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.

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: Jocelyn Harimon Date: 01/30/2023

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

Our ref: 12566934

January 24, 2023

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

Re: Updated Site Characterization and Revised Remediation Work Plan
Endurance 6" Upstream Jacinto Tie-In Release Site
Plains Pipeline, L.P.
Incident ID: nAPP2129935504
O-25-24S-34E, Lea County, New Mexico

1. Introduction

GHD Services, Inc. (GHD), on behalf of Plains Pipeline, L.P. (Plains), submits this Updated Site Characterization and Revised Remediation Work Plan to the New Mexico Oil Conservation Division (NMOCD) District 1 Office. This transmittal provides documentation of additional site characterization activities and proposed remediation of residual hydrocarbon impacted soil 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 latitude and 103.421514 W longitude. The release occurred on October 25, 2021, on private land owned by Quail Ranch. Figure 1 depicts the Site location. Figure 2, Site Plan and Soil Analytical Results Map, depicts Site details.

2. Background Information

A C-141, Release Notification, for this release was submitted to the NMOCD on October 29, 2021. The C-141 stated the release was due to internal corrosion and was discovered during station awareness inspections. The release was reported as 42.7 barrels (bbl) of crude oil with zero (0) bbl. recovered. The release falls under the jurisdiction of the NMOCD District 1 Office in Hobbs, New Mexico. The NMOCD assigned the release with Incident Number nAPP2129935504. The Release Notification, Site Assessment/Characterization and Remediation Plan portions of Form C-141 are attached to the front of this document.

3. Groundwater and Updated 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).

According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the Site is located within an area of low karst potential. No groundwater data could be located within one-half mile of the Site; therefore, on June 13, 2022, GHD and White Drilling installed a soil boring (SB-1) to 106.7 feet below ground surface (bgs) and installed a temporary well to determine the depth to groundwater. During soil boring advancement activities, soil samples were collected on five (5) feet intervals from thirty-five (35) feet bgs to eighty (80) feet bgs. All soil samples were analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300 by Permian Basin Environmental Lab, LP in Midland, Texas. Soil samples collected from thirty-five (35) feet bgs and forty (40) feet bgs exhibited concentrations over Table 1 closure criteria for Total TPH.

On June 16, 2022, the temporary well was gauged after 72 hours. Water was not detected; therefore, the temporary well was properly plugged and abandoned on June 16, 2022, in accordance with applicable State of New Mexico Office of the Sate Engineer as well as the approved Well Plugging Plan of Operations for well no. C-4645-POD1. A soil boring log is provided in Attachment A. Analytical results are provided in Table 1 and on Figure 2. Certified copies of laboratory analytical reports are provided in Attachment B.

No receptors (water wells, playas, wetlands, waterways, lakebeds or ordinance boundaries) were located within each specific boundaries or distance from the Site. The Site characterization documentation (Karst Potential, FEMA, Points of Diversion and Wetlands maps) are provided in Attachment C. The closure criteria are listed below:

General Site Characterization and Groundwater:

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

Table 3.1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12)

Regulatory Standard	Chloride	TPH (GRO+DRO+MRO)	TPH (GRO+MRO)	BTEX	Benzene
19.15.29.13 Restoration, Reclamation and Re-Vegetation (Impacted Area 0-4 Feet)	600 mg/kg	100 mg/kg	---	50 mg/kg	10 mg/kg
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release	20,000 mg/kg	2,500 mg/kg	1,000	50 mg/kg	10 mg/kg
Notes: --- = not defined					

4. Final Remedial Excavation Activities

On January 3, 2022, Plains personnel received an approval of the variance request for the installation of a plastic liner in the bottom of the excavation. The variance was requested in the Site Characterization and Remediation Work Plan, dated December 17, 2021. A copy of the approved variance is provided in Attachment D.

Waste Management activities were performed in coordination with Plains directives from January 10, 2022 until January 20, 2022. Plains obtained regulatory approval via the successful processing of Form C-138 Request

for Approval to Accept Solid Waste. The waste was approved for acceptance at the OCD-permitted OWL Landfill Services, LLC Northern Delaware Basin Landfill (NDBL) facility, NM1-63-0, 2029 West NM Hwy 128, Jal, New Mexico, 88252. Approximately 3,672 cubic yards of impacted soil were transported and disposed at the NDBL facility. The waste manifests are available upon request and are not included in this report due to size of the file. A Summary of Waste Management Information is provided as Table 2.

Excavation backfill activities were also completed in January 2022, following confirmation final sidewall soil samples were below applicable Table 1 closure criteria. A twenty (20) millimeter plastic liner was placed in the bottom and covered with approximately one (1) foot of locally purchased, non-impacted blow sand to ensure protection of the liner. Locally purchased, non-impacted fill material was then utilized to backfill the remaining excavation. Locally purchased, non-impacted topsoil was placed as the final fill layer to promote vegetation growth. Final excavation activities were completed on January 27, 2022. A Photographic Log is included as Attachment E.

5. nAPP2129935504 Proposed Work Plan

The excavation area was constrained by the proximity of the Conoco Phillips pad located to the north, the access road to the east, Battle Axe Road to the south, and the Plains pipeline riser to the west. Battle Axe Road and the access road provide the only access to the three (3) pads located off Battle Axe Road. A Photographic Log is included as Attachment E. Further vertical excavation cannot be completed in a safe manner due to the noted limitations and safe excavation practices. Based on existing Site conditions, Plains proposes a Soil Vapor Extraction (SVE) system be utilized to address residual hydrocarbon impacted soil at Site.

Additional horizontal delineation of the residual impacted soil will be required prior to SVE system design and implementation. Following approval of this Work Plan, the required permits and applications will be submitted to the State of New Mexico Office of the State Engineer for the proposed soil borings. Subsequent to obtaining the required authorizations, a licensed New Mexico driller will be scheduled to complete the required delineation activities.

