08/01/2023 17:22	WG2105684
(S) 4-Bromofluorobenzene	111		67.0-138		08/02/2023 17:38	WG2106143
(S) 1,2-Dichloroethane-d4	72.8		70.0-130		08/01/2023 17:22	WG2105684
(S) 1,2-Dichloroethane-d4	98.3		70.0-130		08/02/2023 17:38	WG2106143

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	70.2		4.00	1	07/31/2023 23:13	WG2103345
C28-C36 Motor Oil Range	31.0		4.00	1	07/31/2023 23:13	WG2103345
(S) o-Terphenyl	42.9		18.0-148		07/31/2023 23:13	WG2103345

Collected date/time: 07/20/23 11:20

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 06:31	WG2102351

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.247	B	0.100	1	08/02/2023 08:25	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	94.9		77.0-120		08/02/2023 08:25	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 17:41	WG2105684
Toluene	0.00587		0.00500	1	08/01/2023 17:41	WG2105684
Ethylbenzene	0.00553		0.00250	1	08/02/2023 17:58	WG2106143
Total Xylenes	0.0344		0.00650	1	08/02/2023 17:58	WG2106143
(S) Toluene-d8	116		75.0-131		08/01/2023 17:41	WG2105684
(S) Toluene-d8	104		75.0-131		08/02/2023 17:58	WG2106143
(S) 4-Bromofluorobenzene	100		67.0-138		08/01/2023 17:41	WG2105684
(S) 4-Bromofluorobenzene	106		67.0-138		08/02/2023 17:58	WG2106143
(S) 1,2-Dichloroethane-d4	74.8		70.0-130		08/01/2023 17:41	WG2105684
(S) 1,2-Dichloroethane-d4	99.1		70.0-130		08/02/2023 17:58	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	199		20.0	5	08/01/2023 01:51	WG2103345
C28-C36 Motor Oil Range	148		20.0	5	08/01/2023 01:51	WG2103345
(S) o-Terphenyl	56.1		18.0-148		08/01/2023 01:51	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 11:25

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 06:41	WG2102351

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.780		0.100	1	08/02/2023 08:48	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	94.7		77.0-120		08/02/2023 08:48	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 18:00	WG2105684
Toluene	0.0301		0.00500	1	08/01/2023 18:00	WG2105684
Ethylbenzene	0.0192		0.00250	1	08/02/2023 18:18	WG2106143
Total Xylenes	0.455		0.00650	1	08/02/2023 18:18	WG2106143
(S) Toluene-d8	109		75.0-131		08/01/2023 18:00	WG2105684
(S) Toluene-d8	103		75.0-131		08/02/2023 18:18	WG2106143
(S) 4-Bromofluorobenzene	106		67.0-138		08/01/2023 18:00	WG2105684
(S) 4-Bromofluorobenzene	117		67.0-138		08/02/2023 18:18	WG2106143
(S) 1,2-Dichloroethane-d4	78.2		70.0-130		08/01/2023 18:00	WG2105684
(S) 1,2-Dichloroethane-d4	100		70.0-130		08/02/2023 18:18	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	501		40.0	10	08/01/2023 13:52	WG2103345
C28-C36 Motor Oil Range	383		40.0	10	08/01/2023 13:52	WG2103345
(S) o-Terphenyl	81.8		18.0-148		08/01/2023 13:52	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 11:30

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 06:51	WG2102351

¹ Cp

² Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/28/2023 23:04	WG2103423
(S) a,a,a-Trifluorotoluene(FID)	99.6		77.0-120		07/28/2023 23:04	WG2103423

³ Ss

⁴ Cn

⁵ Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/27/2023 13:18	WG2102922
Toluene	ND		0.00500	1	07/27/2023 13:18	WG2102922
Ethylbenzene	ND		0.00250	1	07/27/2023 13:18	WG2102922
Total Xylenes	ND		0.00650	1	07/27/2023 13:18	WG2102922
(S) Toluene-d8	116		75.0-131		07/27/2023 13:18	WG2102922
(S) 4-Bromofluorobenzene	101		67.0-138		07/27/2023 13:18	WG2102922
(S) 1,2-Dichloroethane-d4	79.8		70.0-130		07/27/2023 13:18	WG2102922

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	07/31/2023 20:14	WG2103345
C28-C36 Motor Oil Range	ND		4.00	1	07/31/2023 20:14	WG2103345
(S) o-Terphenyl	42.2		18.0-148		07/31/2023 20:14	WG2103345

Collected date/time: 07/20/23 11:35

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 07:01	WG2102351

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.532		0.100	1	08/02/2023 09:11	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	97.6		77.0-120		08/02/2023 09:11	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 18:19	WG2105684
Toluene	0.0216		0.00500	1	08/01/2023 18:19	WG2105684
Ethylbenzene	0.0147		0.00250	1	08/03/2023 13:32	WG2106988
Total Xylenes	0.229		0.00650	1	08/03/2023 13:32	WG2106988
(S) Toluene-d8	110		75.0-131		08/01/2023 18:19	WG2105684
(S) Toluene-d8	110		75.0-131		08/03/2023 13:32	WG2106988
(S) 4-Bromofluorobenzene	100		67.0-138		08/01/2023 18:19	WG2105684
(S) 4-Bromofluorobenzene	102		67.0-138		08/03/2023 13:32	WG2106988
(S) 1,2-Dichloroethane-d4	69.1	J2	70.0-130		08/01/2023 18:19	WG2105684
(S) 1,2-Dichloroethane-d4	64.1	J2	70.0-130		08/03/2023 13:32	WG2106988

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	147		4.00	1	08/01/2023 00:06	WG2103345
C28-C36 Motor Oil Range	93.1		4.00	1	08/01/2023 00:06	WG2103345
(S) o-Terphenyl	38.5		18.0-148		08/01/2023 00:06	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 11:40

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		2000	100	07/28/2023 00:20	WG2101827

Sample Narrative:

L1638358-06 WG2101827: Dilution due to matrix interference.

