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	nAPP2129935504
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Plains Pipeline, L.P.	OGRID 713291
Contact Name Amber Groves	Contact Telephone 575-200-5517
Contact email algroves@paalp.com	Incident # *(assigned by OCD)*
Contact mailing address 1911 Connie Road, Carlsbad NM 88220	

Location of Release Source

Latitude 32.181559 Longitude -103.421514
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Endurance 6" Upstream Jacinto Tie In	Site Type Pipeline
Date Release Discovered 10/25/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	25	24S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* *Quail Ranch*)

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) 42.7	Volume Recovered (bbls) 0
☐ 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 discovered during station awareness inspections.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2129935504
District RP	
Facility ID	
Application ID	

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? Release volume greater than 25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? Amber Groves sent initial notification e-mail on 10/26/2021 to Jim Griswold, Bradford Billings, Mike Bratcher, Robert Hamlet, Karen Collins and Chad Hensley	

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 not 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: Amber Groves Title: Remediation Coordinator

Signature: Amber Groves Date: 10/29/2021

email: algroves@paalp.com Telephone: (575)200-5517

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2129935504
District RP	
Facility ID	
Application ID	

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?	_____ (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2129935504
District RP	
Facility ID	
Application ID	

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: Camille Bryant Title: Remediation Supervisor

Signature: Camille Bryant Date: 1/30/2023

email:cjbryant@paalp.com Telephone: 575.441.1099

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2129935504
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] 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: Kaylanne Hudgens Title: HSE Remediation Specialist II

Signature: Date: 11/27/23

email: kaylanne.hudgens@plains.com Telephone: 575-200-5517

OCD Only

Received by: Date:

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: Nelson Velez Date: 11/27/2023

Remediation plan is approved with the following conditions;

1. **Soil Vapor Extraction Pilot Test to be completed by 02/26/2024.**
2. **Report of Pilot Test to be completed and submitted to OCD by 03/26/2024.**

PLAINS ALL AMERICAN PIPELINE, L.P.

August 9, 2023

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

Re: Additional Soil Assessment Report and Pilot Test Procedure
Endurance 6" Upstream Jacinto Tie-In Release Site
Plains All American Pipeline, L.P.
O-25-24S-34E
Lea County, New Mexico
NMOCD Incident No. nAPP2129935504

To Whom it May Concern,

Plains All American Pipeline, L.P. (Plains) submits this *Additional Soil Assessment Report* and *SVE Pilot Test Procedure* to the New Mexico Oil Conservation Division (NMOCD) District I Office. These combined documents provide documentation of delineation activities, soil sampling of the affected area and a detailed work-plan associated with a proposed soil vapor extraction (SVE) pilot study for the Plains Endurance 6" Upstream Jacinto Tie-In Release, hereinafter referred to as the "Site". The Site is located in Unit Letter O Section 25 of Township 24 South and Range 34 East in Lea County, New Mexico. The NMOCD Incident number assigned to the release is nAPP2129935504.

If you have any questions of comments regarding the attached documents, please feel free to contact myself at (575) 200-5571.

Respectfully,

Karolanne Hudgens
HSE Remediation Specialist II

Attachments:

- Attachment A - *Additional Soil Assessment Report*
- Attachment B - *SVE Pilot Test Procedure*

ATTACHMENT A

Additional Soil Assessment Report

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

Our ref: 12566934

July 07, 2023

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

Re: Additional Soil Assessment Report
Endurance 6" Upstream Jacinto Tie-In Release Site
Plains Pipeline, L.P.
SRS#2021-089
Incident ID: nAPP2129935504
O-25-24S-34E, Lea County, New Mexico

To Whom It May Concern:

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 I Office. This Report provides documentation of delineation activities, sampling, and analyses in the affected area at the Plains Endurance 6" Upstream Jacinto Tie-In Release Site (Site). The Site is located in Unit Letter O Section 25 of Township 24 South and Range 34 East in Lea County, New Mexico. The GPS coordinates for the release site are 32.181559 N and 103.421514 W. The release occurred on October 25, 2021, on private land owned by Quail Ranch. Figure 1 depicts the Site location. Figure 2, Cross Section and Soil Boring Location Map, depicts the excavated area, Battle Axe Road, access road, Conoco Phillips pad and other site details.

2. Background Information

A Form C-141, Release Notification, was submitted to the NMOCD on October 29, 2021. The C-141 stated the cause of the release was due to internal corrosion of the Plains 6" Endurance crude oil pipeline. The release was reported as 42.7 barrels (bbls) of crude oil with no recovery during initial response actions. The release falls under the jurisdiction of the NMOCD District I Office in Hobbs, New Mexico and the release was assigned the Incident Number nAPP2129935504.

3. Groundwater and Site Characterization

GHD characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

The *Updated Site Characterization and Revised Remediation Work Plan* dated January 24, 2023, was approved by the NMOCD on February 17, 2023. Details of the Site Characterization documentation and previously completed assessment and excavation activities can be found in the aforementioned report. The closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (feet)
No Receptors Found	>100

Table 3.1 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 0-4 Feet)	600	100	---	50	10
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release	20,000	2,500	1,000	50	10
Notes: --- = not defined					

4. Vertical and Horizontal Delineation Summary and Findings

From April 24 to April 26, 2023, GHD and White Drilling (White) installed soil borings at the Site to delineate horizontal extent of the affected soils. SB-2 through SB-11 were advanced to approximately 50 feet below ground surface (bgs) and samples were collected at various intervals based on field screening activities. The boring and sample intervals are listed below:

- SB-2 was sampled at 30 to 35 feet bgs and 45 to 50 feet bgs.
- SB-3 was sampled at 45 to 50 feet bgs.
- SB-4 was sampled at 18 to 20 feet bgs and 45 to 50 feet bgs.
- SB-5 was sampled at 35 to 40 feet bgs and 45 to 50 feet bgs.
- SB-6 was sampled at 20 to 28 feet bgs and 45 to 50 feet bgs.
- SB-7 was sampled at 28 to 30 feet bgs and 45 to 50 feet bgs.
- SB-8 was sampled at 20 to 21 feet bgs and 45 to 50 feet bgs.
- SB-9 was sampled at 45 to 50 feet bgs.
- SB-10 was sampled at 33 to 35 feet bgs and 45 to 50 feet bgs.
- SB-11 was sampled at 23 to 25 feet bgs and 45 to 50 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 EPA SW846 Method 8021B, total petroleum hydrocarbons (TPH) by EPA SW46 Method 8015B Modified, and chloride by EPA Method 9056A.

Analytical results indicated seven (7) of the samples exhibited benzene, BTEX, TPH (GRO+DRO), and/or total TPH concentrations above Table I Closure Criteria (SB-2@30'-35', SB-6@20'-28', SB-7@28'-30', SB-8@20'-21', SB-10@33'-35', SB-10@45'-50', and SB-11@23'-25'). The excavation was backfilled from 19 feet bgs to surface with non-impacted soil transported to the Site. Soil boring locations are shown on Figure 2. Analytical results are shown on Table 1 and in the laboratory analytical report that is included as Attachment A. The boring logs are included as Attachment B. Cross-section diagrams depicting the affected areas are shown on Figures 3 (A-A'), 4 (B-B'), and 5 (C-C').

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

Sincerely,

GHD

Nate Reece
Environmental Scientist

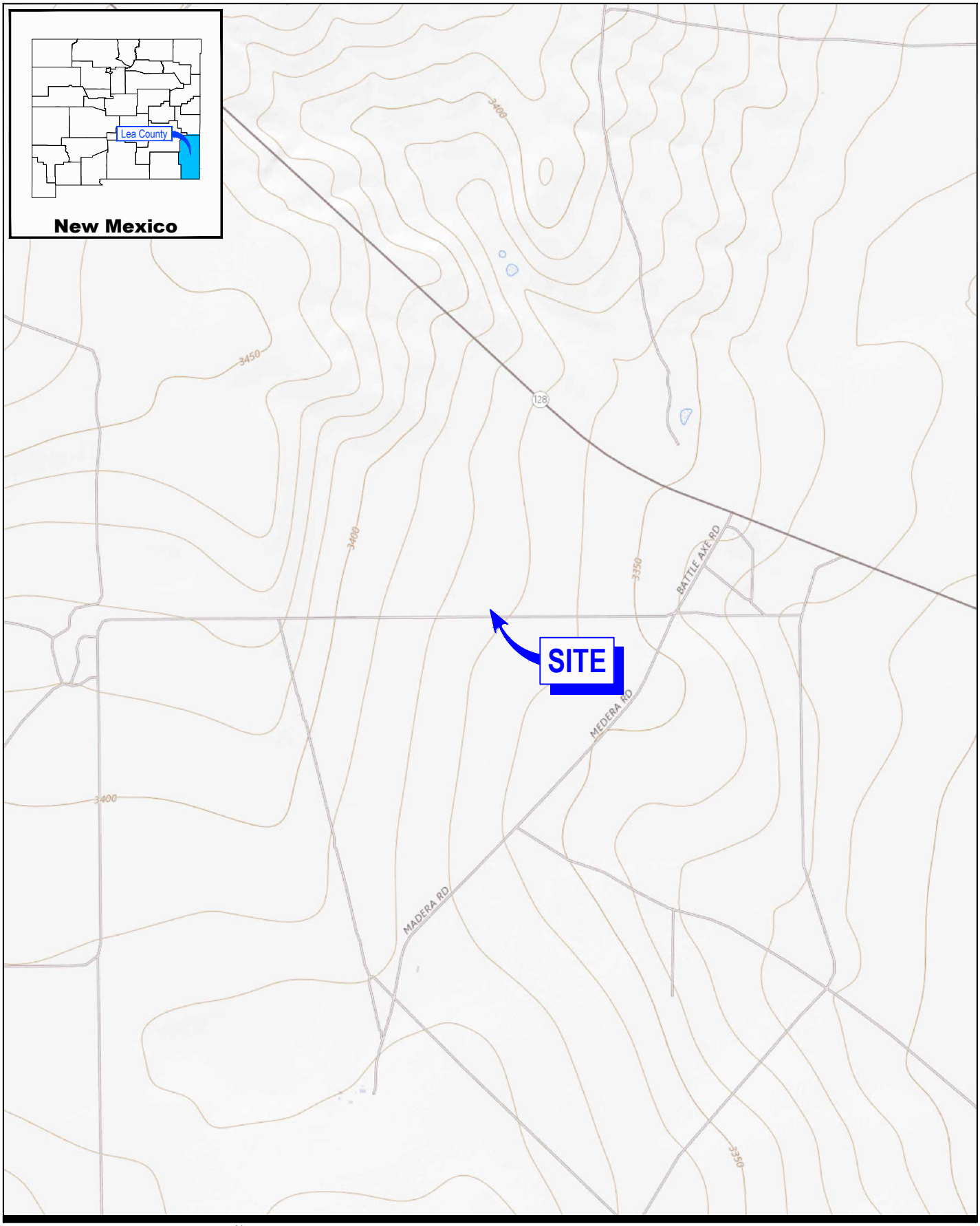
J.T. Murrey
Senior Project Manager

JT/nr/2

Encl. Figure 1 – Site Location Map
Figure 2 – Cross-Section and Soil Boring Location Map
Figure 3 – Cross-Section A-A'
Figure 4 – Cross-Section B-B'
Figure 5 – Cross-Section C-C'
Table 1 – Summary of Soil Analytical Data
Attachment A – Laboratory Analytical Reports and Chain-of-Custody Documentation
Attachment B – Soil Boring Logs

cc: Karolanne Hudgens – Plains Pipeline, L.P.