Soil Sampling Procedures

A GHD Field Geologist will log the soil borings, collect soil samples, and supervise all field activities. A continuous soil profile will be developed using the Unified Soil Classification System. GHD will utilize a driller licensed to drill and operate in the State of New Mexico. Soil samples will be collected continuously at five-foot drilling intervals starting from the previously completed excavation depth of 19 feet bgs and will continue to approximately fifty (50) feet bgs. Field observations and screening will determine the final depths of each soil boring. All drilling and sampling equipment will be cleaned between each use using an Alconox detergent solution and rinsed with potable water. GHD personnel will utilize new nitrile gloves to collect each soil sample. Each five-foot sampling interval will be placed in plastic baggies for field screening (i.e., headspace analysis for volatile organic compounds) and qualitative evaluation (i.e., visual observations and olfactory conditions). Headspace testing will be conducted with a photo-ionization detector (PID).

Following field screening activities, those intervals selected for laboratory sample submittal will then be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the laboratory. Each container will be filled to capacity with soil to limit the amount of headspace present. All containers will then be labelled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F

(4°C). The samples will be delivered to a certified laboratory for laboratory analysis, utilizing proper chain of custody documentation throughout the sampling process.

Soil Sampling Matrix

Soil samples selected for analyses will be transmitted to the laboratory for analysis of BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300. All analytical results will be compared to the Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12) Table 1 (>100 feet depth to groundwater).

Reporting and Documentation

Upon completion of Site delineation activities, a Work Plan will be prepared with additional details regarding the SVE system and submitted to the NMOCD for consideration. Information collected from the proposed soil boring activities will also be presented at this time, along with the proposed locations and number of SVE wells to address Site conditions. The activities described here-in are anticipated to take approximately 180 days from Work Plan approval.

If you have any questions or comments concerning this Updated Site Characterization and Revised Remediation Work Plan, please do not hesitate to contact our Midland office at (432) 686-0086.

Sincerely,

GHD

J.T. Murrey
Senior Project Manager

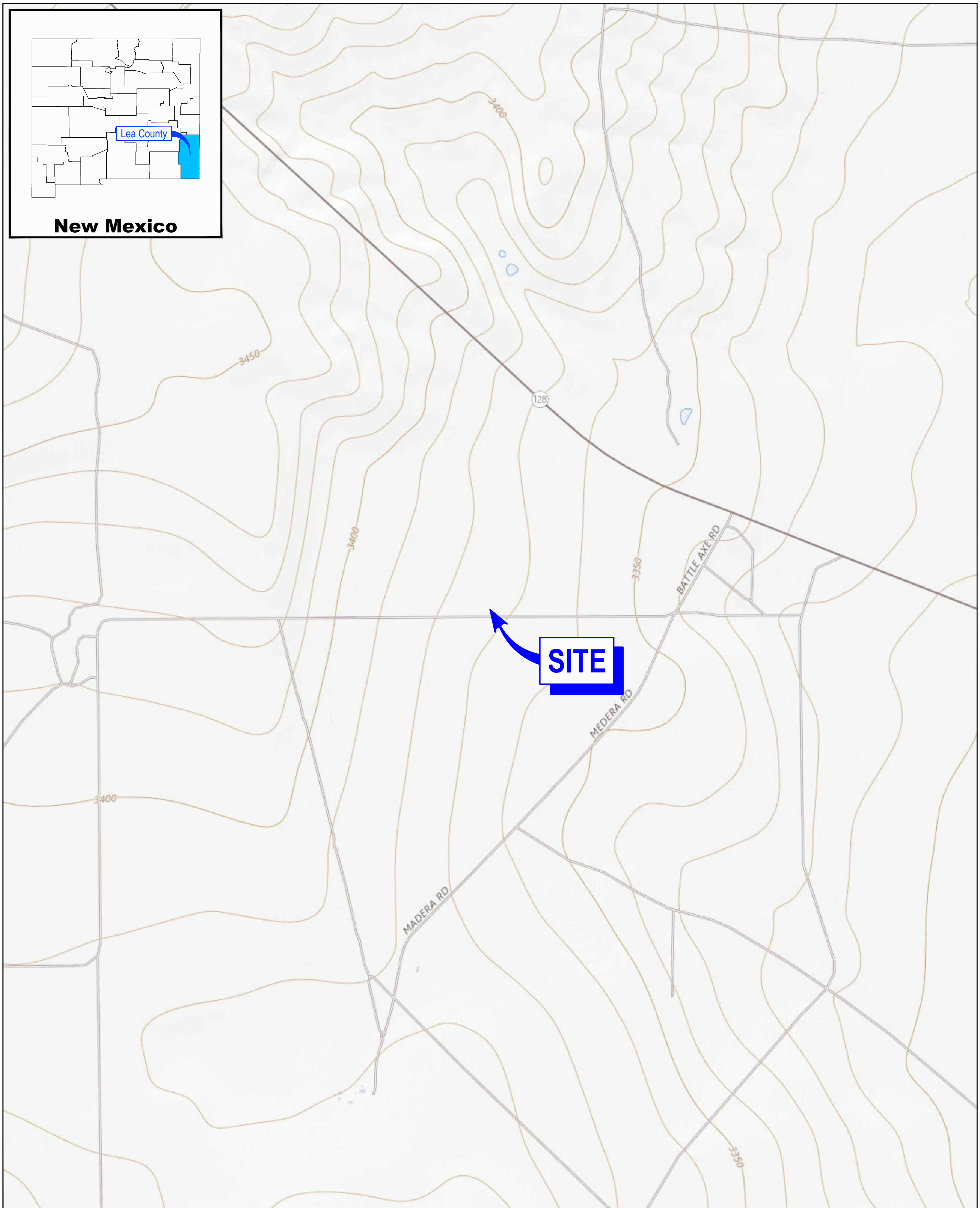
Michael Staffileno
Project Director

BH/ZC/1

Encl. Figure 1 – Site Location Map
Figure 2 – Site Plan and Soil Analytical Results Map
Table 1 – Summary of Soil Analytical Data
Table 2 – Summary of Waste Management Information
Attachment A – Soil Boring Log
Attachment B – Laboratory Analytical Reports and Chain-of-Custody Documentation
Attachment C – Site Characterization Documentation
Attachment D – Regulatory Correspondence
Attachment E – Photographic Log

cc: Camille Bryant – Plains Pipeline, L.P.