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.454		0.100	1	08/02/2023 09:34	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	96.8		77.0-120		08/02/2023 09:34	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 18:38	WG2105684
Toluene	ND		0.00500	1	08/01/2023 18:38	WG2105684
Ethylbenzene	0.0129		0.00250	1	08/02/2023 18:37	WG2106143
Total Xylenes	0.220		0.00650	1	08/02/2023 18:37	WG2106143
(S) Toluene-d8	109		75.0-131		08/01/2023 18:38	WG2105684
(S) Toluene-d8	101		75.0-131		08/02/2023 18:37	WG2106143
(S) 4-Bromofluorobenzene	105		67.0-138		08/01/2023 18:38	WG2105684
(S) 4-Bromofluorobenzene	117		67.0-138		08/02/2023 18:37	WG2106143
(S) 1,2-Dichloroethane-d4	78.9		70.0-130		08/01/2023 18:38	WG2105684
(S) 1,2-Dichloroethane-d4	100		70.0-130		08/02/2023 18:37	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	453		40.0	10	08/01/2023 13:39	WG2103345
C28-C36 Motor Oil Range	307		40.0	10	08/01/2023 13:39	WG2103345
(S) o-Terphenyl	79.6		18.0-148		08/01/2023 13:39	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 11:45

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/28/2023 00:54	WG2101827

¹ Cp

² Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/31/2023 00:10	WG2104457
(S) a,a,a-Trifluorotoluene(FID)	97.6		77.0-120		07/31/2023 00:10	WG2104457

³ Ss

⁴ Cn

⁵ Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/27/2023 13:38	WG2102922
Toluene	ND		0.00500	1	07/27/2023 13:38	WG2102922
Ethylbenzene	ND		0.00250	1	07/27/2023 13:38	WG2102922
Total Xylenes	ND		0.00650	1	07/27/2023 13:38	WG2102922
(S) Toluene-d8	110		75.0-131		07/27/2023 13:38	WG2102922
(S) 4-Bromofluorobenzene	96.5		67.0-138		07/27/2023 13:38	WG2102922
(S) 1,2-Dichloroethane-d4	76.4		70.0-130		07/27/2023 13:38	WG2102922

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	9.21		4.00	1	07/31/2023 21:54	WG2103345
C28-C36 Motor Oil Range	7.77		4.00	1	07/31/2023 21:54	WG2103345
(S) o-Terphenyl	36.8		18.0-148		07/31/2023 21:54	WG2103345

Collected date/time: 07/20/23 11:50

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 22:19	WG2103193

¹ Cp

² Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.780		0.100	1	08/02/2023 09:57	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	95.0		77.0-120		08/02/2023 09:57	WG2105715

³ Ss

⁴ Cn

⁵ Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 18:57	WG2105684
Toluene	0.0327		0.00500	1	08/01/2023 18:57	WG2105684
Ethylbenzene	0.0539		0.00250	1	08/02/2023 18:57	WG2106143
Total Xylenes	0.423		0.00650	1	08/02/2023 18:57	WG2106143
(S) Toluene-d8	111		75.0-131		08/01/2023 18:57	WG2105684
(S) Toluene-d8	108		75.0-131		08/02/2023 18:57	WG2106143
(S) 4-Bromofluorobenzene	106		67.0-138		08/01/2023 18:57	WG2105684
(S) 4-Bromofluorobenzene	117		67.0-138		08/02/2023 18:57	WG2106143
(S) 1,2-Dichloroethane-d4	81.1		70.0-130		08/01/2023 18:57	WG2105684
(S) 1,2-Dichloroethane-d4	101		70.0-130		08/02/2023 18:57	WG2106143

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	72.4		4.00	1	07/31/2023 23:39	WG2103345
C28-C36 Motor Oil Range	32.6		4.00	1	07/31/2023 23:39	WG2103345
(S) o-Terphenyl	27.6		18.0-148		07/31/2023 23:39	WG2103345

Collected date/time: 07/20/23 11:55

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 22:29	WG2103193

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.142	B	0.100	1	08/02/2023 10:21	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	96.9		77.0-120		08/02/2023 10:21	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 19:16	WG2105684
Toluene	ND		0.00500	1	08/01/2023 19:16	WG2105684
Ethylbenzene	ND		0.00250	1	08/02/2023 19:16	WG2106143
Total Xylenes	0.0613		0.00650	1	08/02/2023 19:16	WG2106143
(S) Toluene-d8	109		75.0-131		08/01/2023 19:16	WG2105684
(S) Toluene-d8	106		75.0-131		08/02/2023 19:16	WG2106143
(S) 4-Bromofluorobenzene	102		67.0-138		08/01/2023 19:16	WG2105684
(S) 4-Bromofluorobenzene	107		67.0-138		08/02/2023 19:16	WG2106143
(S) 1,2-Dichloroethane-d4	82.7		70.0-130		08/01/2023 19:16	WG2105684
(S) 1,2-Dichloroethane-d4	98.1		70.0-130		08/02/2023 19:16	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	69.4		4.00	1	07/31/2023 23:52	WG2103345
C28-C36 Motor Oil Range	49.4		4.00	1	07/31/2023 23:52	WG2103345
(S) o-Terphenyl	34.2		18.0-148		07/31/2023 23:52	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 12:00