Figures



0 1000 2000 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

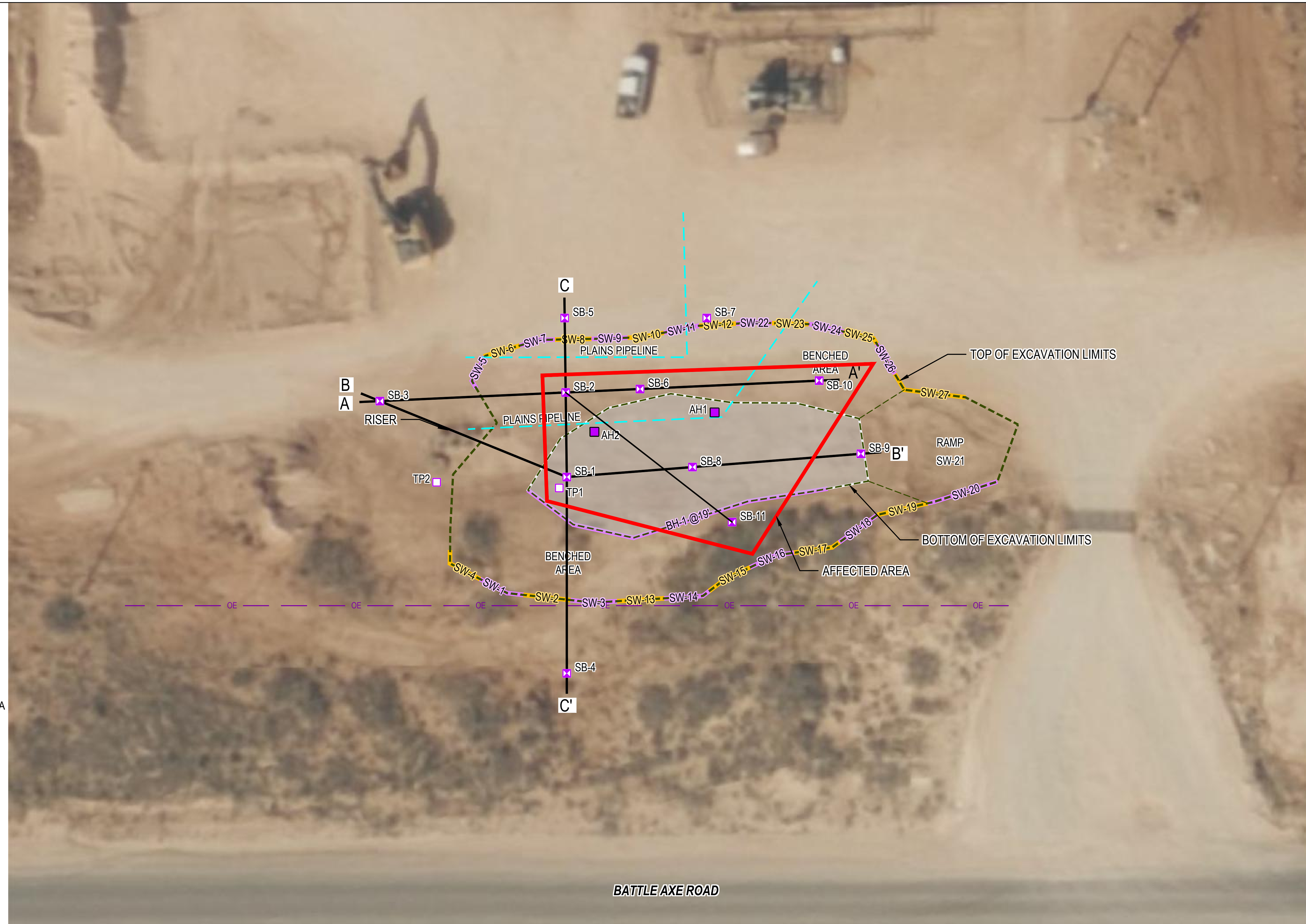
PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN
SRS #2021-089; nAPP2129935504

Project No. **12566934**
Date **July 2023**

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Midland\Projects\562\12566934\Digital_Design\ACAD\Figures\RPT002\12566934-GHD-00-00-RPT-EN-D103_WA-002.dwg
Data Source: USGS 7.5 Minute Quad "Woodley Flat and Custer Mountain, New Mexico"
Lat/Long: 32.181559° North, 103.421514° West

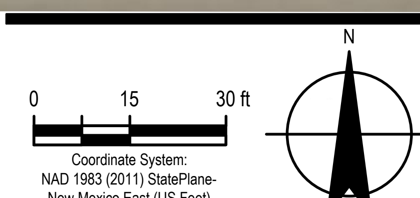


LEGEND

- PREVIOUSLY EXCAVATED AND BACKFILLED AREA
- OE — OVERHEAD ELECTRICAL
- TEST PIT LOCATION
- HAND AUGER LOCATION
- SOIL BORING LOCATION
- DEPTH — DEPTH OF SAMPLE (FT)
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (MG/KG)
- INDICATES SIDE WALL COMPOSITE SAMPLE
- INDICATES SIDE WALL COMPOSITE SAMPLE
- A — A' LOCATION OF CROSS-SECTION
- AFFECTED SOIL AREA

NOTES:

1. SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.



Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

GHD

PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN
SRS #2021-089; nAPP2129935504

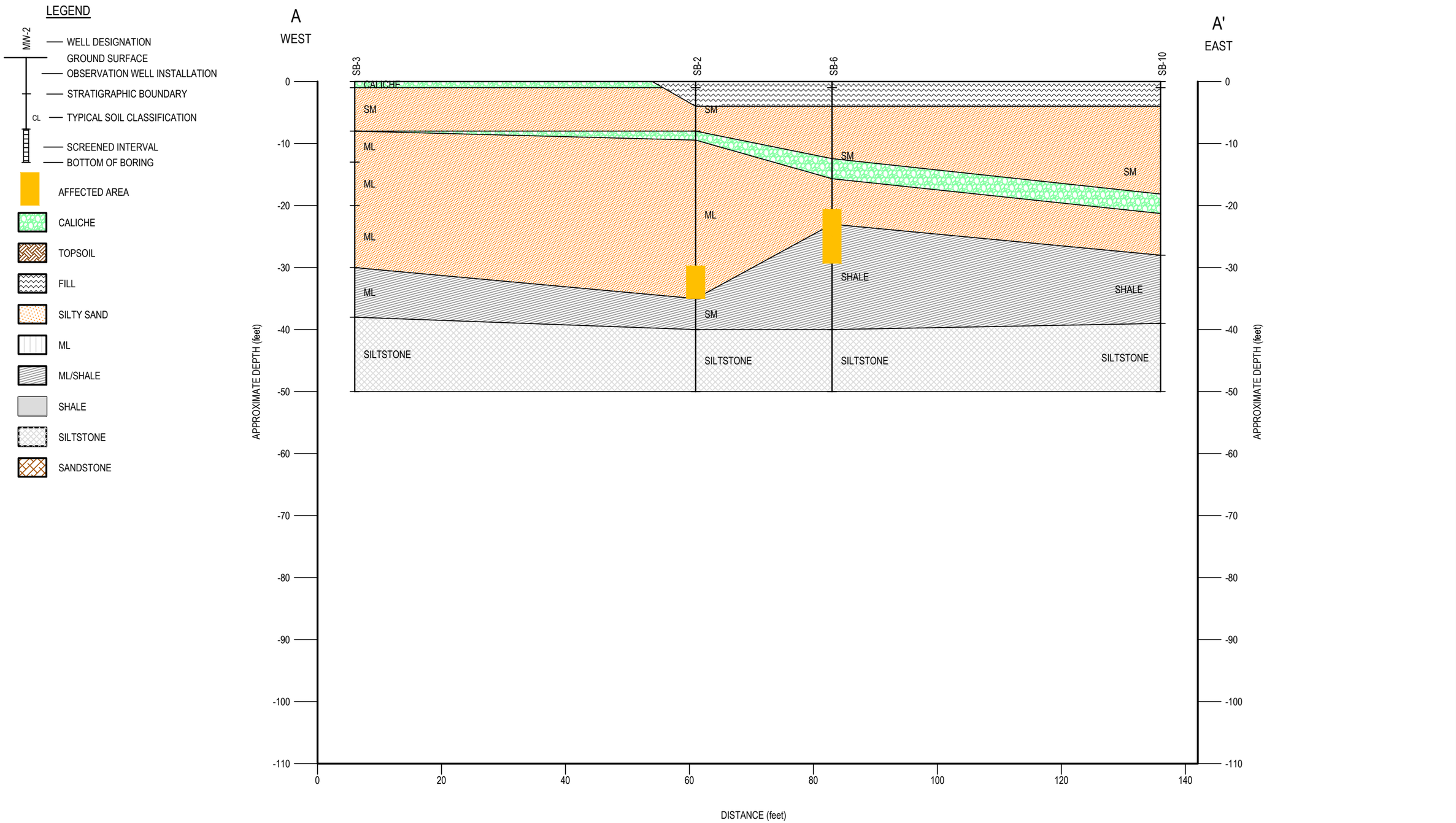
CROSS-SECTION LOCATION MAP

Project No. **12566934**
Date **July 2023**

FIGURE 2

Filename: \\ghdnet\ghd\US\Midland\Projects\562\12566934\Digital_Design\ACAD\Figures\RPT002\12566934-GHD-00-00-RPT-EN-D102_WA-002.dwg

Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
Lat/Long: 32.181559° North, 103.421514° West



HORIZONTAL
1" = 15 ft

0 7.5 15Ft

0 7.5 15Ft

1" = 15 ft
VERTICAL

GHD

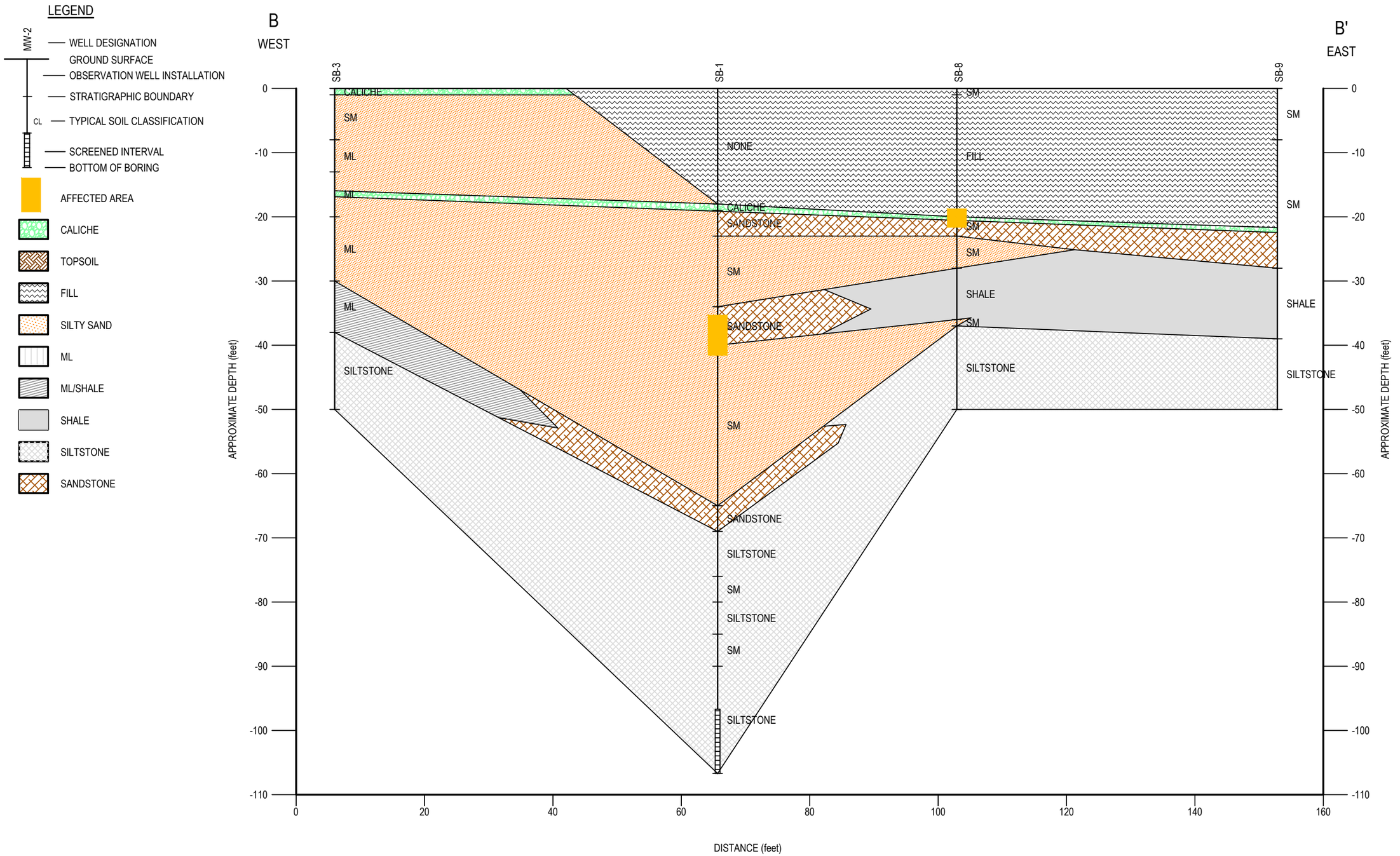
PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN
SRS #2021-089; nAPP2129935504