Figures



0 1000 2000 ft

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

N

PLAINS PIPELINE, L.P.
LEA COUNTY, NEW MEXICO
ENDURANCE 6" UPSTREAM JACINTO TIE-IN

SITE LOCATION MAP

Project No. **12566934**
Date **January 2023**

FIGURE 1

Filename: \\ghdnet\ghd\US\Midland\Projects\562\12566934\Digital_Design\ACAD\Figures\RPT001\12566934-GHD-00-00-RPT-EN-D102_WA-001.dwg
Plot Date: [illegible] January 2023 9:58 AM

Data Source: USGS 7.5 Minute Quad "Woodley Flat and Custer Mountain, New Mexico"
Lat/Long: 32.181559° North, 103.421514° West

Sample ID	Sample Date	Depth (feet bgs)	Benzene	BTEX	TPH Total GRO/DRO/MRO	Chloride
Table I Closure Criteria for Soils <100 feet Depth to Groundwater 19.15.29 NMAC			10	50	2,500	20,000
19.15.29.13 NMAC - Restoration and Reclamation Criteria (0 to 4 feet)			10	50	100	600
Initial Assessment Samples - Hand Augers						
~~AH1-1'~~	~~10/26/2021~~	~~1~~	~~338~~	~~1,720~~	~~19,700~~	~~13.3~~
~~AH1-3'~~	~~10/26/2021~~	~~3~~	~~197~~	~~1,360~~	~~25,700~~	~~17.2~~
~~AH2-2'~~	~~10/26/2021~~	~~2~~	~~268~~	~~1,750~~	~~25,700~~	~~6.98~~
~~AH2-4'~~	~~10/26/2021~~	~~4~~	~~706~~	~~3,760~~	~~29,300~~	~~6.12~~
Initial Assessment Samples - Test Pits						
TP1-22'	11/2/21	22	163	2,500	32,100	63.3
TP1-28'	11/2/21	28	115	2,370	35,000	57.1
TP1-31'	11/2/21	31	160	1,860	41,100	104
TP2-2'	11/19/21	2	<0.000383 U	<0.00100 U	16.7 J	17.1
TP2-4'	11/19/21	4	<0.000384 U	<0.00101 U	17.1 J	20.5
TP2-6'	11/19/21	6	<0.000387 U	<0.00101 U	58.7	19.9
TP2-10'	11/19/21	10	<0.000387 U	<0.00102 U	17.8 J	35.2
TP2-12'	11/19/21	12	<0.000383 U	<0.00101 U	17.4 J	35.8
Confirmation Samples - Sidewall Samples						
SW-1	11/15/21	-	0.000463 J	0.00125 J	18.2 J	32.2
SW-2	11/15/21	-	<0.000386 U	<0.00101 U	17.9 J	27.7
SW-3	11/15/21	-	<0.000386 U	<0.00101 U	16.3 J	37.5
SW-4	11/15/21	-	<0.000388 U	0.00893	18.3 J	82.5
SW-5	11/18/21	-	<0.000388 U F1	<0.00102 U	31.2 J	341
SW-6	11/18/21	-	0.00107 J	0.00350 J	<15.0 U	86.0
SW-7	11/18/21	-	<0.000383 U	<0.00101 U	<15.0 U	49.3
~~SW-8~~	~~11/18/21~~	~~-~~	~~<0.000384 U~~	~~0.00147 J~~	~~288.0~~	~~23.0~~
SW-8A	12/3/21	-	<0.000383 U	<0.00101 U	65.1	92.6
SW-9	11/18/21	-	<0.00386 U	0.00128 J	38.1 J	110
SW-10	11/18/21	-	0.00114 J	0.00340 J	82.9	96.2
SW-11	11/18/21	-	0.000391 J	0.00212 J	45.2 J	109
SW-12	11/18/21	-	<0.000384 U	0.00266 J	72.3	50.4
~~SW-13~~	~~11/18/21~~	~~-~~	~~<0.000383 U~~	~~0.00113 J~~	~~318.0~~	~~77.6~~
SW-13 A	12/3/21	-	<0.000385 U	<0.00101 U	23.7 J	32.9
SW-14	11/18/21	-	0.000450 J	0.00114 J	17.4 J	17.3
SW-15	11/18/21	-	<0.000383 U	<0.00100 U	26.0 J	84.3
SW-16	11/19/21	-	<0.000388 U	<0.00102 U	63.4	19.2
SW-17	11/19/21	-	<0.000384 U	<0.00101 U	17.0 J	69.2
SW-18	11/19/21	-	<0.000383 U	<0.00101 U	16.0 J	29.0
SW-19	11/19/21	-	<0.000386 U	<0.00101 U	40.3 J	19.2
SW-20	11/19/21	-	<0.000383 U	<0.00101 U	21.5 J	45.0
SW-21	11/19/21	-	<0.000383 U	<0.00101 U	17.2 J	19.6
SW-22	11/19/21	-	<0.000384 U	<0.00101 U	17.8 J	20.3
SW-23	11/19/21	-	<0.000383 U	<0.00100 U	30.9 J	82.9
SW-24	11/19/21	-	<0.000381 U	<0.00100 U	28.9 J	42.3
SW-25	11/19/21	-	<0.000387 U	<0.00101 U	18.1 J	51.5
SW-26	11/19/21	-	<0.000386 U	<0.00101 U	17.7 J	102
SW-27	11/19/21	-	<0.000383 U	<0.00101 U	27.5 J	17.9
Confirmation Samples - Bottom Hole Samples						
BH-1	11/19/21	19	<0.000385 U	<0.00101 U	134	65.5
Soil Boring Samples						
SB-1	6/13/22	35	0.0402	22.07	4,150	30.4
SB-1	6/13/22	40	0.149	32.77	10,700	27.5
SB-1	6/13/22	45	0.00650	0.741	1,370	28.3
SB-1	6/13/22	50	<0.00103	0.531	974	33.5
SB-1	6/13/22	60	<0.00101	0.045	638	21.1
SB-1	6/13/22	70	0.00648	0.630	561	8.72
SB-1	6/13/22	80	<0.00104	<0.00312	<26.0	8.97