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 22:39	WG2103193

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	08/02/2023 10:44	WG2105715
(S) a,a,a-Trifluorotoluene(FID)	96.8		77.0-120		08/02/2023 10:44	WG2105715

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 19:35	WG2105684
Toluene	0.00820		0.00500	1	08/01/2023 19:35	WG2105684
Ethylbenzene	ND		0.00250	1	08/02/2023 19:36	WG2106143
Total Xylenes	ND		0.00650	1	08/02/2023 19:36	WG2106143
(S) Toluene-d8	115		75.0-131		08/01/2023 19:35	WG2105684
(S) Toluene-d8	103		75.0-131		08/02/2023 19:36	WG2106143
(S) 4-Bromofluorobenzene	96.2		67.0-138		08/01/2023 19:35	WG2105684
(S) 4-Bromofluorobenzene	108		67.0-138		08/02/2023 19:36	WG2106143
(S) 1,2-Dichloroethane-d4	77.1		70.0-130		08/01/2023 19:35	WG2105684
(S) 1,2-Dichloroethane-d4	100		70.0-130		08/02/2023 19:36	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	10.3		4.00	1	07/31/2023 23:00	WG2103345
C28-C36 Motor Oil Range	7.88		4.00	1	07/31/2023 23:00	WG2103345
(S) o-Terphenyl	36.6		18.0-148		07/31/2023 23:00	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 12:05

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 22:49	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	10.2		2.50	25	07/31/2023 02:49	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		07/31/2023 02:49	WG2104460

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 19:53	WG2105684
Toluene	0.0573		0.00500	1	08/01/2023 19:53	WG2105684
Ethylbenzene	0.0676		0.00250	1	08/02/2023 19:55	WG2106143
Total Xylenes	0.590		0.00650	1	08/02/2023 19:55	WG2106143
(S) Toluene-d8	111		75.0-131		08/01/2023 19:53	WG2105684
(S) Toluene-d8	106		75.0-131		08/02/2023 19:55	WG2106143
(S) 4-Bromofluorobenzene	106		67.0-138		08/01/2023 19:53	WG2105684
(S) 4-Bromofluorobenzene	116		67.0-138		08/02/2023 19:55	WG2106143
(S) 1,2-Dichloroethane-d4	77.6		70.0-130		08/01/2023 19:53	WG2105684
(S) 1,2-Dichloroethane-d4	98.0		70.0-130		08/02/2023 19:55	WG2106143

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	73.6		4.00	1	07/31/2023 23:26	WG2103345
C28-C36 Motor Oil Range	37.8		4.00	1	07/31/2023 23:26	WG2103345
(S) o-Terphenyl	24.5		18.0-148		07/31/2023 23:26	WG2103345

Collected date/time: 07/20/23 12:10

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 22:59	WG2103193

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		2.50	25	07/31/2023 03:07	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	102		77.0-120		07/31/2023 03:07	WG2104460

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 20:13	WG2105684
Toluene	ND		0.00500	1	08/01/2023 20:13	WG2105684
Ethylbenzene	0.00328		0.00250	1	08/02/2023 20:15	WG2106143
Total Xylenes	0.00668		0.00650	1	08/02/2023 20:15	WG2106143
(S) Toluene-d8	114		75.0-131		08/01/2023 20:13	WG2105684
(S) Toluene-d8	104		75.0-131		08/02/2023 20:15	WG2106143
(S) 4-Bromofluorobenzene	99.6		67.0-138		08/01/2023 20:13	WG2105684
(S) 4-Bromofluorobenzene	105		67.0-138		08/02/2023 20:15	WG2106143
(S) 1,2-Dichloroethane-d4	77.1		70.0-130		08/01/2023 20:13	WG2105684
(S) 1,2-Dichloroethane-d4	98.6		70.0-130		08/02/2023 20:15	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	520		40.0	10	08/01/2023 14:19	WG2103345
C28-C36 Motor Oil Range	450		40.0	10	08/01/2023 14:19	WG2103345
(S) o-Terphenyl	87.0		18.0-148		08/01/2023 14:19	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 12:15

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 23:09	WG2103193

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	4.05		2.50	25	07/31/2023 03:26	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	98.7		77.0-120		07/31/2023 03:26	WG2104460

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/01/2023 20:32	WG2105684
Toluene	ND		0.00500	1	08/01/2023 20:32	WG2105684
Ethylbenzene	ND		0.00250	1	08/02/2023 20:34	WG2106143
Total Xylenes	0.0244		0.00650	1	08/02/2023 20:34	WG2106143
(S) Toluene-d8	112		75.0-131		08/01/2023 20:32	WG2105684
(S) Toluene-d8	104		75.0-131		08/02/2023 20:34	WG2106143
(S) 4-Bromofluorobenzene	100		67.0-138		08/01/2023 20:32	WG2105684
(S) 4-Bromofluorobenzene	112		67.0-138		08/02/2023 20:34	WG2106143
(S) 1,2-Dichloroethane-d4	73.1		70.0-130		08/01/2023 20:32	WG2105684
(S) 1,2-Dichloroethane-d4	97.8		70.0-130		08/02/2023 20:34	WG2106143

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	535		40.0	10	08/01/2023 14:06	WG2103345
C28-C36 Motor Oil Range	451		40.0	10	08/01/2023 14:06	WG2103345
(S) o-Terphenyl	58.4		18.0-148		08/01/2023 14:06	WG2103345

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 12:20

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 23:19	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	10.4		2.50	25	07/31/2023 03:44	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		07/31/2023 03:44	WG2104460