CROSS-SECTION A-A'

Project No. **12566934**
Date **July 2023**

FIGURE 3

Filename: \\ghdnetfiohdl\US\Midland\Projects\56\12566934\Digital_Design\ACAD\Figures\RPT002\12566934-GHD-00-00-RPT-EN-D102_WA-002.dwg



HORIZONTAL
1" = 15 ft
0 7.5 15Ft
0 7.5 15Ft
1" = 15 ft
VERTICAL

GHD

PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN
SRS #2021-089; nAPP2129935504

CROSS-SECTION B-B'

Project No. **12566934**
Date **July 2023**

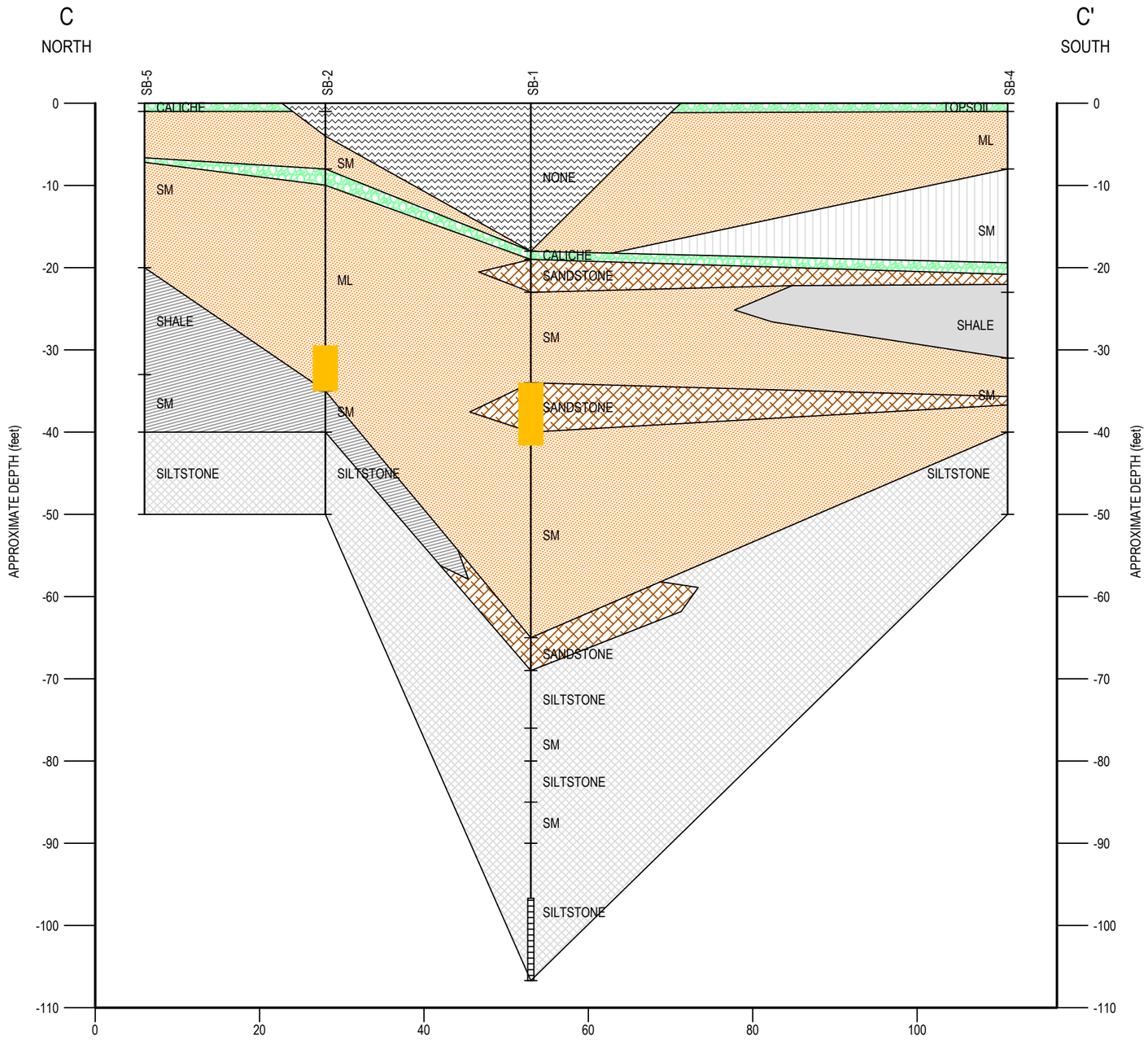
FIGURE 4

Filename: \\ghdnetghd\US\Midland\Projects\56\12566934\Digital_Design\ACAD\Figures\RPT002\12566934-GHD-00-00-RPT-EN-D102_WA-002.dwg

LEGEND

MW-2 — WELL DESIGNATION
GROUND SURFACE
OBSERVATION WELL INSTALLATION
STRATIGRAPHIC BOUNDARY
CL — TYPICAL SOIL CLASSIFICATION
SCREENED INTERVAL
BOTTOM OF BORING

AFFECTED AREA
CALICHE
TOPSOIL
FILL
SILTY SAND
ML
ML/SHALE
SHALE
SILTSTONE
SANDSTONE



HORIZONTAL
1" = 15 ft
0 7.5 15Ft
0 7.5 15Ft
1" = 15 ft
VERTICAL

PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN
SRS #2021-089; nAPP2129935504

CROSS-SECTION C-C'

Project No. 12566934
Date July 2023

FIGURE 5

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Tables

Table 1
Summary of Soil Analytical Results
Plains Pipeline, L.P.
Endurance 6" Upstream Jacinto Tie-In
SRS #2021-089
nAPP2129935504
Lea County, New Mexico

Location ID:		**SB-2**	**SB-2**	**SB-3**	**SB-4**	**SB-4**	**SB-5**	**SB-5**	**SB-6**	**SB-6**	**SB-7**	**SB-7**	**SB-8**
Sample Name:		**SB-2(30-35)**	**SB-2(45-50)**	**SB-3(45-50)**	**SB-4(18-20)**	**SB-4(45-50)**	**SB-5(35-40)**	**SB-5(45-50)**	**SB-6(20-28)**	**SB-6(45-50)**	**SB-7(28-30)**	**SB-7(45-50)**	**SB-8(20-21)**
Sample Date:		**04/24/2023**	**04/24/2023**	**04/24/2023**	**04/24/2023**	**04/24/2023**	**04/25/2023**	**04/25/2023**	**04/25/2023**	**04/25/2023**	**04/25/2023**	**04/25/2023**	**04/26/2023**
Depth:		**30-35 ft BGS**	**45-50 ft BGS**	**45-50 ft BGS**	**18-20 ft BGS**	**45-50 ft BGS**	**35-40 ft BGS**	**45-50 ft BGS**	**20-28 ft BGS**	**45-50 ft BGS**	**28-30 ft BGS**	**45-50 ft BGS**	**20-21 ft BGS**
Parameters	**Closure Criteria: DTW >100 feet bgs**												
Volatile Organic Compounds													
Benzene	10	**1.05**	**0.0647**	**0.000332**	**0.000622**	**0.000238**	**0.00753**	**0.000227**	**114**	**0.000409**	**0.672**	**0.000578**	**0.216**
Toluene	--	**15.3**	**1.45**	**0.000336**	**0.000628**	**0.000196**	**0.00497**	**0.000401**	**491**	**0.000446**	**10.7**	**0.000481**	**18.2**
Ethylbenzene	--	**6.33**	**0.768**	<0.000114	**0.000285**	<0.000113	<0.000130	**0.000118**	**108**	**0.000204**	**6.36**	**0.000129**	**13.0**
Xylenes (total)	--	**37.2**	**4.62**	<0.000476	<0.000492	<0.000470	**0.291**	<0.000471	**525**	**0.00156**	**37.8**	<0.000472	**78.4**
BTEX	50	**59.88**	**6.9027**	**0.00148**	**0.002027**	**0.001017**	**0.30363**	**0.001217**	**1238**	**0.002619**	**55.532**	**0.00166**	**109.816**
Total Petroleum Hydrocarbons													
TPH - GRO	--	**508**	**73.4**	**0.0308**	**0.0243**	**0.0254**	**9.21**	**0.0279**	**5620**	**0.516**	**449**	**0.0334**	**1030**
TPH - DRO	--	**1340**	**324**	**2.27**	**16.2**	**5.21**	**343**	**20.1**	**12100**	**223**	**1640**	**127**	**22100**
TPH - MRO	--	**636**	**151**	**3.38**	**33.4**	**9.05**	**203**	**23.4**	**4700**	**146**	**804**	**98.8**	**9360**
TPH - DRO+GRO	1000	**1848**	**397.4**	**2.3008**	**16.2243**	**5.2354**	**352.21**	**20.1279**	**17720**	**223.516**	**2089**	**127.0334**	**23130**
Total TPH	2500	**2484**	**548.4**	**5.6808**	**49.6243**	**14.2854**	**555.21**	**43.5279**	**22420**	**369.516**	**2893**	**225.8334**	**32490**
General Chemistry													
Chloride	20000	**25.4**	**21.1**	**27.9**	**34.3**	**13.6**	**13.9**	**29.0**	**51.1**	**33.0**	**54.9**	**47.6**	**402**

Notes:
1. Values reported in mg/kg
2. < = Value Less than Method Detection Limit
3. Bold Indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015 Mod.
6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the NMOC 19.15.29.12 Table 1 Closure Criteria for the site.
8. TPH (DRO+GRO) and Total TPH (DRO +GRO+DRO) are calculated values.

Table 1
Summary of Soil Analytical Results
Plains Pipeline, L.P.
Endurance 6" Upstream Jacinto Tie-In
SRS #2021-089
nAPP2129935504
Lea County, New Mexico

Location ID:		SB-8	SB-9	SB-10	SB-10	SB-11	SB-11
Sample Name:		SB-8(45-50)	SB-9(45-50)	SB-10(33-35)	SB-10(45-50)	SB-11(23-25)	SB-11(45-50)
Sample Date:		04/26/2023	04/26/2023	04/26/2023	04/26/2023	04/26/2023	04/26/2023
Depth:		45-50 ft BGS	45-50 ft BGS	33-35 ft BGS	45-50 ft BGS	23-25 ft BGS	45-50 ft BGS
Parameters	**Closure Criteria: DTW >100 feet bgs**						
Volatile Organic Compounds							
Benzene	10	**0.0310**	**0.000259**	**0.722**	**0.0167**	**19.9**	**0.000249**
Toluene	--	**0.924**	**0.000233**	**13.7**	**1.39**	**72.9**	**0.000247**
Ethylbenzene	--	**0.529**	<0.000113	**5.94**	**1.52**	**18.1**	<0.000113
Xylenes (total)	--	**3.21**	<0.000472	**34.7**	**10.0**	**89.5**	**0.000478**
BTEX	50	**4.694**	**0.001077**	**55.062**	**12.9267**	**200.4**	**0.001087**
Total Petroleum Hydrocarbons							
TPH - GRO	--	**61.6**	**0.0531**	**692**	**197**	**1740**	**0.101**
TPH - DRO	--	**421**	**13.2**	**1140**	**1020**	**1060**	**58.6**
TPH - MRO	--	**241**	**14.6**	**525**	**490**	**468**	**41.0**
TPH - DRO+GRO	1000	**482.6**	**13.2531**	**1832**	**1217**	**2800**	**58.701**
Total TPH	2500	**723.6**	**27.8531**	**2357**	**1707**	**3268**	**99.701**
General Chemistry							
Chloride	20000	**59.1**	**33.0**	**215**	**74.4**	**496**	**59.8**

Notes:
1. Values reported in mg/kg
2. < = Value Less than Method Detection Limit
3. Bold Indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015 Mod.
6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the NMOC 19.15.29.12 Table 1 Closure Criteria for the site.
8. TPH (DRO+GRO) and Total TPH (DRO +GRO+DRO) are calculated values.