LEGEND

- EXCAVATED AREA
- 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)
- SAMPLE POINT EXCAVATED
- INDICATES SIDE WALL COMPOSITE SAMPLE
- INDICATES SIDE WALL COMPOSITE SAMPLE

NOTES:

1. RESULTS IN MILLIGRAMS PER KILOGRAM (MG/KG).
2. SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.
3. YELLOW SHADED CELLS INDICATE EXCEEDANCE.

0 15 30 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

SITE PLAN AND SOIL ANALYTICAL RESULTS MAP

Project No. **12566934**
Date **January 2023**

FIGURE 2

Filename: \\phdnefiphdf\US\Midland\Projects\562\12566934\Digital Design\ACAD\Figures\RPT001\12566934-GHD-00-00-RPT-EN-D103_WA-001.dwg

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

Tables

Table 1
Summary of Soil Analytical Data
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
								GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	
Table I Closure Criteria for Soils <100 feet Depth to Groundwater 19.15.29 NMAC			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**2,500**	**20,000**
19.15.29.13 NMAC - Restoration and Reclamation Criteria (0 to 4 feet)			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**100**	**600**
Initial Assessment Samples - Hand Augers												
~~AH1-1'~~	~~10/26/2021~~	~~1~~	~~**338**~~	~~**1,020**~~	~~**89.1**~~	~~**267**~~	~~**1,720**~~	~~**10,500 *1**~~	~~**9,190 B**~~	~~<75.0 U~~	~~**19,700**~~	~~**13.3**~~
~~AH1-3'~~	~~10/26/2021~~	~~3~~	~~**197**~~	~~**769**~~	~~**88.3**~~	~~**303**~~	~~**1,350**~~	~~**12,100 *1**~~	~~**13,600 B**~~	~~<74.7 U~~	~~**25,700**~~	~~**17.2**~~
~~AH2-2'~~	~~10/26/2021~~	~~2~~	~~**268**~~	~~**976**~~	~~**113**~~	~~**389**~~	~~**1,750**~~	~~**12,200 *1**~~	~~**13,500 B**~~	~~<74.9 U~~	~~**25,700**~~	~~**6.98**~~
~~AH2-4'~~	~~10/26/2021~~	~~4~~	~~**705**~~	~~**1,860**~~	~~**139**~~	~~**1,050**~~	~~**3,760**~~	~~**14,800 *1**~~	~~**14,500 B**~~	~~<74.9 U~~	~~**29,300**~~	~~**6.12**~~
Initial Assessment Samples - Test Pits												
TP1-22'	11/2/21	22	**163**	**1,930 b**	**85.4**	**319**	**2,500**	**16,100**	**14,800 ***	**1,150**	**32,100**	**63.3**
TP1-28'	11/2/21	28	**115**	**1,910 b**	**72.0**	**276**	**2,370**	**16,900**	**16,600 ***	**1,470**	**35,000**	**57.1**
TP1-31'	11/2/21	31	**160**	**1,300**	**82.0**	**314**	**1,860**	**20,800**	**18,700 ***	**1,640**	**41,100**	**104**
TP2-2'	11/19/21	2	<0.000383 U	<0.000453 U	<0.000562 U	<0.00100 U	<0.00100 U	<15.0 U	**16.7 J B**	<15.0 U	**16.7 J**	**17.1**
TP2-4'	11/19/21	4	<0.000384 U	<0.000455 U	<0.000564 U	<0.00101 U	<0.00101 U	<15.0 U	**17.1 J B**	<15.0 U	**17.1 J**	**20.5**
TP2-6'	11/19/21	6	<0.000387 U	<0.000458 U	<0.000567 U	<0.00101 U	<0.00101 U	**41.9 J**	**16.8 J B**	<14.9 U	**58.7**	**19.9**
TP2-10'	11/19/21	10	<0.000387 U	<0.000459 U	<0.000568 U	<0.00102 U	<0.00102 U	<15.0 U	**17.8 J B**	<15.0 U	**17.8 J**	**35.2**
TP2-12'	11/19/21	12	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**17.4 J B**	<15.0 U	**17.4 J**	**35.8**
Confirmation Samples - Sidewall Samples												
SW-1	11/15/21	-	**0.000463 J**	<0.000453 U	<0.000562 U	<00.00100 U	**0.00125 J**	<15.0 U	**18.2 J***	<15.0 U	**18.2 J**	**32.2**
SW-2	11/15/21	-	<0.000386 U	<0.000457 U	<0.000566 U	<0.00101 U	<0.00101 U	<15.0 U	**17.9 J***	<15.0 U	**17.9 J**	**27.7**
SW-3	11/15/21	-	<0.000386 U	<0.000457 U	<0.000566 U	<0.00101 U	<0.00101 U	<15.0 U	**16.3 J***	<15.0 U	**16.3 J**	**37.5**
SW-4	11/15/21	-	<0.000388 U	**0.00197 J**	**0.000624 J**	**0.00634**	**0.00893**	<15.0 U	**18.3 J***	<15.0 U	**18.3 J**	**82.5**
SW-5	11/18/21	-	<0.000388 U F1	<0.000460 U F1	<0.000570 U F1	<0.00102 U F1	<0.00102 U	<15.0 U	**31.2 J**	<15.0 U	**31.2 J**	**341**
SW-6	11/18/21	-	**0.00107 J**	**0.000580 J**	<0.00561 U	**0.00185 J**	**0.00350 J**	<15.0 U	<15.0 U	<15.0 U	<15.0 U	**86.0**
SW-7	11/18/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	**49.3**
~~SW-8~~	~~11/18/21~~	~~-~~	~~<0.000384 U~~	~~<0.00455 U~~	~~<0.00564 U~~	~~**0.00147 J**~~	~~**0.00147 J**~~	~~**288**~~	~~<15.0 U~~	~~<15.0 U~~	~~**288.0**~~	~~**23.0**~~
SW-8A	12/3/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**26.4 J**	**38.7 J**	**65.1**	**92.6**
SW-9	11/18/21	-	<0.00386 U	<0.000457 U	<0.000566 U	**0.00128 J**	**0.00128 J**	<14.9	**38.1 J**	<14.9 U	**38.1 J**	**110**
SW-10	11/18/21	-	**0.00114 J**	**0.00147 J**	**0.000787 J**	<0.00101 U	**0.00340 J**	<15.0 U	**82.9**	<15.0 U	**82.9**	**96.2**
SW-11	11/18/21	-	**0.000391 J**	**0.000471 J**	<0.000562 U	**0.00126 J**	**0.00212 J**	<14.9 U	**45.2 J**	<14.9 U	**45.2 J**	**109**
SW-12	11/18/21	-	<0.000384 U	**0.000987 J**	**<0.000564 U**	**0.000167 J**	**0.00266 J**	<15.0 U	**72.3**	<15.0 U	**72.3**	**50.4**
~~SW-13~~	~~11/18/21~~	~~-~~	~~<0.000383 U~~	~~<0.000454 U~~	~~**0.00113 J**~~	~~<0.00101 U~~	~~**0.00113 J**~~	~~<15.0 U~~	~~**318**~~	~~<15.0 U~~	~~**318.0**~~	~~**77.6**~~
SW-13 A	12/3/21	-	<0.000385 U	<0.000456 U	<0.000565 U	<0.00101 U	<0.00101 U	<15.0 U	**23.7 J**	<15.0 U	**23.7 J**	**32.9**
SW-14	11/18/21	-	**0.000450 J**	**0.000688 J**	<0.000564 U	<0.00101 U	**0.00114 J**	<15.0 U	**17.4 J B**	<15.0 U	**17.4 J**	**17.3**
SW-15	11/18/21	-	<0.000383 U	<0.000453 U	<0.000562 U	<0.00100 U	<0.00100 U	<14.9 U	**26.0 J B**	<14.9 U	**26.0 J**	**84.3**
SW-16	11/19/21	-	<0.000388 U	<0.000460 U	<0.000570 U	<0.00102 U	<0.00102 U	**26.4 J**	**37.0 J B**	<15.0 U	**63.4**	**19.2**