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/31/2023 18:53	WG2104608
Toluene	0.0128		0.00500	1	07/31/2023 18:53	WG2104608
Ethylbenzene	0.0383		0.00250	1	07/31/2023 18:53	WG2104608
Total Xylenes	0.299		0.00650	1	07/31/2023 18:53	WG2104608
(S) Toluene-d8	96.9		75.0-131		07/31/2023 18:53	WG2104608
(S) 4-Bromofluorobenzene	89.8		67.0-138		07/31/2023 18:53	WG2104608
(S) 1,2-Dichloroethane-d4	107		70.0-130		07/31/2023 18:53	WG2104608

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	1280		20.0	5	08/01/2023 02:05	WG2103345
C28-C36 Motor Oil Range	720		20.0	5	08/01/2023 02:05	WG2103345
(S) o-Terphenyl	0.000	J2	18.0-148		08/01/2023 02:05	WG2103345

Sample Narrative:

L1638358-14 WG2103345: Surrogate failure due to matrix interference.

Collected date/time: 07/20/23 12:25

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 23:49	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		2.50	25	07/31/2023 04:02	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		07/31/2023 04:02	WG2104460

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/31/2023 19:12	WG2104608
Toluene	ND		0.00500	1	07/31/2023 19:12	WG2104608
Ethylbenzene	ND		0.00250	1	07/31/2023 19:12	WG2104608
Total Xylenes	0.00658		0.00650	1	07/31/2023 19:12	WG2104608
(S) Toluene-d8	107		75.0-131		07/31/2023 19:12	WG2104608
(S) 4-Bromofluorobenzene	92.1		67.0-138		07/31/2023 19:12	WG2104608
(S) 1,2-Dichloroethane-d4	112		70.0-130		07/31/2023 19:12	WG2104608

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	316	J3 V	4.00	1	08/01/2023 00:19	WG2103345
C28-C36 Motor Oil Range	202		40.0	10	08/01/2023 13:26	WG2103345
(S) o-Terphenyl	0.000	J2	18.0-148		08/01/2023 00:19	WG2103345
(S) o-Terphenyl	23.8		18.0-148		08/01/2023 13:26	WG2103345

Sample Narrative:

L1638358-15 WG2103345: Surrogate failure due to matrix interference

Collected date/time: 07/20/23 12:30

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/27/2023 23:59	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		2.50	25	07/31/2023 04:20	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	98.3		77.0-120		07/31/2023 04:20	WG2104460

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/31/2023 19:30	WG2104608
Toluene	ND		0.00500	1	07/31/2023 19:30	WG2104608
Ethylbenzene	ND		0.00250	1	07/31/2023 19:30	WG2104608
Total Xylenes	ND		0.00650	1	07/31/2023 19:30	WG2104608
(S) Toluene-d8	118		75.0-131		07/31/2023 19:30	WG2104608
(S) 4-Bromofluorobenzene	91.1		67.0-138		07/31/2023 19:30	WG2104608
(S) 1,2-Dichloroethane-d4	109		70.0-130		07/31/2023 19:30	WG2104608

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	90.7		4.00	1	07/31/2023 06:35	WG2103346
C28-C36 Motor Oil Range	82.7		4.00	1	07/31/2023 06:35	WG2103346
(S) o-Terphenyl	50.8		18.0-148		07/31/2023 06:35	WG2103346

Collected date/time: 07/20/23 12:35

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/28/2023 00:19	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	16.9		2.50	25	07/31/2023 04:39	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		07/31/2023 04:39	WG2104460

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00188		0.00100	1	07/31/2023 19:50	WG2104608
Toluene	0.0415		0.00500	1	07/31/2023 19:50	WG2104608
Ethylbenzene	0.0966		0.00250	1	07/31/2023 19:50	WG2104608
Total Xylenes	0.663		0.00650	1	07/31/2023 19:50	WG2104608
(S) Toluene-d8	102		75.0-131		07/31/2023 19:50	WG2104608
(S) 4-Bromofluorobenzene	107		67.0-138		07/31/2023 19:50	WG2104608
(S) 1,2-Dichloroethane-d4	108		70.0-130		07/31/2023 19:50	WG2104608

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	2750		40.0	10	07/31/2023 08:50	WG2103346
C28-C36 Motor Oil Range	1690		400	100	08/01/2023 11:54	WG2103346
(S) o-Terphenyl	0.000	J7	18.0-148		08/01/2023 11:54	WG2103346
(S) o-Terphenyl	0.000	J2	18.0-148		07/31/2023 08:50	WG2103346

Sample Narrative:

L1638358-17 WG2103346: Surrogate failure due to matrix interference

L1638358-17 WG2103346: Dilution and surrogate failure due to matrix interference.

Collected date/time: 07/20/23 12:40

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/28/2023 00:29	WG2103193

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	5.40		2.50	25	07/31/2023 04:57	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		07/31/2023 04:57	WG2104460

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/31/2023 20:09	WG2104608
Toluene	0.00733		0.00500	1	07/31/2023 20:09	WG2104608
Ethylbenzene	0.00778		0.00250	1	07/31/2023 20:09	WG2104608
Total Xylenes	0.130		0.00650	1	07/31/2023 20:09	WG2104608
(S) Toluene-d8	105		75.0-131		07/31/2023 20:09	WG2104608
(S) 4-Bromofluorobenzene	94.3		67.0-138		07/31/2023 20:09	WG2104608
(S) 1,2-Dichloroethane-d4	111		70.0-130		07/31/2023 20:09	WG2104608