Attachment A
Laboratory Analytical Reports and Chain-of-Custody Documentation

ANALYTICAL REPORT

May 19, 2023

Plains All American, LP - GHD

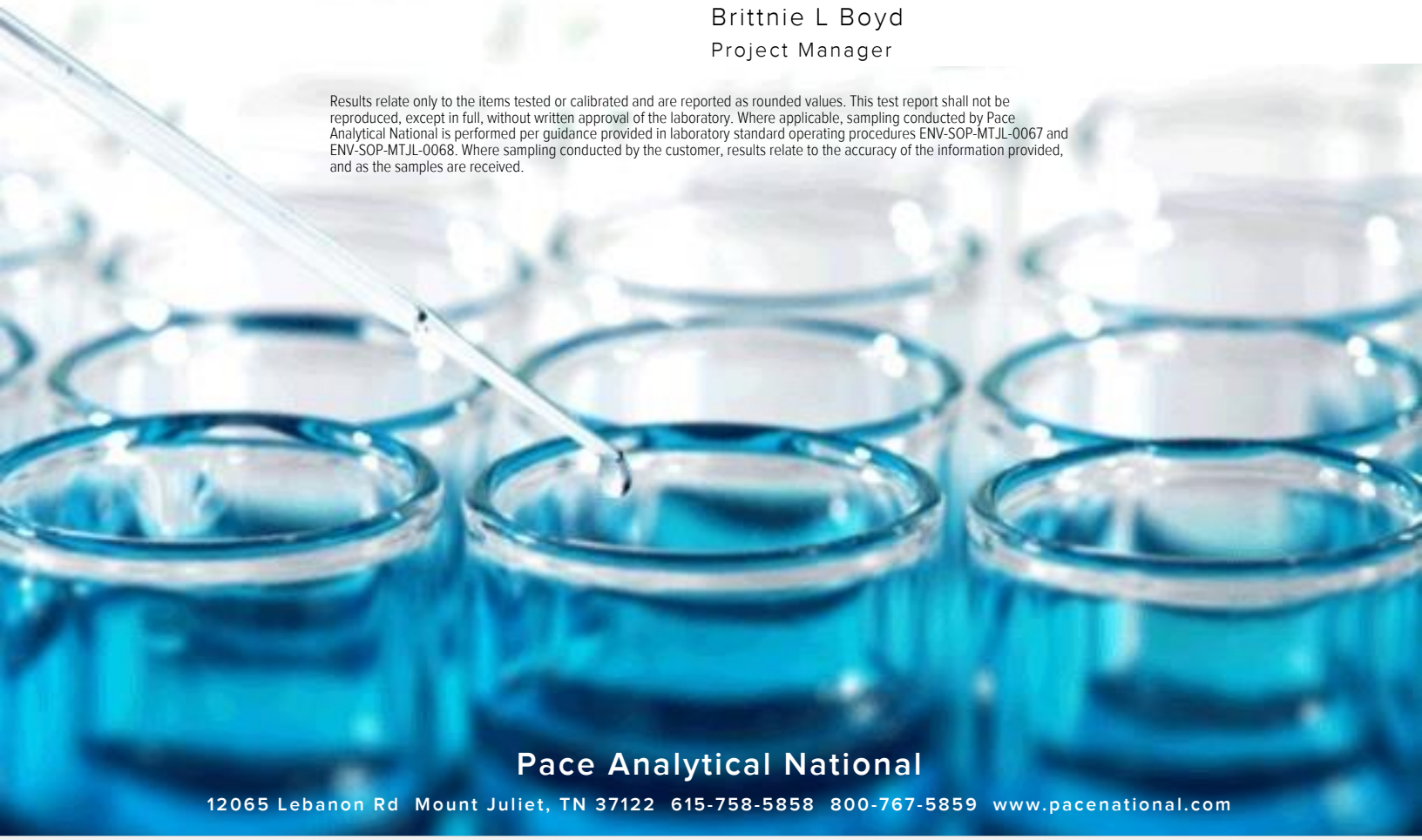
Sample Delivery Group:	L1610720
Samples Received:	04/29/2023
Project Number:	R.A/M.C
Description:	Plains Endurance 6" Upstream Jacinto Tie In

Report To: J.T. Murrey
2135 S Loop 250 W
Midland, TX 79703

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

TABLE OF CONTENTS

SB-2(30-35) L1610720-01 Solid

Collected by	Collected date/time	Received date/time
	04/24/23 14:30	04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 02:02	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	250	05/04/23 17:11	05/07/23 11:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	250	05/04/23 17:11	05/10/23 03:15	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	20	05/06/23 13:10	05/06/23 19:02	JSS	Mt. Juliet, TN

SB-2(45-50) L1610720-02 Solid

Collected by	Collected date/time	Received date/time
	04/24/23 14:45	04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 02:17	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	100	05/04/23 17:11	05/07/23 11:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	25	05/04/23 17:11	05/10/23 01:45	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:47	NH	Mt. Juliet, TN

SB-3(45-50) L1610720-03 Solid

Collected by	Collected date/time	Received date/time
	04/24/23 16:00	04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 02:33	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 05:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/08/23 20:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:23	JSS	Mt. Juliet, TN

SB-4(18-20) L1610720-04 Solid

Collected by	Collected date/time	Received date/time
	04/24/23 17:15	04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 02:49	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 05:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/08/23 21:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:35	JSS	Mt. Juliet, TN

SB-4(45-50) L1610720-05 Solid

Collected by	Collected date/time	Received date/time
	04/24/23 17:30	04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 03:05	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 06:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056927	1.01	05/10/23 15:46	05/10/23 16:11	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:10	JSS	Mt. Juliet, TN

SB-5(35-40) L1610720-06 Solid

Collected by | Collected date/time 04/25/23 12:00 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 03:21	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 06:33	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056927	1	05/10/23 15:46	05/10/23 16:34	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 18:12	JSS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	2	05/06/23 13:10	05/07/23 02:12	JSS	Mt. Juliet, TN

SB-5(45-50) L1610720-07 Solid

Collected by | Collected date/time 04/25/23 12:15 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 04:56	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 06:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/08/23 22:21	GLN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:23	JSS	Mt. Juliet, TN

SB-6(20-28) L1610720-08 Solid

Collected by | Collected date/time 04/25/23 13:45 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1.01	05/09/23 00:03	05/09/23 05:12	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	500	05/04/23 17:11	05/07/23 11:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	2500	05/04/23 17:11	05/10/23 03:38	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	50	05/06/23 13:10	05/06/23 18:50	NH	Mt. Juliet, TN

SB-6(45-50) L1610720-09 Solid

Collected by | Collected date/time 04/25/23 14:00 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 05:28	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 07:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056927	1	05/10/23 15:46	05/10/23 16:59	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 17:35	JSS	Mt. Juliet, TN

SB-7(28-30) L1610720-10 Solid

Collected by | Collected date/time 04/25/23 16:30 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052418	1	05/03/23 08:32	05/03/23 08:38	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 05:44	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	100	05/04/23 17:11	05/07/23 12:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	100	05/04/23 17:11	05/10/23 04:00	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	20	05/06/23 13:10	05/06/23 18:50	JSS	Mt. Juliet, TN

SB-7(45-50) L1610720-11 Solid

Collected by | Collected date/time 04/25/23 16:45 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052480	1	05/03/23 07:39	05/03/23 07:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 06:00	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 07:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/08/23 23:07	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054637	1	05/06/23 13:10	05/06/23 18:00	JSS	Mt. Juliet, TN

SB-8(20-21) L1610720-12 Solid

Collected by | Collected date/time 04/26/23 10:30 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052480	1	05/03/23 07:39	05/03/23 07:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 06:16	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	250	05/04/23 17:11	05/07/23 12:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	250	05/04/23 17:11	05/10/23 04:23	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054640	250	05/05/23 15:19	05/06/23 09:12	JAS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054640	50	05/05/23 15:19	05/06/23 04:10	JAS	Mt. Juliet, TN

SB-8(45-50) L1610720-13 Solid

Collected by | Collected date/time 04/26/23 10:45 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052480	1	05/03/23 07:39	05/03/23 07:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 06:32	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2056171	25	05/04/23 17:11	05/10/23 02:07	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2061264	5	05/17/23 10:07	05/18/23 10:12	JAS	Mt. Juliet, TN

SB-9(45-50) L1610720-14 Solid

Collected by | Collected date/time 04/26/23 12:00 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052483	1	05/02/23 18:50	05/02/23 19:07	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056312	1	05/09/23 00:03	05/09/23 06:48	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 08:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/08/23 23:29	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2061264	1	05/17/23 10:07	05/17/23 20:33	JAS	Mt. Juliet, TN

SB-10(33-35) L1610720-15 Solid

Collected by | Collected date/time 04/26/23 14:30 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052483	1	05/02/23 18:50	05/02/23 19:07	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2057730	1	05/10/23 18:51	05/11/23 01:27	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	200	05/04/23 17:11	05/07/23 13:23	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	200	05/04/23 17:11	05/10/23 04:45	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2061264	10	05/17/23 10:07	05/18/23 09:59	JAS	Mt. Juliet, TN

SB-10(45-50) L1610720-16 Solid

Collected by | Collected date/time 04/26/23 14:45 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052483	1	05/02/23 18:50	05/02/23 19:07	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2057730	1	05/10/23 18:51	05/11/23 01:36	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	200	05/04/23 17:11	05/07/23 13:46	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	50	05/04/23 17:11	05/10/23 02:30	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054640	10	05/05/23 15:19	05/06/23 08:58	JAS	Mt. Juliet, TN

SB-11(23-25) L1610720-17 Solid

Collected by | Collected date/time 04/26/23 17:00 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052483	1	05/02/23 18:50	05/02/23 19:07	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2057730	1	05/10/23 18:51	05/11/23 01:55	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG2055267	200	05/04/23 17:11	05/07/23 14:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056171	200	05/04/23 17:11	05/10/23 05:08	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054640	10	05/05/23 15:19	05/06/23 08:45	JAS	Mt. Juliet, TN