Table 1
Summary of Soil Analytical Data
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
								GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	
Table I Closure Criteria for Soils <100 feet Depth to Groundwater 19.15.29 NMAC			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**2,500**	**20,000**
19.15.29.13 NMAC - Restoration and Reclamation Criteria (0 to 4 feet)			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**100**	**600**
SW-17	11/19/21	-	<0.000384 U	<0.000455 U	<0.000564 U	<0.00101 U	<0.00101 U	**17.0 J**	<15.0 U F1	<15.0 U	**17.0 J**	**69.2**
SW-18	11/19/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**16.0 J B**	<15.0 U	**16.0 J**	**29.0**
SW-19	11/19/21	-	<0.000386 U	<0.000457 U	<0.000566 U	<0.00101 U	<0.00101 U	**15.8 J**	**24.5 J B**	<15.0 U	**40.3 J**	**19.2**
SW-20	11/19/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**21.5 J B**	<15.0 U	**21.5 J**	**45.0**
SW-21	11/19/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<14.9 U	**17.2 J B**	<14.9 U	**17.2 J**	**19.6**
SW-22	11/19/21	-	<0.000384 U	<0.000455 U	<0.000564 U	<0.00101 U	<0.00101 U	<15.0 U	**17.8 J B**	<15.0 U	**17.8 J**	**20.3**
SW-23	11/19/21	-	<0.000383 U	<0.000453 U	<0.000562 U	<0.00100 U	<0.00100 U	<14.9 U	**30.9 J B**	<14.9 U	**30.9 J**	**82.9**
SW-24	11/19/21	-	<0.000381 U	<0.000451 U	<0.000559 U	<0.00100 U	<0.00100 U	<15.0 U	**28.9 J B**	<15.0	**28.9 J**	**42.3**
SW-25	11/19/21	-	<0.000387 U	<0.000458 U	<0.000567 U	<0.00101 U	<0.00101 U	**18.1 J**	<15.0 U	<15.0 U	**18.1 J**	**51.5**
SW-26	11/19/21	-	<0.000386 U	<0.000457 U	<0.000566 U	<0.00101 U	<0.00101 U	<15.0 U	**17.7 J B**	<15.0 U	**17.7 J**	**102**
SW-27	11/19/21	-	<0.000383 U	<0.000454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**27.5 J B**	<15.0 U	**27.5 J**	**17.9**
Confirmation Samples - Bottom Hole Samples												
BH-1	11/19/21	19	<0.000385 U	<0.000456 U	<0.000565 U	<0.00101 U	<0.00101 U	**18.0 J**	**98.5 B**	**17.3 J**	**134**	**65.5**
Unimpacted Soil Piles												
Clean Pile	12/8/21	-	<0.000387 U	<0.000459 U	<0.000568 U	<0.00102 U	<0.00102 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	**54.8**
Clean Pile 2	12/10/21	-	<0.000383 U	<0.00454 U	<0.000563 U	<0.00101 U	<0.00101 U	<15.0 U	**87.8**	<15.0 U	**87.8**	**61.8 F1**
Clean Pile 3	1210/21	-	<0.000381 U	<0.000451 U	<0.000559 U	<0.00100 U	<0.00100 U	<15.0 U	<15.0 U	<15.0 U	<15.0 U	<0.850 U
Soil Boring Samples												
SB-1	6/13/22	35	**0.0402**	**2.34**	**2.87**	**16.82**	**22.07**	**955**	**2,810**	**383**	**4,150**	**30.4**
SB-1	6/13/22	40	**0.149**	**6.27**	**4.06**	**22.29**	**32.77**	**1,480**	**8,330**	**886**	**10,700**	**27.5**
SB-1	6/13/22	45	**0.00650**	**0.118**	**0.0854**	**0.531**	**0.741**	**102**	**1,140**	**128**	**1,370**	**28.3**
SB-1	6/13/22	50	<0.00103	**0.0449**	**0.0618**	**0.424**	**0.531**	**92.1**	**788**	**93.9**	**974**	**33.5**
SB-1	6/13/22	60	<0.00101	**0.00524**	**0.00504**	**0.03505**	**0.045**	**28.1**	**540**	**70.0**	**638**	**21.1**
SB-1	6/13/22	70	**0.00648**	**0.142**	**0.0693**	**0.412**	**0.630**	**44.5**	**449**	**67.5**	**561**	**8.72**
SB-1	6/13/22	80	<0.00104	<0.00104	<0.00104	<0.00208	<0.00312	<26.0	<26.0	<26.0	<26.0	**8.97**