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	268		4.00	1	07/31/2023 06:52	WG2103346
C28-C36 Motor Oil Range	219		40.0	10	08/01/2023 11:02	WG2103346
(S) o-Terphenyl	52.3		18.0-148		08/01/2023 11:02	WG2103346
(S) o-Terphenyl	53.7		18.0-148		07/31/2023 06:52	WG2103346

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 07/20/23 12:45

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/28/2023 00:39	WG2103193

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	07/31/2023 00:33	WG2104461
(S) a,a,a-Trifluorotoluene(FID)	96.3		77.0-120		07/31/2023 00:33	WG2104461

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	08/03/2023 17:03	WG2106636
Toluene	0.00513		0.00500	1	08/03/2023 17:03	WG2106636
Ethylbenzene	ND		0.00250	1	08/03/2023 17:03	WG2106636
Total Xylenes	0.00696		0.00650	1	08/03/2023 17:03	WG2106636
(S) Toluene-d8	110		75.0-131		08/03/2023 17:03	WG2106636
(S) 4-Bromofluorobenzene	101		67.0-138		08/03/2023 17:03	WG2106636
(S) 1,2-Dichloroethane-d4	69.7	J2	70.0-130		08/03/2023 17:03	WG2106636

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	34.4		4.00	1	07/31/2023 05:29	WG2103346
C28-C36 Motor Oil Range	26.4		4.00	1	07/31/2023 05:29	WG2103346
(S) o-Terphenyl	52.6		18.0-148		07/31/2023 05:29	WG2103346

Collected date/time: 07/20/23 12:50

L1638358

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	ND		20.0	1	07/28/2023 00:49	WG2103193

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	9.75		2.50	25	07/31/2023 05:15	WG2104460
(S) a,a,a-Trifluorotoluene(FID)	100		77.0-120		07/31/2023 05:15	WG2104460

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.00100	1	07/31/2023 20:28	WG2104608
Toluene	0.0594		0.00500	1	07/31/2023 20:28	WG2104608
Ethylbenzene	0.0553		0.00250	1	07/31/2023 20:28	WG2104608
Total Xylenes	0.410		0.00650	1	07/31/2023 20:28	WG2104608
(S) Toluene-d8	104		75.0-131		07/31/2023 20:28	WG2104608
(S) 4-Bromofluorobenzene	96.1		67.0-138		07/31/2023 20:28	WG2104608
(S) 1,2-Dichloroethane-d4	111		70.0-130		07/31/2023 20:28	WG2104608

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	405		40.0	10	08/04/2023 12:26	WG2103346
C28-C36 Motor Oil Range	301		40.0	10	08/04/2023 12:26	WG2103346
(S) o-Terphenyl	51.4		18.0-148		08/04/2023 12:26	WG2103346

Method Blank (MB)

(MB) R3954065-1 07/27/23 16:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1637461-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1637461-15 07/27/23 17:34 • (DUP) R3954065-3 07/27/23 17:51

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	ND	100	0.000		20

L1638358-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1638358-06 07/28/23 00:20 • (DUP) R3954065-6 07/28/23 00:37

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	ND	100	0.000		20

Sample Narrative:

OS: Dilution due to matrix interference.

Laboratory Control Sample (LCS)

(LCS) R3954065-2 07/27/23 17:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	197	98.4	90.0-110	

L1637461-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1637461-15 07/27/23 17:34 • (MS) R3954065-4 07/27/23 18:08 • (MSD) R3954065-5 07/27/23 18:25

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	ND	ND	ND	191	186	100	80.0-120	J5	J5	2.34	20

Sample Narrative:

MS: Matrix spike failure due to matrix interference.

MSD: Matrix spike failure due to matrix interference.

Wet Chemistry by Method 300.0

[L1638358-01,02,03,04,05](#)

Method Blank (MB)

(MB) R3953667-1 07/27/23 00:31

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chloride	U		9.20	20.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1638332-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1638332-12 07/27/23 04:11 • (DUP) R3953667-4 07/27/23 04:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	507	483	1.02	4.98		20

L1638336-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1638336-01 07/27/23 04:51 • (DUP) R3953667-7 07/27/23 05:01

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	118	118	1	0.204		20

Laboratory Control Sample (LCS)

(LCS) R3953667-3 07/27/23 02:22

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	203	102	90.0-110	

L1638332-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1638332-12 07/27/23 04:11 • (MS) R3953667-5 07/27/23 04:31 • (MSD) R3953667-6 07/27/23 04:41

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	507	1030	1050	105	108	1	80.0-120			1.53	20

Wet Chemistry by Method 300.0

[L1638358-08,09,10,11,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R3954477-1 07/27/23 21:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1638358-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1638358-16 07/27/23 23:59 • (DUP) R3954477-3 07/28/23 00:09

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP RPD Limits
Chloride	ND	ND	1	5.42	20

L1639109-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1639109-02 07/28/23 02:00 • (DUP) R3954477-4 07/28/23 02:10

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP RPD Limits
Chloride	ND	ND	1	0.000	20

Laboratory Control Sample (LCS)

(LCS) R3954477-2 07/27/23 21:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	206	103	90.0-110	

L1639109-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1639109-02 07/28/23 02:00 • (MS) R3954477-5 07/28/23 02:20 • (MSD) R3954477-6 07/28/23 02:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits
Chloride	500	ND	514	525	103	105	1	80.0-120			2.10	20

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1638358-04](#)

Method Blank (MB)

(MB) R3954529-2 07/28/23 13:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0239	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.2			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3954529-1 07/28/23 12:43 • (LCSD) R3954529-3 07/29/23 01:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.11	4.56	92.9	82.9	72.0-127			11.4	20
(S) a,a,a-Trifluorotoluene(FID)				104	101	77.0-120				