SB-11(45-50) L1610720-18 Solid

Collected by | Collected date/time 04/26/23 17:15 | Received date/time 04/29/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2052483	1	05/02/23 18:50	05/02/23 19:07	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2057730	1	05/10/23 18:51	05/11/23 02:04	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG2055258	1	05/04/23 17:11	05/06/23 08:26	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8021	WG2056152	1	05/04/23 17:11	05/09/23 00:06	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2054640	1	05/05/23 15:19	05/06/23 00:25	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.7		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.4		9.93	21.6	1	05/09/2023 02:02	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	1.05	J3 Q	0.0348	0.145	250	05/10/2023 03:15	WG2056171
Toluene	15.3	J3 Q	0.0435	1.45	250	05/10/2023 03:15	WG2056171
Ethylbenzene	6.33	J3 Q	0.0319	0.145	250	05/10/2023 03:15	WG2056171
Total Xylene	37.2	J3 Q	0.133	0.435	250	05/10/2023 03:15	WG2056171
TPH (GC/FID) Low Fraction	508		6.30	29.0	250	05/07/2023 11:07	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*		*05/07/2023 11:07*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*77.0-120*		*05/10/2023 03:15*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*		*05/07/2023 11:07*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*112*			*72.0-128*		*05/10/2023 03:15*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1340		34.8	86.3	20	05/06/2023 19:02	WG2054637
C28-C36 Motor Oil Range	636		5.91	86.3	20	05/06/2023 19:02	WG2054637
(S) o-Terphenyl	*63.0*	J7		*18.0-148*		*05/06/2023 19:02*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	21.1		9.43	20.5	1	05/09/2023 02:17	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.0647	J3 Q	0.00315	0.0131	25	05/10/2023 01:45	WG2056171
Toluene	1.45	J3 Q	0.00394	0.131	25	05/10/2023 01:45	WG2056171
Ethylbenzene	0.768	J3 Q	0.00289	0.0131	25	05/10/2023 01:45	WG2056171
Total Xylene	4.62	J3 Q	0.0121	0.0394	25	05/10/2023 01:45	WG2056171
TPH (GC/FID) Low Fraction	73.4		2.28	10.5	100	05/07/2023 11:29	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*103*			*77.0-120*		*05/07/2023 11:29*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*77.0-120*		*05/10/2023 01:45*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*		*05/07/2023 11:29*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*112*			*72.0-128*		*05/10/2023 01:45*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	324		1.65	4.10	1	05/06/2023 17:47	WG2054637
C28-C36 Motor Oil Range	151		0.281	4.10	1	05/06/2023 17:47	WG2054637
(S) o-Terphenyl	*97.7*			*18.0-148*		*05/06/2023 17:47*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	27.9		9.52	20.7	1	05/09/2023 02:33	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000332	J	0.000124	0.000517	1	05/08/2023 20:50	WG2056152
Toluene	0.000336	J	0.000155	0.00517	1	05/08/2023 20:50	WG2056152
Ethylbenzene	U		0.000114	0.000517	1	05/08/2023 20:50	WG2056152
Total Xylene	U		0.000476	0.00155	1	05/06/2023 05:24	WG2055258
TPH (GC/FID) Low Fraction	0.0308	B J	0.0225	0.103	1	05/06/2023 05:24	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*05/06/2023 05:24*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*05/08/2023 20:50*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*		*05/06/2023 05:24*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*		*05/08/2023 20:50*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.27	J	1.67	4.14	1	05/06/2023 17:23	WG2054637
C28-C36 Motor Oil Range	3.38	B J	0.284	4.14	1	05/06/2023 17:23	WG2054637
(S) o-Terphenyl	*68.0*			*18.0-148*		*05/06/2023 17:23*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	34.3		9.85	21.4	1	05/09/2023 02:49	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000622		0.000128	0.000535	1	05/08/2023 21:13	WG2056152
Toluene	0.000628	J	0.000161	0.00535	1	05/08/2023 21:13	WG2056152
Ethylbenzene	0.000285	J	0.000118	0.000535	1	05/08/2023 21:13	WG2056152
Total Xylene	U		0.000492	0.00161	1	05/06/2023 05:47	WG2055258
TPH (GC/FID) Low Fraction	0.0243	B J	0.0232	0.107	1	05/06/2023 05:47	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*05/06/2023 05:47*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*05/08/2023 21:13*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*		*05/06/2023 05:47*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*112*			*72.0-128*		*05/08/2023 21:13*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	16.2		1.72	4.28	1	05/06/2023 17:35	WG2054637
C28-C36 Motor Oil Range	33.4		0.293	4.28	1	05/06/2023 17:35	WG2054637
(S) o-Terphenyl	*53.3*			*18.0-148*		*05/06/2023 17:35*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.0		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	13.6	J	9.39	20.4	1	05/09/2023 03:05	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000238	J Q	0.000123	0.000515	1.01	05/10/2023 16:11	WG2056927
Toluene	0.000196	J Q	0.000155	0.00515	1.01	05/10/2023 16:11	WG2056927
Ethylbenzene	U	Q	0.000113	0.000515	1.01	05/10/2023 16:11	WG2056927
Total Xylene	U		0.000470	0.00153	1	05/06/2023 06:10	WG2055258
TPH (GC/FID) Low Fraction	0.0254	B J	0.0221	0.102	1	05/06/2023 06:10	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*05/06/2023 06:10*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*05/10/2023 16:11*	WG2056927
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*		*05/06/2023 06:10*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*115*			*72.0-128*		*05/10/2023 16:11*	WG2056927

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	5.21		1.64	4.08	1	05/06/2023 17:10	WG2054637
C28-C36 Motor Oil Range	9.05		0.280	4.08	1	05/06/2023 17:10	WG2054637
(S) o-Terphenyl	*70.4*			*18.0-148*		*05/06/2023 17:10*	WG2054637

SB-5(39-40)
Collected date/time: 04/25/23 12:00
L1610720

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.9		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	13.9	J P1	10.8	23.6	1	05/09/2023 03:21	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.00753	Q	0.000141	0.000589	1	05/10/2023 16:34	WG2056927
Toluene	0.00497	J Q	0.000177	0.00589	1	05/10/2023 16:34	WG2056927
Ethylbenzene	U	Q	0.000130	0.000589	1	05/10/2023 16:34	WG2056927
Total Xylene	0.291		0.000542	0.00177	1	05/06/2023 06:33	WG2055258
TPH (GC/FID) Low Fraction	9.21		0.0256	0.118	1	05/06/2023 06:33	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*94.2*			*77.0-120*		*05/06/2023 06:33*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*05/10/2023 16:34*	WG2056927
(S) a,a,a-Trifluorotoluene(PID)	*103*			*72.0-128*		*05/06/2023 06:33*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*109*			*72.0-128*		*05/10/2023 16:34*	WG2056927

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	343		1.90	4.71	1	05/06/2023 18:12	WG2054637
C28-C36 Motor Oil Range	203		0.645	9.42	2	05/07/2023 02:12	WG2054637
(S) o-Terphenyl	*44.2*			*18.0-148*		*05/06/2023 18:12*	WG2054637
(S) o-Terphenyl	*77.5*			*18.0-148*		*05/07/2023 02:12*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	29.0		9.42	20.5	1	05/09/2023 04:56	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000227	J	0.000123	0.000512	1	05/08/2023 22:21	WG2056152
Toluene	0.000401	J	0.000154	0.00512	1	05/08/2023 22:21	WG2056152
Ethylbenzene	0.000118	J	0.000113	0.000512	1	05/08/2023 22:21	WG2056152
Total Xylene	U		0.000471	0.00154	1	05/06/2023 06:55	WG2055258
TPH (GC/FID) Low Fraction	0.0279	B J	0.0222	0.102	1	05/06/2023 06:55	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*05/06/2023 06:55*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*117*			*77.0-120*		*05/08/2023 22:21*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*		*05/06/2023 06:55*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*120*			*72.0-128*		*05/08/2023 22:21*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	20.1		1.65	4.10	1	05/06/2023 17:23	WG2054637
C28-C36 Motor Oil Range	23.4		0.281	4.10	1	05/06/2023 17:23	WG2054637
(S) o-Terphenyl	*53.0*			*18.0-148*		*05/06/2023 17:23*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	51.1		10.4	22.5	1.01	05/09/2023 05:12	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	114	J3 Q	0.370	1.54	2500	05/10/2023 03:38	WG2056171
Toluene	491	J3 Q	0.462	15.4	2500	05/10/2023 03:38	WG2056171
Ethylbenzene	108	J3 Q	0.339	1.54	2500	05/10/2023 03:38	WG2056171
Total Xylene	525	J3 Q	1.42	4.62	2500	05/10/2023 03:38	WG2056171
TPH (GC/FID) Low Fraction	5620		13.4	61.6	500	05/07/2023 11:52	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*88.4*			*77.0-120*		*05/07/2023 11:52*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*77.0-120*		*05/10/2023 03:38*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*103*			*72.0-128*		*05/07/2023 11:52*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*114*			*72.0-128*		*05/10/2023 03:38*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	12100		89.8	223	50	05/06/2023 18:50	WG2054637
C28-C36 Motor Oil Range	4700		15.3	223	50	05/06/2023 18:50	WG2054637
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*05/06/2023 18:50*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.5		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	33.0		9.44	20.5	1	05/09/2023 05:28	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000409	J Q	0.000123	0.000513	1	05/10/2023 16:59	WG2056927
Toluene	0.000446	J Q	0.000154	0.00513	1	05/10/2023 16:59	WG2056927
Ethylbenzene	0.000204	J Q	0.000113	0.000513	1	05/10/2023 16:59	WG2056927
Total Xylene	0.00156		0.000472	0.00154	1	05/06/2023 07:18	WG2055258
TPH (GC/FID) Low Fraction	0.516		0.0223	0.103	1	05/06/2023 07:18	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*05/06/2023 07:18*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*115*			*77.0-120*		*05/10/2023 16:59*	WG2056927
(S) a,a,a-Trifluorotoluene(PID)	*114*			*72.0-128*		*05/06/2023 07:18*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*118*			*72.0-128*		*05/10/2023 16:59*	WG2056927

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	223		1.65	4.10	1	05/06/2023 17:35	WG2054637
C28-C36 Motor Oil Range	146		0.281	4.10	1	05/06/2023 17:35	WG2054637
(S) o-Terphenyl	*45.4*			*18.0-148*		*05/06/2023 17:35*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.4		1	05/03/2023 08:38	WG2052418

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	54.9		11.2	24.3	1	05/09/2023 05:44	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.672	J3 Q	0.0171	0.0713	100	05/10/2023 04:00	WG2056171
Toluene	10.7	J3 Q	0.0214	0.713	100	05/10/2023 04:00	WG2056171
Ethylbenzene	6.36	J3 Q	0.0157	0.0713	100	05/10/2023 04:00	WG2056171
Total Xylene	37.8	J3 Q	0.0656	0.214	100	05/10/2023 04:00	WG2056171
TPH (GC/FID) Low Fraction	449		3.09	14.3	100	05/07/2023 12:15	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*05/07/2023 12:15*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*05/10/2023 04:00*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*109*			*72.0-128*		*05/07/2023 12:15*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*117*			*72.0-128*		*05/10/2023 04:00*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1640		39.1	97.0	20	05/06/2023 18:50	WG2054637
C28-C36 Motor Oil Range	804		6.65	97.0	20	05/06/2023 18:50	WG2054637
(S) o-Terphenyl	*70.3*	J7		*18.0-148*		*05/06/2023 18:50*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	05/03/2023 07:44	WG2052480

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	47.6		9.45	20.5	1	05/09/2023 06:00	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000578		0.000123	0.000514	1	05/08/2023 23:07	WG2056152
Toluene	0.000481	J	0.000154	0.00514	1	05/08/2023 23:07	WG2056152
Ethylbenzene	0.000129	J	0.000113	0.000514	1	05/08/2023 23:07	WG2056152
Total Xylene	U		0.000472	0.00154	1	05/06/2023 07:40	WG2055258
TPH (GC/FID) Low Fraction	0.0334	B J	0.0223	0.103	1	05/06/2023 07:40	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*05/06/2023 07:40*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*05/08/2023 23:07*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*		*05/06/2023 07:40*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*115*			*72.0-128*		*05/08/2023 23:07*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	127		1.65	4.11	1	05/06/2023 18:00	WG2054637
C28-C36 Motor Oil Range	98.8		0.281	4.11	1	05/06/2023 18:00	WG2054637
(S) o-Terphenyl	*50.9*			*18.0-148*		*05/06/2023 18:00*	WG2054637

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.5		1	05/03/2023 07:44	WG2052480