Notes:

1. Values reported in mg/kg
2. < = Value Less than Reporting Limit (RL)
3. Bold indicates analyte detected
4. BTEX analyses by EPA Method SW 8021B

~~B-BH-2~~ Sample Point Excavated

5. TPH analyses by EPA Method SW 8015 Modified
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. J - the target analytes was positively identified below the quantitation limit and above the detection limit

9. * - RPD of the LCS and LCSD exceeds the control limits
10. b - The compound was found in the blank and sample
11. *1 - LCS/LCSD RPD exceeds control limits

Table 2
Summary of Waste Management Information
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Date	Ticket #	Volume (Cubic Yard)	Date	Ticket #	Volume (Cubic Yard)
1/10/2023	98485	12	1/12/2023	98910	12
1/10/2023	98455	12	1/12/2023	98934	12
1/10/2023	98492	12	1/12/2023	98939	12
1/10/2023	98497	12	1/12/2023	98971	12
1/10/2023	98459	12	1/12/2023	98958	12
1/10/2023	98433	12	1/12/2023	98917	12
1/10/2023	98430	12	1/12/2023	98895	12
1/10/2023	98452	12	1/12/2023	98878	12
1/10/2023	98457	12	1/12/2023	98874	12
1/10/2023	98431	12	1/12/2023	98888	12
1/10/2023	98436	12	1/12/2023	98914	12
1/10/2023	98488	12	1/12/2023	98936	12
1/10/2023	98487	12	1/12/2023	98956	12
1/10/2023	98457	12	1/12/2023	98968	12
1/10/2023	98432	12	1/12/2023	98885	12
1/10/2023	98499	12	1/12/2023	98995	12
1/10/2023	98460	12	1/12/2023	98987	12
1/10/2023	98434	12	1/12/2023	98988	12
1/11/2023	98728	12	1/12/2023	98991	12
1/11/2023	98707	12	1/13/2023	99208	12
1/11/2023	98684	12	1/13/2023	99210	12
1/11/2023	98721	12	1/13/2023	99214	12
1/11/2023	98746	12	1/13/2023	99202	12
1/11/2023	98682	12	1/13/2023	99216	12
1/11/2023	98705	12	1/13/2023	99169	12
1/11/2023	98726	12	1/13/2023	99149	12
1/11/2023	98743	12	1/13/2023	99125	12
1/11/2023	98729	12	1/13/2023	99114	12
1/11/2023	98750	12	1/13/2023	99103	12
1/11/2023	98748	12	1/13/2023	99101	12
1/11/2023	98732	12	1/13/2023	99111	12
1/11/2023	98745	12	1/13/2023	99120	12
1/11/2023	98727	12	1/13/2023	99142	12
1/11/2023	98747	12	1/13/2023	99163	12
1/12/2023	98877	12	1/13/2023	99183	12
1/12/2023	98894	12	1/13/2023	99182	12
1/12/2023	98915	12	1/13/2023	99161	12
1/12/2023	98938	12	1/13/2023	99140	12
1/12/2023	98954	12	1/13/2023	99119	12
1/12/2023	98969	12	1/13/2023	99110	12
1/12/2023	98964	12	1/13/2023	99099	12
1/12/2023	98931	12	1/13/2023	99104	12
1/12/2023	98946	12	1/13/2023	99112	12
1/12/2023	98913	12	1/13/2023	99121	12
1/12/2023	98887	12	1/13/2023	99147	12
1/12/2023	98876	12	1/13/2023	99165	12
1/12/2023	98966	12	1/13/2023	99189	12
1/12/2023	98951	12	1/13/2023	99188	12
1/12/2023	98886	12	1/13/2023	99168	12
1/12/2023	98873	12	1/13/2023	99144	12
1/13/2023	99122	12	1/17/2023	99892	12