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1638358-07](#)

Method Blank (MB)

(MB) R3954905-2 07/30/23 21:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0301	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120

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

(LCS) R3954905-1 07/30/23 19:46 • (LCSD) R3954905-3 07/30/23 21:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.75	4.96	86.4	90.2	72.0-127			4.33	20
(S) a,a,a-Trifluorotoluene(FID)				97.4	98.4	77.0-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1638358-11,12,13,14,15,16,17,18,20](#)

Method Blank (MB)

(MB) R3954843-2 07/30/23 19:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3954843-1 07/30/23 18:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.34	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			106	77.0-120	

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1638358-19](#)

Method Blank (MB)

(MB) R3954906-2 07/30/23 21:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0301	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120

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

(LCS) R3954906-1 07/30/23 19:46 • (LCSD) R3954906-3 07/30/23 21:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.75	4.96	86.4	90.2	72.0-127			4.33	20
(S) a,a,a-Trifluorotoluene(FID)				97.4	98.4	77.0-120				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1638358-01,02,03,05,06,08,09,10](#)

Method Blank (MB)

(MB) R3955953-2 08/02/23 01:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0277	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.2			77.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3955953-1 08/02/23 01:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.26	95.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	

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

L1638358-04.07

Method Blank (MB)

(MB) R3955332-3 07/27/23 10:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	113			75.0-131
(S) 4-Bromofluorobenzene	96.6			67.0-138
(S) 1,2-Dichloroethane-d4	85.0			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R3955332-1 07/27/23 08:47 • (LCSD) R3955332-2 07/27/23 09:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.113	0.107	90.4	85.6	70.0-123			5.45	20
Toluene	0.125	0.130	0.120	104	96.0	75.0-121			8.00	20
Ethylbenzene	0.125	0.119	0.116	95.2	92.8	74.0-126			2.55	20
Total Xylenes	0.375	0.348	0.340	92.8	90.7	72.0-127			2.33	20
(S) Toluene-d8				108	107	75.0-131				
(S) 4-Bromofluorobenzene				100	107	67.0-138				
(S) 1,2-Dichloroethane-d4				85.1	86.8	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

W02104608

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

L1638358-14,15,16,17,18,20

Method Blank (MB)

(MB) R3955248-2 07/31/23 13:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	109			75.0-131
(S) 4-Bromofluorobenzene	89.8			67.0-138
(S) 1,2-Dichloroethane-d4	110			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3955248-1 07/31/23 12:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.113	90.4	70.0-123	
Toluene	0.125	0.108	86.4	75.0-121	
Ethylbenzene	0.125	0.116	92.8	74.0-126	
Total Xylenes	0.375	0.318	84.8	72.0-127	
(S) Toluene-d8			106	75.0-131	
(S) 4-Bromofluorobenzene			93.8	67.0-138	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

Method Blank (MB)

(MB) R3955591-3 08/01/23 11:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	94.8			67.0-138
(S) 1,2-Dichloroethane-d4	76.1			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3955591-1 08/01/23 10:04 • (LCSD) R3955591-2 08/01/23 10:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.106	0.105	84.8	84.0	70.0-123			0.948	20
Toluene	0.125	0.111	0.120	88.8	96.0	75.0-121			7.79	20
(S) Toluene-d8				109	107	75.0-131				
(S) 4-Bromofluorobenzene				98.2	97.1	67.0-138				
(S) 1,2-Dichloroethane-d4				92.6	83.3	70.0-130				

Method Blank (MB)

(MB) R3956233-3 08/02/23 10:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	98.0			67.0-138
(S) 1,2-Dichloroethane-d4	96.3			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3956233-1 08/02/23 08:53 • (LCSD) R3956233-2 08/02/23 09:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.132	0.132	106	106	74.0-126			0.000	20
Total Xylenes	0.375	0.382	0.386	102	103	72.0-127			1.04	20
(S) Toluene-d8				102	104	75.0-131				
(S) 4-Bromofluorobenzene				105	105	67.0-138				
(S) 1,2-Dichloroethane-d4				102	99.2	70.0-130				

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

L1638358-19

Method Blank (MB)

(MB) R3957016-2 08/03/23 10:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	95.5			67.0-138
(S) 1,2-Dichloroethane-d4	76.2			70.0-130

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

Laboratory Control Sample (LCS)

(LCS) R3957016-1 08/03/23 08:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.110	88.0	70.0-123	
Toluene	0.125	0.125	100	75.0-121	
Ethylbenzene	0.125	0.106	84.8	74.0-126	
Total Xylenes	0.375	0.327	87.2	72.0-127	
(S) Toluene-d8			108	75.0-131	
(S) 4-Bromofluorobenzene			96.2	67.0-138	
(S) 1,2-Dichloroethane-d4			85.6	70.0-130	

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3956477-2 08/03/23 10:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000737	0.00250
Total Xylenes	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	95.5			67.0-138
(S) 1,2-Dichloroethane-d4	76.2			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3956477-1 08/03/23 08:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	0.125	0.106	84.8	74.0-126	
Total Xylenes	0.375	0.327	87.2	72.0-127	
(S) Toluene-d8			108	75.0-131	
(S) 4-Bromofluorobenzene			96.2	67.0-138	
(S) 1,2-Dichloroethane-d4			85.6	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Semi-Volatile Organic Compounds (GC) by Method 8015M

[L1638358-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15](#)

Method Blank (MB)

(MB) R3955134-1 07/31/23 19:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	58.9			18.0-148