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	402		10.9	23.7	1	05/09/2023 06:16	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.216	J3	0.0410	0.171	250	05/10/2023 04:23	WG2056171
Toluene	18.2	J3	0.0513	1.71	250	05/10/2023 04:23	WG2056171
Ethylbenzene	13.0	J3	0.0376	0.171	250	05/10/2023 04:23	WG2056171
Total Xylene	78.4	J3	0.157	0.513	250	05/10/2023 04:23	WG2056171
TPH (GC/FID) Low Fraction	1030		7.43	34.2	250	05/07/2023 12:38	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*05/07/2023 12:38*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*05/10/2023 04:23*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*		*05/07/2023 12:38*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*		*05/10/2023 04:23*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	22100		477	1180	250	05/06/2023 09:12	WG2054640
C28-C36 Motor Oil Range	9360		16.2	237	50	05/06/2023 04:10	WG2054640
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*05/06/2023 04:10*	WG2054640
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*05/06/2023 09:12*	WG2054640

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	05/03/2023 07:44	WG2052480

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	59.1		9.48	20.6	1	05/09/2023 06:32	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.0310	J3	0.00318	0.0133	25	05/10/2023 02:07	WG2056171
Toluene	0.924	J3	0.00398	0.133	25	05/10/2023 02:07	WG2056171
Ethylbenzene	0.529	J3	0.00292	0.0133	25	05/10/2023 02:07	WG2056171
Total Xylene	3.21	J3	0.0122	0.0398	25	05/10/2023 02:07	WG2056171
TPH (GC/FID) Low Fraction	61.6		0.576	2.65	25	05/10/2023 02:07	WG2056171
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*05/10/2023 02:07*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*114*			*72.0-128*		*05/10/2023 02:07*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	421	T8	8.30	20.6	5	05/18/2023 10:12	WG2061264
C28-C36 Motor Oil Range	241	T8	1.41	20.6	5	05/18/2023 10:12	WG2061264
(S) o-Terphenyl	*95.7*			*18.0-148*		*05/18/2023 10:12*	WG2061264

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	05/02/2023 19:07	WG2052483

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	33.0		9.45	20.5	1	05/09/2023 06:48	WG2056312

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000259	J	0.000123	0.000514	1	05/08/2023 23:29	WG2056152
Toluene	0.000233	J	0.000154	0.00514	1	05/08/2023 23:29	WG2056152
Ethylbenzene	U		0.000113	0.000514	1	05/08/2023 23:29	WG2056152
Total Xylene	U		0.000472	0.00154	1	05/06/2023 08:03	WG2055258
TPH (GC/FID) Low Fraction	0.0531	B J	0.0223	0.103	1	05/06/2023 08:03	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*115*			*77.0-120*		*05/06/2023 08:03*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*05/08/2023 23:29*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*119*			*72.0-128*		*05/06/2023 08:03*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*		*05/08/2023 23:29*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	13.2	T8	1.65	4.11	1	05/17/2023 20:33	WG2061264
C28-C36 Motor Oil Range	14.6	T8	0.281	4.11	1	05/17/2023 20:33	WG2061264
(S) o-Terphenyl	*55.3*			*18.0-148*		*05/17/2023 20:33*	WG2061264

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.0		1	05/02/2023 19:07	WG2052483

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	215		10.1	22.0	1	05/11/2023 01:27	WG2057730

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.722	J3	0.0288	0.120	200	05/10/2023 04:45	WG2056171
Toluene	13.7	J3	0.0360	1.20	200	05/10/2023 04:45	WG2056171
Ethylbenzene	5.94	J3	0.0264	0.120	200	05/10/2023 04:45	WG2056171
Total Xylene	34.7	J3	0.110	0.360	200	05/10/2023 04:45	WG2056171
TPH (GC/FID) Low Fraction	692		5.20	24.0	200	05/07/2023 13:23	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*90.6*			*77.0-120*		*05/07/2023 13:23*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*77.0-120*		*05/10/2023 04:45*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*		*05/07/2023 13:23*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*		*05/10/2023 04:45*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1140	T8	17.7	44.0	10	05/18/2023 09:59	WG2061264
C28-C36 Motor Oil Range	525	T8	3.01	44.0	10	05/18/2023 09:59	WG2061264
(S) o-Terphenyl	*152*	J1		*18.0-148*		*05/18/2023 09:59*	WG2061264

Sample Narrative:

L1610720-15 WG2061264: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	05/02/2023 19:07	WG2052483

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	74.4		9.41	20.5	1	05/11/2023 01:36	WG2057730

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.0167	J J3	0.00628	0.0262	50	05/10/2023 02:30	WG2056171
Toluene	1.39	J3	0.00785	0.262	50	05/10/2023 02:30	WG2056171
Ethylbenzene	1.52	J3	0.00575	0.0262	50	05/10/2023 02:30	WG2056171
Total Xylene	10.0	J3	0.0241	0.0785	50	05/10/2023 02:30	WG2056171
TPH (GC/FID) Low Fraction	197		4.54	20.9	200	05/07/2023 13:46	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*05/07/2023 13:46*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*05/10/2023 02:30*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*112*			*72.0-128*		*05/07/2023 13:46*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*114*			*72.0-128*		*05/10/2023 02:30*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1020		16.5	40.9	10	05/06/2023 08:58	WG2054640
C28-C36 Motor Oil Range	490		2.80	40.9	10	05/06/2023 08:58	WG2054640
(S) o-Terphenyl	*125*			*18.0-148*		*05/06/2023 08:58*	WG2054640

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.4		1	05/02/2023 19:07	WG2052483

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	496		11.7	25.5	1	05/11/2023 01:55	WG2057730

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	19.9	J3	0.0372	0.155	200	05/10/2023 05:08	WG2056171
Toluene	72.9	J3	0.0465	1.55	200	05/10/2023 05:08	WG2056171
Ethylbenzene	18.1	J3	0.0341	0.155	200	05/10/2023 05:08	WG2056171
Total Xylene	89.5	J3	0.143	0.465	200	05/10/2023 05:08	WG2056171
TPH (GC/FID) Low Fraction	1740	J3 V	6.73	31.0	200	05/07/2023 14:09	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*88.8*			*77.0-120*		*05/07/2023 14:09*	WG2055267
(S) a,a,a-Trifluorotoluene(FID)	*88.9*			*77.0-120*		*05/10/2023 05:08*	WG2056171
(S) a,a,a-Trifluorotoluene(PID)	*103*			*72.0-128*		*05/07/2023 14:09*	WG2055267
(S) a,a,a-Trifluorotoluene(PID)	*104*			*72.0-128*		*05/10/2023 05:08*	WG2056171

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1060		20.5	51.0	10	05/06/2023 08:45	WG2054640
C28-C36 Motor Oil Range	468		3.49	51.0	10	05/06/2023 08:45	WG2054640
(S) o-Terphenyl	*96.2*			*18.0-148*		*05/06/2023 08:45*	WG2054640

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.2		1	05/02/2023 19:07	WG2052483

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	59.8		9.47	20.6	1	05/11/2023 02:04	WG2057730

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000249	J	0.000123	0.000514	1	05/09/2023 00:06	WG2056152
Toluene	0.000247	J	0.000154	0.00514	1	05/09/2023 00:06	WG2056152
Ethylbenzene	U		0.000113	0.000514	1	05/09/2023 00:06	WG2056152
Total Xylene	0.000478	J	0.000473	0.00154	1	05/06/2023 08:26	WG2055258
TPH (GC/FID) Low Fraction	0.101	B J	0.0223	0.103	1	05/06/2023 08:26	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*05/06/2023 08:26*	WG2055258
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*05/09/2023 00:06*	WG2056152
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*		*05/06/2023 08:26*	WG2055258
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*		*05/09/2023 00:06*	WG2056152

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	58.6		1.66	4.12	1	05/06/2023 00:25	WG2054640
C28-C36 Motor Oil Range	41.0		0.282	4.12	1	05/06/2023 00:25	WG2054640
(S) o-Terphenyl	*58.8*			*18.0-148*		*05/06/2023 00:25*	WG2054640

Method Blank (MB)

(MB) R3920697-1 05/03/23 08:38

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1610720-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1610720-01 05/03/23 08:38 • (DUP) R3920697-3 05/03/23 08:38

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.7	92.7	1	0.0895		10

Laboratory Control Sample (LCS)

(LCS) R3920697-2 05/03/23 08:38

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3920691-1 05/03/23 07:44

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1610720-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1610720-11 05/03/23 07:44 • (DUP) R3920691-3 05/03/23 07:44

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.4	97.3	1	0.0790		10

Laboratory Control Sample (LCS)

(LCS) R3920691-2 05/03/23 07:44

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3920258-1 05/02/23 19:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1610796-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1610796-01 05/02/23 19:07 • (DUP) R3920258-3 05/02/23 19:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	81.7	81.2	1	0.573		10

Laboratory Control Sample (LCS)

(LCS) R3920258-2 05/02/23 19:07

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3922467-1 05/09/23 01:11

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

L1610720-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1610720-06 05/09/23 03:21 • (DUP) R3922467-3 05/09/23 03:37

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13.9	16.8	1	19.4	J P1	15

L1612401-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1612401-01 05/09/23 07:35 • (DUP) R3922467-6 05/09/23 07:51

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	5	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3922467-2 05/09/23 01:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	193	96.3	80.0-120	

L1610720-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1610720-06 05/09/23 03:21 • (MS) R3922467-4 05/09/23 04:25 • (MSD) R3922467-5 05/09/23 04:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	589	13.9	572	574	94.7	95.2	1	80.0-120			0.450	15

Method Blank (MB)

(MB) R3923448-1 05/10/23 20:51

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

L1610720-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1610720-16 05/11/23 01:36 • (DUP) R3923448-3 05/11/23 01:45

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	74.4	75.7	1	1.69		15

L1612742-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1612742-01 05/11/23 03:40 • (DUP) R3923448-4 05/11/23 03:50

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25.2	30.5	1	19.1	P1	15

Laboratory Control Sample (LCS)

(LCS) R3923448-2 05/10/23 21:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	199	99.5	80.0-120	

L1612742-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1612742-01 05/11/23 03:40 • (MS) R3923448-5 05/11/23 03:59 • (MSD) R3923448-6 05/11/23 04:09

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	25.2	508	512	96.6	97.3	1	80.0-120			0.678	15

Method Blank (MB)

(MB) R3922167-2 05/06/23 21:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*110*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3922167-1 05/06/23 19:37

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)			*116*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*122*	*72.0-128*	

L1610720-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1610720-17 05/07/23 14:09 • (MS) R3922167-3 05/07/23 15:41 • (MSD) R3922167-4 05/07/23 16:03

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	214	1740	346	223	0.000	0.000	25	10.0-151	V	J3 V	43.1	28
(S) a,a,a-Trifluorotoluene(FID)					*131*	*117*		*77.0-120*	J1			
(S) a,a,a-Trifluorotoluene(PID)					*139*	*125*		*72.0-128*	J1			

Method Blank (MB)

(MB) R3922149-3 05/06/23 03:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0241	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*111*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3922149-1 05/06/23 00:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Xylene	0.150	0.189	126	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			*109*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*111*	*72.0-128*	

Laboratory Control Sample (LCS)

(LCS) R3922149-2 05/06/23 02:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.71	104	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*116*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*120*	*72.0-128*	

Method Blank (MB)

(MB) R3923180-4 05/10/23 01:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.00300	0.0125
Toluene	0.00572	J	0.00375	0.125
Ethylbenzene	U		0.00275	0.0125
Total Xylene	U		0.0115	0.0375
TPH (GC/FID) Low Fraction	0.646	J	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*114*			*72.0-128*

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

(LCS) R3923180-1 05/09/23 21:53 • (LCSD) R3923180-3 05/10/23 00:17

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	0.0500	0.0528	0.0426	106	85.2	76.0-121		J3	21.4	20
Toluene	0.0500	0.0519	0.0420	104	84.0	80.0-120		J3	21.1	20
Ethylbenzene	0.0500	0.0566	0.0456	113	91.2	80.0-124		J3	21.5	20
Total Xylene	0.150	0.166	0.134	111	89.3	37.0-160		J3	21.3	20
(S) a,a,a-Trifluorotoluene(FID)				*108*	*107*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*115*	*113*	*72.0-128*				