Table 2
Summary of Waste Management Information
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Date	Ticket #	Volume (Cubic Yard)	Date	Ticket #	Volume (Cubic Yard)
1/13/2023	99113	12	1/17/2023	99919	12
1/13/2023	99102	12	1/17/2023	99937	12
1/13/2023	99190	12	1/17/2023	99960	12
1/13/2023	99213	12	1/17/2023	99981	12
1/13/2023	99105	12	1/17/2023	99997	12
1/13/2023	99115	12	1/17/2023	99996	12
1/13/2023	99129	12	1/17/2023	99979	12
1/13/2023	99146	12	1/17/2023	99959	12
1/13/2023	99173	12	1/17/2023	99935	12
1/13/2023	99193	12	1/17/2023	99914	12
1/14/2023	99403	12	1/17/2023	99890	12
1/14/2023	99381	12	1/17/2023	99995	12
1/14/2023	99356	12	1/17/2023	99976	12
1/14/2023	99329	12	1/17/2023	99958	12
1/14/2023	99315	12	1/17/2023	99932	12
1/14/2023	99410	12	1/17/2023	99912	12
1/14/2023	99385	12	1/17/2023	99889	12
1/14/2023	99387	12	1/17/2023	99993	12
1/14/2023	99411	12	1/17/2023	99974	12
1/14/2023	99308	12	1/17/2023	99952	12
1/14/2023	99356	12	1/17/2023	99930	12
1/14/2023	99328	12	1/17/2023	99903	12
1/14/2023	99380	12	1/17/2023	99887	12
1/14/2023	99400	12	1/17/2023	99893	12
1/14/2023	99313	12	1/17/2023	99933	12
1/14/2023	99314	12	1/17/2023	99971	12
1/14/2023	99333	12	1/17/2023	99948	12
1/14/2023	99358	12	1/17/2023	99991	12
1/14/2023	99384	12	1/17/2023	99917	12
1/14/2023	99320	12	1/17/2023	99888	12
1/14/2023	99339	12	1/17/2023	99905	12
1/14/2023	99362	12	1/17/2023	99931	12
1/14/2023	99357	12	1/17/2023	99956	12
1/14/2023	99332	12	1/17/2023	99975	12
1/14/2023	99316	12	1/17/2023	99994	12
1/14/2023	99382	12	1/18/2023	100175	12
1/14/2023	99406	12	1/18/2023	100155	12
1/14/2023	99359	12	1/18/2023	100136	12
1/14/2023	99336	12	1/18/2023	100121	12
1/14/2023	99317	12	1/18/2023	100124	12
1/14/2023	99428	12	1/18/2023	100142	12
1/14/2023	99434	12	1/18/2023	100160	12
1/14/2023	99430	12	1/18/2023	100181	12
1/14/2023	99429	12	1/18/2023	100195	12
1/14/2023	99431	12	1/18/2023	100212	12
1/17/2023	100023	12	1/18/2023	100234	12
1/17/2023	100020	12	1/18/2023	100122	12
1/17/2023	100007	12	1/18/2023	100137	12
1/17/2023	100012	12	1/18/2023	100156	12
1/17/2023	100013	12	1/18/2023	100178	12

Table 2
Summary of Waste Management Information
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Date	Ticket #	Volume (Cubic Yard)	Date	Ticket #	Volume (Cubic Yard)
1/17/2023	100022	12	1/18/2023	100193	12
1/18/2023	100206	12	1/19/2023	100405	12
1/18/2023	100229	12	1/19/2023	100430	12
1/18/2023	100134	12	1/19/2023	100435	12
1/18/2023	100119	12	1/19/2023	100454	12
1/18/2023	100171	12	1/19/2023	100445	12
1/18/2023	100153	12	1/19/2023	100455	12
1/18/2023	100192	12	1/19/2023	100341	12
1/18/2023	100216	12	1/19/2023	100352	12
1/18/2023	100225	12	1/19/2023	100373	12
1/18/2023	100120	12	1/19/2023	100394	12
1/18/2023	100201	12	1/19/2023	100421	12
1/18/2023	100189	12	1/19/2023	100438	12
1/18/2023	100173	12	1/19/2023	100436	12
1/18/2023	100154	12	1/19/2023	100416	12
1/18/2023	100135	12	1/19/2023	100395	12
1/18/2023	100226	12	1/19/2023	100376	12
1/18/2023	100202	12	1/19/2023	100360	12
1/18/2023	100190	12	1/19/2023	100348	12
1/18/2023	100141	12	1/19/2023	100453	12
1/18/2023	100123	12	1/19/2023	100448	12
1/18/2023	100230	12	1/20/2023	100645	12
1/18/2023	100209	12	1/20/2023	100611	12
1/18/2023	100194	12	1/20/2023	100632	12
1/18/2023	100179	12	1/20/2023	100591	12
1/18/2023	100157	12	1/20/2023	100573	12
1/18/2023	100244	12	1/20/2023	100557	12
1/18/2023	100246	12	1/20/2023	100554	12
1/18/2023	100239	12	1/20/2023	100567	12
1/18/2023	100248	12	1/20/2023	100586	12
1/18/2023	100247	12	1/20/2023	100617	12
1/18/2023	100245	12	1/20/2023	100633	12
1/19/2023	100411	12	1/20/2023	100646	12
1/19/2023	100393	12	1/20/2023	100654	12
1/19/2023	100374	12	1/20/2023	100638	12
1/19/2023	100355	12	1/20/2023	100619	12
1/19/2023	100344	12	1/20/2023	100592	12
1/19/2023	100343	12	1/20/2023	100576	12
1/19/2023	100354	12	1/20/2023	100558	12
1/19/2023	100370	12	1/20/2023	100556	12
1/19/2023	100392	12	1/20/2023	100571	12
1/19/2023	100410	12	1/20/2023	100590	12
1/19/2023	100434	12	1/20/2023	100618	12
1/19/2023	100340	12	1/20/2023	100637	12
1/19/2023	100351	12	1/20/2023	100651	12
1/19/2023	100367	12	1/20/2023	100555	12
1/19/2023	100390	12	1/20/2023	100570	12
1/19/2023	100407	12	1/20/2023	100587	12
1/19/2023	100432	12	1/20/2023	100616	12
1/19/2023	100338	12	1/20/2023	100636	12
1/19/2023	100350	12	1/20/2023	100653	12

Table 2
Summary of Waste Management Information
Endurance 6" Upstream Jacinto Tie-In
Plains Pipeline, L.P.
Lea County, New Mexico

Date	Ticket #	Volume (Cubic Yard)	Date	Ticket #	Volume (Cubic Yard)
1/19/2023	100366	12			
1/19/2023	100388	12			