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3955134-4 08/01/23 09:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	27.2	54.4	50.0-150	
(S) o-Terphenyl			58.0	18.0-148	

L1638358-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1638358-15 08/01/23 00:19 • (MS) R3955134-2 08/01/23 00:32 • (MSD) R3955134-3 08/01/23 00:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.5	316	321	448	10.3	272	1	50.0-150	V	E J3 V	33.0	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J2	J2		

Sample Narrative:

OS: Surrogate failure due to matrix interference

Semi-Volatile Organic Compounds (GC) by Method 8015M

[L1638358-16,17,18,19,20](#)

Method Blank (MB)

(MB) R3954775-1 07/31/23 02:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	44.6			18.0-148

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3954775-2 07/31/23 02:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	31.5	63.0	50.0-150	
(S) o-Terphenyl			69.4	18.0-148	

L1638378-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1638378-09 07/31/23 05:46 • (MS) R3954775-3 07/31/23 06:01 • (MSD) R3954775-4 07/31/23 06:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	5.58	31.0	27.4	50.8	43.6	1	50.0-150		J6	12.3	20
(S) o-Terphenyl					55.6	57.1		18.0-148				

Sample Narrative:

OS: Sample resembles laboratory standard for Fuel Oil #6.

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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PEOPLE ADVANCING SCIENCE

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 # 16 2838
D212

Acctnum: **PLAINSGHD**

Template:

Prelogin:

PM: 829-Brittnie L Boyd

PB:

Shipped Via:

Remarks	Sample # (lab only)
---------	---------------------

Condition:
NCF / OK

Released to Imaging: 2/7/2024 3:22:42 PM

Company Name/Address:
Plains Pipeline, L.P. - GHD
2135 S Loop 250 West
Midland, TX 79703

Billing Information:
Karolanne Hudgens
1106 Griffith Drive
Midland, TX 79706

Pres
Chk

Analysis / Container / Preservative

Chain of Custody



12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG #

Table #

Acctnum: **PLAINSGHD**

Template:

Prelogin:

PM: **829-Brittanie L Boyd**

PB:

Shipped Via:

Remarks

Sample # (lab only)

Report to:

J.T Murrey

Email To:

JT.Murrey@ghd.com

Project Description:

Plains Montera 6" Release

City/State
Collected:

Lea County, NM

Please Circle:
PT MT CT ET

Phone: **(361) 252-6136**

Client Project #

SRS 2022-077

Lab Project #

Collected by (print):

Mitchell Clemens

Site/Facility ID #

SRS 2022-077

P.O. #

SRS 2022-077

Collected by (signature):

Mitchell Clemens

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Standard TAT

No.
of
Cntrs

Immediately
Packed on Ice N ____ Y ____ **X**

Sample ID

Comp/Grab

Matrix*

Depth

Date

Time

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX 8260	TPH 8015	300.0 Chlorides										
BH-11	Comp	SS	-	7/20/20	12:05	1	X	X	X										-11
BH-12	Comp	SS	-	7/20/20	12:10	1	X	X	X										-12
BH-13	Comp	SS	-	7/20/20	12:15	1	X	X	X										-13
BH-14	Comp	SS	-	7/20/20	12:20	1	X	X	X										-14
BH-15	Comp	SS	-	7/20/20	12:25	1	X	X	X										-15
BH-16	Comp	SS	-	7/20/20	12:30	1	X	X	X										-16
BH-17	Comp	SS	-	7/20/20	12:35	1	X	X	X										-17
BH-18	Comp	SS	-	7/20/20	12:40	1	X	X	X										-18
BH-19	Comp	SS	-	7/20/20	12:45	1	X	X	X										-19
BH-20	Comp	SS	-	7/20/20	12:50	1	X	X	X										-20

* Matrix:

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

Remarks:

Samples returned via:

____ UPS ____ FedEx ____ Courier

Tracking #

pH ____ Temp ____

Flow ____ Other ____

Sample Receipt Checklist

COC Seal Present/Intact: ____ NP ____ 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)

Mitchell Clemens

Date:

7-21-23

Time:

10:10

Received by: (Signature)

[Signature]

Trip Blank Received: Yes / No

HCL / MeOH
TBR

Relinquished by: (Signature)

[Signature]

Date:

7/21/23

Time:

1700

Received by: (Signature)

[Signature]

Temp: 20.0 °C

Bottles Received:

4/10=40

20

If preservation required by Login: Date/Time

Relinquished by: (Signature)

[Signature]

Date:

7/22/23

Time:

1545

Received for lab by: (Signature)

Alexa Mitchell

Date:

7/22/23

Time:

1545

Hold:

Condition:

NCF / OK

Attachment B

Stratigraphic Logs



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 2

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: DTW

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\12615440\TECH\INTL\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	
2	SILTY SAND, very fine grained, red, medium-hard consol, presense of coarse SS gravel, dry	2.00					
4	SILTY SAND, very fine grained, light grey, loose-medium consol, dry						
6	SILTY SAND, very fine grained, light grey, loose-medium consol, sparse layers of well cemented SS	6.00					
8							
10	SILTY SAND, very fine grained, loose consol, dull orange, sparse layers of well cemented SS, color is starting transition light grey to dull orange	10.00					
12							
14							
16							
18							
20	SILTY SAND, very fine grained, loose consol, dull orange, sparse layers of well cemented SS, dry	20.00					
22							
24							
26	SILTY SAND, very fine grained, dull orange, loose consol, decreasing amount of well cemented SS, dry	25.00					
28							
30	SILTY SAND, very fine grained, dull orange, loose consol only, dry	30.00					
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE



STRATIGRAPHIC LOG (OVERBURDEN)

Page 2 of 2

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: DTW

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\12615440\TECH\GINT\LOG.DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	
36	SILTY SAND, very fine grained, dull orange, loose consol, dry, very sparse layers of SS	35.00					
38							
40							
42							
44	SILTY SAND, very fine grained, dull orange, loose consol, dry, thin layers of SS	45.00					
46							
48							
50							
52	END OF BOREHOLE @ 55.00ft BGS	55.00					
54							
56							
58							
60	Boring gauged on 7-20-23 and was dry.						
62							
64							
66							
68							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 2

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-1

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\56212615440\TECH\GINT\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
	OPEN EXCAVATION						
2							
4							
6							
8							
10							
12							
14							
16							
18	SILTY SAND, very fine grained, dull orange, loose-medium consol, dry, hydrocarbon odor	18.00					952.9
20	SILTY SAND, very fine grained, dull orange, loose-medium consol, dry	20.00					937.3
22	SILTY SAND, very fine grained, light grey, loose-medium consol, dry, layers of well cemented ss	22.00					905.4
24							778.1
26	SILTY SAND, very fine grained, dull brown, loose-medium consol, dry	26.00					901.3
28	SILTY SAND, very fine grained, dull orange, loose-medium consol, dry	28.00					
30							
32							
34	SILTY SAND, very fine grained, dull orange, loose consol, only, dry	33.00					227.3

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



STRATIGRAPHIC LOG (OVERBURDEN)

Page 2 of 2

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-1

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\56212615440\TECH\GINT\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
36							
38							158.1
40							
42							123.6
44							
46							
48	SILTY SAND, very fine grained, dull orange, very loose consol, dry	48.00					315.2
50							
52							19.6
54							
56							
58	END OF BOREHOLE @ 58.00ft BGS	58.00					19.5
60							
62							
64							
66							
68							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-2

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\56212615440\TECH\INTLOG.DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
	OPEN EXCAVATION						
2							
4							
6							
8							
10							
12							
14							
16							
18	SILTY SAND, very fine grained, dull orange, loose-medium consol, dry	18.00					0.1
20	SILTY SAND, very fine grained, dull orange, loose-med consol, thin layers of well cemented SS, dry	20.00					0.8
22							0.2
24	SILTY SAND, very fine grained, dull orange, hard consol, thin layer of well cemented SS, dry	24.00					0.6
26	SILTY SAND, very fine grained, dull orange, medium-hard consol, hard cemented fine gravel SS, thin layers of well cemented SS	26.00					
28	END OF BOREHOLE @ 28.00ft BGS	28.00					0.4
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-3

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\56212615440\TECH\INTL\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
	OPEN EXCAVATION						
2							
4							
6							
8							
10							
12							
14							
16							
18	SILTY SAND, very fine grained, dull orange, loose-medium consol, dry, presense of gravel well cemented SS	18.00					
20	SILTY SAND, very fine grained, light yellow-orange, medium-hard consol, dry, layers of well cemeneted SS	20.00					52.7
22							10.4
24	SILTY SAND, very fine grained, dull orange, medium-hard consol, dry, layers of well cemented SS	24.00					19.6
26	SILTY SAND, very fine grained, reddish-orange, sparse loose-medium consol, dry, layers of well cemented SS	26.00					5.3
28	SILTY SAND, very fine grained, dull reddish-orange, loose consol, dry, layers of medium cemented SS	28.00					5.1
30							
32							
34	END OF BOREHOLE @ 33.00ft BGS	33.00					4.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-4

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\12615440\TECH\GINT\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
	SILTY SAND, very fine grained, red, loose consol, dry, roots present						
2	SILTY SAND, very fine grained, red, loose-medium consol, dry	2.00					1.3
4	SILTY SAND, very fine grained, transition from red to tan sand, loose to medium consol, dry	4.00					0.9
6	SILTY SAND, very fine grained, light tan, loose-medium consol, dry	6.00					1.3
8	SILTY SAND, very fine grained, light tan, loose-medium consol, dry, layers of well cemented SS	8.00					1.3
10	SILTY SAND, very fine grained, light tan, mostly loose consol, layers of well cemented SS, dry	10.00					2.4
12							
14							
15	END OF BOREHOLE @ 15.00ft BGS	15.00					1.8
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: 6" Montera Release

HOLE DESIGNATION: SB-5

PROJECT NUMBER: 12615440

DATE COMPLETED:

CLIENT: Plains

DRILLING METHOD: Air Rotary

LOCATION: Lea County

FIELD PERSONNEL: Mitchell Clemens

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\12615440\TECH\INTL\LOG DATABASE\12615440-WA-072023.GPJ Library File: GHD_ENVIRO_V11.GLB Report: OVERBURDEN LOG Date: 3/8/23

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
	SILTY SAND, fine grained, light grey, fine gravel, SS, organic matter						
2	SILTY SAND, very fine grained, light yellow-orange, thin layer of well cemented SS, dry	2.00					0.3
4							0.5
6	SILTY SAND, very fine grained, light yellow-orange, medium consol, layers of well cemented SS, dry	6.00					1.1
8	SILTY SAND, very fine grained, dull orange, thin layers of well cemented SS, very fine SS gravel, dry	8.00					0.8
10							0.9
12	SILTY SAND, very fine grained, light grey, loose-medium consol, dry	12.00					4.1
14							0.4
16	END OF BOREHOLE @ 16.00ft BGS	16.00					0.9
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 273257

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 273257
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	Please submit closure report to OCD by May 7, 2024.	2/7/2024