Laboratory Control Sample (LCS)

(LCS) R3923180-2 05/09/23 23:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.54	82.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*114*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*123*	*72.0-128*	

Method Blank (MB)

(MB) R3922734-2 05/08/23 20:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*113*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3922734-1 05/08/23 19:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0429	85.8	76.0-121	
Toluene	0.0500	0.0410	82.0	80.0-120	
Ethylbenzene	0.0500	0.0443	88.6	80.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*110*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*113*	*72.0-128*	

Method Blank (MB)

(MB) R3923445-3 05/10/23 15:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*115*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3923445-1 05/10/23 14:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0443	88.6	76.0-121	
Toluene	0.0500	0.0433	86.6	80.0-120	
Ethylbenzene	0.0500	0.0479	95.8	80.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*112*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*114*	*72.0-128*	

Method Blank (MB)

(MB) R3921764-1 05/06/23 16:58

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	0.477	J	0.274	4.00
(S) o-Terphenyl	*91.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3921764-2 05/06/23 17:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.6	67.2	50.0-150	
(S) o-Terphenyl			*71.3*	*18.0-148*	

L1610752-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1610752-01 05/07/23 02:12 • (MS) R3921764-3 05/06/23 18:12 • (MSD) R3921764-4 05/06/23 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 %
C10-C28 Diesel Range	49.0	18.0	50.6	50.4	66.5	64.8	1	50.0-150			0.396	20
(S) o-Terphenyl					*57.2*	*65.0*		*18.0-148*				

Method Blank (MB)

(MB) R3921648-1 05/05/23 23:45

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	*58.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3921648-2 05/05/23 23:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	27.7	55.4	50.0-150	
(S) o-Terphenyl			*56.6*	*18.0-148*	

L1610729-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1610729-06 05/06/23 01:18 • (MS) R3921648-3 05/06/23 01:31 • (MSD) R3921648-4 05/06/23 01:44

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	54.7	2.87	37.5	33.4	63.4	55.6	1	50.0-150			11.8	20
(S) o-Terphenyl					*61.1*	*55.1*		*18.0-148*				

Method Blank (MB)

(MB) R3926233-1 05/17/23 20:07

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	*55.9*			*18.0-148*

Method Blank (MB)

(MB) R3926425-1 05/18/23 09:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	2.22	J	1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*87.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3926233-2 05/17/23 20:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	28.7	57.4	50.0-150	
(S) o-Terphenyl			*68.0*	*18.0-148*	

L1614205-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1614205-01 05/17/23 21:51 • (MS) R3926233-3 05/17/23 22:04 • (MSD) R3926233-4 05/17/23 22:17

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	57.4	U	32.3	32.7	56.4	56.7	1	50.0-150			1.07	20
(S) o-Terphenyl					*57.6*	*53.2*		*18.0-148*				

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

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
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Plains	Billing Information:
Address: 1106 Griffith Drive	
Report To: JT Murrey, Chris Knight, Joe Mizzi	Email To:
Copy To:	Site Collection Info/Address: JAL, NM
Customer Project Name/Number:	State: / County/City: / Time Zone Collected: [ ]PT [✓]MT [ ]CT [ ]ET
Phone: / Email:	Site/Facility ID #: / Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): RA MC	Purchase Order # : / Quote #: / DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: / Immediately Packed on Ice: [✓] Yes [ ] No
Sample Disposal: [✓] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [✓] 5 Day / Field Filtered (if applicable): [ ] Yes [✓] No / Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: TPH (TX1005) - 8015 mod/Gro-Dro-Mo	Analyses: BTEX (8021B)	Analyses: Chlorides 4500/9056	Lab Profile/Line: LAB USE ONLY Lab Sample # / Comments: L1610720
SB-2 (30-35)	SL	Grab	4-24-23	1430				1		X	X	X	-01
SB-2 (45-50)				1445									-02
SB-3 (45-50)				1600									-03
SB-4 (18-20)				1715									-04
SB-4 (45-50)				1730									-05
SB-5 (35-40)			4-25-23	1200									-06
SB-5 (45-50)				1215									-07
SB-6 (20-28)				1345									-08
SB-6 (45-50)				1400									-09
SB-7 (28-30)				1630									-10

Lab Profile/Line: Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: ____			
Sample pH Acceptable	Y	N	NA
pH Strips: ____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: ____			

Customer Remarks / Special Conditions / Possible Hazards:
SSOW# 12566934-2023-001

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: NS#7
Cooler 1 Temp Upon Receipt: 0.4 oC
Cooler 1 Therm Corr. Factor: ___ oC
Cooler 1 Corrected Temp: ___ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	4/27/23 1330		4/27/23 1340
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	4/27/23 1700	SWA	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
			04/28/23 0800

E126

Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

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
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number Here
MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Plains	Billing Information:
Address: 1106 Griffith Drive	
Report To: J.T Murrey, Chris Knight, Joe Mizera	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number:	State: / County/City: / Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: / Email:	Site/Facility ID #: / Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): MC RT	Purchase Order # : / Quote #: / DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: / Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day / Field Filtered (if applicable): [ ] Yes [ ] No / Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: TPH 8015 mod/GRO-DRO - MC	Analyses: BTEX (8021B)	Analyses: Chlorides 4500/9056 - MC	Lab Sample # / Comments
SB-7 (45-50)	SL	Grab	4-25-23	16:45				1	G	X	X	X	-11
SB-8 (20-21)			4-26-23	10:30									-12
SB-8 (45-50)				10:45									-13
SB-9 (45-50)				12:00									-14
SB-10 (33-35)				14:30									-15
SB-10 (45-50)				14:45									-16
SB-11 (23-25)				17:00									-17
SB-11 (45-50)				17:15									-18

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: ____			
Sample pH Acceptable	Y	N	NA
pH Strips: ____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: ____			

LAB USE ONLY:
Lab Sample # / Comments:
L1610720

Customer Remarks / Special Conditions / Possible Hazards:
SSOW# 12566 934-2023-001

Type of Ice Used: Wet Blue Dry None
Packing Material Used:
Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A
Lab Tracking #:
Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: NSA7
Cooler 1 Temp Upon Receipt: oC
Cooler 1 Therm Corr. Factor: oC
Cooler 1 Corrected Temp: oC
Comments:

Relinquished by/Company: (Signature)	Date/Time	Received by/Company: (Signature)	Date/Time
	4/27/23 13:30		4/27/23 1340
	4/27/23 1700	SWA	
			04/28/23 0800

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO
Page: ____ of: ____

Attachment B
Soil Boring Logs

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-2
PROJECT NUMBER: 12566934
DATE COMPLETED: 24 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 4 feet of conductor piping that was installed during excavation backfill activities. The initial 4 feet is compacted caliche fill material.					0.0
5	SM-SILTY SAND, red-brown, dry, fine grained, loose-dense, caliche layers	4.00				0.0
	ML-SLIGHTLY SILTY SAND, red-brown, slightly moist, very fine, loose, caliche present/traces	8.00				0.0
10						0.4
15						1.1
20						4.5
25						214.0
30						499.0
35	SILTY SAND/SILTSTONE, dense, grey, moist-dry	35.00				303.0
40	SILTY STONE, grey-brown, dry, dense	40.00				331.0
45						170
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-3
PROJECT NUMBER: 12566934
DATE COMPLETED: 24 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	CALICHE, road top					
	SM-SILTY SAND, tan, moist, very fine, caliche present, loose, dense	1.00				0.0
	ML-SILTY SAND, red brown, moist, very fine, caliche present	8.00				0.0
	ML-SILTY SAND, red brown, moist, loose, compact, caliche present, sandy stone layers	13.00				0.0
	ML-SILTY SAND, red, moist, loose	20.00				0.2
	ML-SILTY SAND, red brown, moist, clay present (shale), compact-dense, caliche present, sandstone layers	30.00				0.0
	SILTSTONE, light grey, dense-very dense, dry	38.00				0.0
	END OF BOREHOLE @ 50.00ft BGS	50.00				0.0

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-4
PROJECT NUMBER: 12566934
DATE COMPLETED: 24 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	TOPSOIL, tan, sand, caliche present, dry, fine-very fine					
	ML-SILTY SAND, red-brown, dry, compact, fine, mica present	1.00				0.0
	SILTY SAND, brown, dry, compact-very dense, sandstone layers, caliche layers	8.00				0.0
	- change color to red-brown at 13.00ft BGS					0.0
						0.4
	SHALE CLAYEY-SILT, red-brown, dry, compact, very fine, very dense/hard, caliche present, black stains, mica present	23.00				0.0
						0.0
	SILTY SAND, with sandstone layers, red-brown, moist-dry, compact-dense, caliche layers	31.00				0.0
						0.0
	SILTSTONE, light grey, dense-very dense, dry	40.00				0.0
	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-5
PROJECT NUMBER: 12566934
DATE COMPLETED: 24 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	CALICHE, road top					
	SILTY SAND, red-brown, moist, compact-dense, fine-very fine, caliche layers, siltstone layers	1.00				0.3
5						0.0
10						0.0
15						0.1
20	SHALE, clayey/silt, red, slightly moist, very dense/hard, low plasticity, caliche traces	20.00				5.6
25						11.2
30						5.6
	SILTY SAND/SILT, with siltstone, red-brown, moist, dense, very fine, caliche present, traces of gravel	33.00	⬭			875.0
35						
40	SILTSTONE, brown, dry, very dense	40.00				665.0
45			⬭			227
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS ⬭

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-6
PROJECT NUMBER: 12566934
DATE COMPLETED: 25 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 4 feet of conductor piping that was installed during excavation backfill activities. The initial 4 feet is compacted caliche fill material.					
	SILT/SILTY SAND, brown, moist-dry, loose-dense, caliche present, siltstone traces and layers	4.00				4.1
5						1.3
10	- caliche layers at 13.00ft BGS					0.5
15						167.0
20						257.0
	SHALE, clayey-silt, red-brown, moist, hard, caliches traces	23.00				
25						690.0
	- greenish color traces, black stains at 28.00ft BGS					
30						596.0
35						227.0
	- change color to greenish color at 38.00ft BGS					
40	SILTSTONE, tan, dry, very dense	40.00				50.7
45						212.0
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-7
PROJECT NUMBER: 12566934
DATE COMPLETED: 25 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	CALICHE, road top					
	SILT-sandy silt, red-brown, moist, fine grained, compact, caliche layers, siltstone, clay traces	1.00				4.0
5	- caliche layers, siltstone, clay traces at 5.00ft BGS					1.6
10						1.8
15						1.6
20						21.2
	SHALE, clayey-silt, red-brown, moist-dry, hard, caliche present	23.00	⬭			580.1
25						71.5
30						272.5
35						315.1
	SILTSTONE, hard, slightly moist, red-brown	38.00				5.2
40	- greenish gray-red brown from 39.00 to 41.00ft BGS		⬭			
45						
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS ⬭

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-8
PROJECT NUMBER: 12566934
DATE COMPLETED: 26 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 18 feet of conductor piping that was installed during excavation backfill activities. The initial 18 feet is compacted caliche fill material.					0.0
5						0.4
10						11.8
15	- appx plastic liner at 15.00ft BGS					338.1
	FILL MATERIAL SILTY SAND, with some clay and gravel	18.00				
20	SILTY SAND, red-brown, dry, compact-dense, caliche layers, with sand stone layer, fine-very fine	20.00	⬭			998.1
	SANDY-SILT, red-brown, moist, very fine	23.00				634.1
25						
	SHALE, clayey silt, red-brown, slightly moist, low plasticity, very dense-hard, sandy traces, black staining	28.00				736.9
30						
35						717.9
	SANDY-SILT with siltstone, red-brown	36.00				
	SILTSTONE, greenish grey	37.00				417.8
40	- change color to red-brown at 40.00ft BGS					557.0
45						331.9
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS ⬭

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-9
PROJECT NUMBER: 12566934
DATE COMPLETED: 26 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 18 feet of conductor piping that was installed during excavation backfill activities. The initial 18 feet is compacted caliche fill material.					0.1
5						
10						0.1
15						0.1
	SANDY-SILT, brown, moist, fine, caliche present, sandstone layers	18.00				0.2
20	@18ft BGS with stone layers and caliche layers					
25						1.0
	SHALE, clay-silt, red-brown, low-medium plasticity, hard, slightly dry-moist, greenish-grey, traces black staining, mica traces, clay present	28.00				0.0
30						
35						0.2
	SILTSTONE, greenish-grey	39.00				0.0
40	- change color to red-brown at 43.00ft BGS		⬭			0.2
45						
						0.2
50	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS ⬭

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-10
PROJECT NUMBER: 12566934
DATE COMPLETED: 26 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 4 feet of conductor piping that was installed during excavation backfill activities. The initial 4 feet is compacted caliche fill material.					
	SILTY-SAND, red-brown, moist, fine, trace caliche, moist-dry	4.00				0.2
5						
						0.2
10						
						0.2
15						
	- heavy caliche and siltstone layers at 18.00ft BGS					1.7
20						
	- changing/transitioning to shale at 23.00ft BGS					2.5
25						
	SHALE, clayey-silt, red-brown, moist, hard, black staining, mica present, low-medium plasticity	28.00				660.1
30						
						751.8
35						
	SILTSTONE, greenish-grey	39.00				601.5
40						
	- change color to red-brown at 42.00ft BGS					331.6
45						
						460.9
50						
	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In
HOLE DESIGNATION: SB-11
PROJECT NUMBER: 12566934
DATE COMPLETED: 26 April 2023
CLIENT: Plains
DRILLING METHOD: Air Rotary/Split Spoons
LOCATION: Lea County , New Mexico
FIELD PERSONNEL: R.Aguilar
DRILLING CONTRACTOR: White Drilling
DRILLER: Bo Atkins

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)
	This borehole was advanced through 14 feet of conductor piping that was installed during excavation backfill activities. The initial 14 feet is compacted caliche fill material.					1.0
						1.1
	SILTY SAND, reddish brown, moist, with sandstone and caliche	14.00				2.2
	- presence of siltstones at 18.00ft BGS					11.9
	SILT-CLAY, shale, red-brown, moist, caliche present	23.00				922.0
	CLAY-SILT, shale, reddish-brown, moise, mica present, black stains, hard, present of siltstones	28.00				747
	- transition from red bown shale to gray at 33.00ft BGS					247
	SILTSTONE, and sandstone, grey-green	36.00				50.9
	- color changed to reddish brown at 41.00ft BGS					61.8
						40.1
	END OF BOREHOLE @ 50.00ft BGS	50.00				

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

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V08.GLB Report: OVERBURDEN LOG Date: 11/7/23

ATTACHMENT B

SVE Pilot Test Procedure

PLAINS PIPELINE, L.P.

ENDURANCE 6-INCH UPSTREAM JACINTO TIE-IN

LEA COUNTY, NEW MEXICO

NMOCD INCIDENT NO. nAPP2129935504

SVE PILOT TEST PROCEDURE

1.0 Introduction

On October 25, 2021, a release of crude oil occurred on the Plains Pipeline, L.P. (Plains) Endurance 6" Upstream Jacinto Tie-In (site). The site is located in Unit Letter O, Section 25 of Township 24 South and Range 34 East in Lea County, New Mexico. The GPS coordinates associated with the release are 31.181559, -103.421514. The release was reported at 42.7 barrels (bbls) with no recovery during initial response actions. The New Mexico Oil Conservation Division (NMOCD) District I office in Hobbs, New Mexico assigned the release with the Incident Number nAPP2129935504.

From October 25 to November 19, 2021, excavation activities were conducted at the site to remove contaminated soil from the affected area. An excavation to a depth of approximately 19 feet below ground surface (bgs) was completed, but soil sampling at depth indicated that additional soil impacts were present at a greater depth. From June 2022 to April 2023, eleven soil borings (SB-1 to SB-11) were advanced at the site to further evaluate the vertical and horizontal extent of impact. The maximum depth of the soil borings was 106 feet bgs (SB-2); groundwater was not encountered in any boring.

Based on laboratory data, soil impacts greater than the applicable NMAC Closure Criteria are present to a depth of approximately 40 feet bgs. Since the contaminated soil shallower than 20 feet bgs was removed via excavation, an in-situ approach to the remediation of soil between depths of approximately 20 and 40 feet bgs is proposed. Plains proposes to conduct a pilot test using soil vapor extraction (SVE) to evaluate whether this is a feasible technique for remediation.

2.0 Installation of Pilot Test Wells

Plains proposes to install two (2) SVE wells and two (2) observation wells to determine if SVE is an effective remedial approach for this site. These four (4) wells would have the following characteristics:

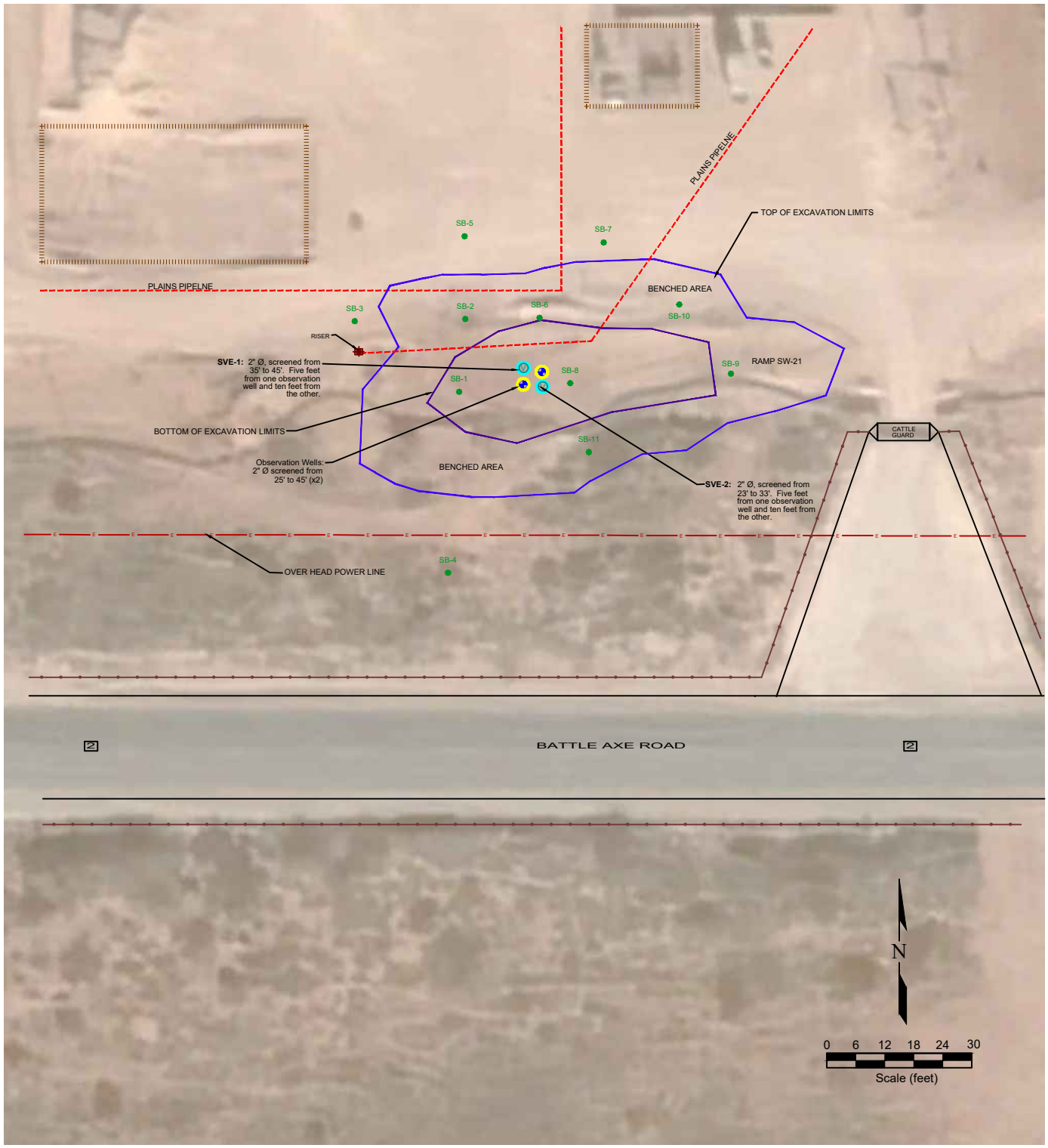
- Borings will be advanced using a hollow stem auger (HSA) rig;
- Split spoon samples will be collected at 5 ft intervals from 20 feet to total depth (TD);
- Samples will be logged using the Unified Soil Classification System (USCS);
- Field observations, including photoionization detector (PID) readings, will be noted;
- Approximately three (3) soil samples per boring will be collected and submitted for laboratory analysis of benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH); it is anticipated that these samples will be collected at a depth greater than 20 feet bgs;
- Borings will be completed as 2-inch diameter PVC wells;
- One SVE well will be screened with 10 feet of well screen from 23 to 33 feet (TD=33Ft);

- One SVE well will be screened with 10 feet of well screen from 35 to 45 feet (TD=45 feet);
- Both observation wells will be screened with 20 feet of well screen from 25 to 45 feet;
- All four (4) wells will be completed at the surface with flush-mount vaults.

3.0 SVE Pilot Test Procedure

A self-contained SVE pilot test trailer will be mobilized to the site to conduct a step-wise SVE test. This trailer has a gasoline engine powered SVE vacuum blower and an air sparge (AS) compressor. The SVE pilot test will include the following steps:

- Attach a 2-inch vacuum hose to one of the SVE pilot test wells;
- Connect magnehelic gauges to the two observation wells and the other SVE well;
- Initiate the test by activating the SVE blower and applying a vacuum to the SVE test well;
- Adjust the applied vacuum to approximately 30 inches of water (“H2O);
- Record the time, applied vacuum at the well (“H2O), flowrate (cfm) and exhaust vapor PID reading (approximately every 5 minutes for 20 to 30 minutes or until stabilized);
- Increase the applied vacuum to approximately 65” H2O and record data for 20 to 30 minutes;
- Increase the applied vacuum to approximately 110” H2O and record data for 20 to 30 minutes;
- Confirm adequacy of pilot test data and stop test.
- Repeat these steps as appropriate for the second SVE well.
- Based on the effectiveness of the SVE pilot test, consideration can be given to perform pilot tests on one or both of the observation wells.
- Based on the results of the SVE pilot test, consideration can be given to applying an air sparge (AS) pilot test to one or more of the wells. If SVE appears to be ineffective, it may be that a pressurized air application may have some effectiveness. Air flow in the subsurface will promote volatilization and biodegradation of petroleum hydrocarbons.



LEGEND

- RISER LOCATION
- PROPOSED SOIL VAPOR EXTRACTION WELL LOCATION (x2)
- SOIL BORING LOCATION
- PROPOSED OBSERVATION WELL (x2)
- CONTAINMENT BERM
- OVER HEAD POWER LINE
- TOP OF EXCAVATION LIMITS
- BOTTOM OF EXCAVATION LIMITS
- PLAINS PIPELNE
- FENCE LINE

Figure 1

PROPOSED SVE WELLS ~ PILOT TEST

Plains Pipeline, L.P.
Endurance 6" Upstream Jacinto Tie-In
SESW Sec. 2, T24N, R34W, 6th PM
Lea County, New Mexico
32.18155°, -103.42151°

Project No.	API #	Facility #	FREMONT ENVIRONMENTAL
Date **6/12/23**	Remediation #	Filename **Endurance_Q**	

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

Operator:	OGRID:
PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	34053
	Action Number: 250135
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved with the following conditions; 1. Soil Vapor Extraction Pilot Test to be completed by 02/26/2024. 2. Report of Pilot Test to be completed and submitted to OCD by 03/26/2024.	11/27/2023