Attachment A
Soil Boring Log

SOIL BORING LOG

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In

PROJECT NUMBER: 12566934

CLIENT: Plains

LOCATION: Lea County , New Mexico

DRILLING CONTRACTOR: White Drilling

HOLE DESIGNATION: SB-1

DATE COMPLETED: 13 June 2022

DRILLING METHOD: Air Rotary/Split Spoons and Cuttings

FIELD PERSONNEL: L. Mullins

DRILLER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)	SAMPLE TOTAL TPH (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.							
	CONSOLIDATED BED OF CALICHE	18.00						
	SANDSTONE, bed of consolidated, red to brown, dry, odor	19.00						
	SM-SILTY SAND, red to brown, dry, odor	23.00						
	SANDSTONE, partially consolidated, red to brown, dry, odor - with sand, red to dark brown at 35.00ft BGS - with silt, light brown at 38.00ft BGS	34.00		35'		100	287.9	4150
	SM-SILTY SAND, brown, dry, odor	40.00		40'			1674	10700
				45'			577.4	1370
				50'			540.1	974
				55'			419.1	NS
				60'			422.6	638
				65'			391.8	NS
	SANDSTONE, consolidated, light brown, dry	65.00						
		69.00		70'			201.7	561

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

CHEMICAL ANALYSIS

NS - Interval Not Sampled

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V06.GLB Report: 12566934 OVERBURDEN LOG Date: 18/1/23

SOIL BORING LOG

PROJECT NAME: Endurance 6" Upstream Jacinto Tie In

PROJECT NUMBER: 12566934

CLIENT: Plains

LOCATION: Lea County , New Mexico

DRILLING CONTRACTOR: White Drilling

HOLE DESIGNATION: SB-1

DATE COMPLETED: 13 June 2022

DRILLING METHOD: Air Rotary/Split Spoons and Cuttings

FIELD PERSONNEL: L. Mullins

DRILLER

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PID (mg/kg)	SAMPLE TOTAL TPH (mg/kg)
75	SILTSTONE, bed of partially consolidated interbedded throughout, with silty sand, red to brown, dry, odor			75'			101.6	NS
	SM-SILTY SAND, brown, dry	76.00						
80	SILTSTONE, consolidated, red to brown, dry, no odor	80.00		80'		100	48.7	<26.0
85	SM-SILTY SAND, red brown, dry	85.00		85'		100	38	NS
90	SILTSTONE, beds of partially consolidated, red to brown, dry	90.00						
95								
100			2" Ø Screen					
105								
	END OF HOLE @ 106.70 ft bgs	106.70						
110								
115								
120								
125								
130								
135								

WELL DETAILS
Screened interval:
96.70 to 106.70 ft bgs
Length: 10 ft
Diameter: 2i n

NOTE:
This is a temporary well that was plugged on June 16, 2022

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

CHEMICAL ANALYSIS (oval)

NS - Interval Not Sampled

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12566934\TECH\GINT LOGS\12566934 LOGS.GPJ Library File: GHD_ENVIRO_V06.GLB Report: 12566934 OVERBURDEN LOG Date: 18/1/23

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

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report Rev. 1

Prepared for:

Karolanne Hudgens
Plains All American EH & S
1301 S. County Road 1150
Midland, TX 79706-4476

Project: Endurance
Project Number: 12566934
Location: New Mexico

Lab Order Number: 2F15001

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 06/23/22

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 (35')	2F15001-01	Soil	06/13/22 12:15	06-14-2022 17:00
SB-1 (40')	2F15001-02	Soil	06/13/22 12:25	06-14-2022 17:00
SB-1 (45')	2F15001-03	Soil	06/13/22 12:35	06-14-2022 17:00
SB-1 (50')	2F15001-04	Soil	06/13/22 12:45	06-14-2022 17:00
SB-1 (60')	2F15001-06	Soil	06/13/22 13:05	06-14-2022 17:00
SB-1 (70')	2F15001-08	Soil	06/13/22 13:25	06-14-2022 17:00
SB-1 (80')	2F15001-10	Soil	06/13/22 13:45	06-14-2022 17:00

Per client request on 6-23-22 sample 2F15001-03, SB-1 (45'), was added for 8021 BTEX, TPH 8015 and Chlorides E300.
The revised report and all corresponding documentation are attached below.

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (35')

2F15001-01 (Soil)

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	**0.0402**	0.0211	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 10:54	EPA 8021B	
Toluene	**2.34**	0.0211	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 10:54	EPA 8021B	
Ethylbenzene	**2.87**	0.0211	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 10:54	EPA 8021B	
Xylene (p/m)	**12.4**	0.0421	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 10:54	EPA 8021B	
Xylene (o)	**4.42**	0.0211	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 10:54	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*109 %*	*80-120*		*P2F1505*	*06/15/22 10:07*	*06/16/22 10:54*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.0 %*	*80-120*		*P2F1505*	*06/15/22 10:07*	*06/16/22 10:54*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**30.4**	1.05	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 14:54	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**955**	26.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 22:06	TPH 8015M	
>C12-C28	**2810**	26.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 22:06	TPH 8015M	
>C28-C35	**383**	26.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 22:06	TPH 8015M	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 22:06*	*TPH 8015M*	
Surrogate: o-Terphenyl		*92.6 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 22:06*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**4150**	26.3	mg/kg dry	1	[CALC]	06/16/22 13:31	06/16/22 22:06	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (40')

2F15001-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	**0.149**	0.0206	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 11:16	EPA 8021B	
Toluene	**6.27**	0.0206	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 11:16	EPA 8021B	
Ethylbenzene	**4.06**	0.0206	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 11:16	EPA 8021B	
Xylene (p/m)	**15.8**	0.0412	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 11:16	EPA 8021B	
Xylene (o)	**6.49**	0.0206	mg/kg dry	20	P2F1505	06/15/22 10:07	06/16/22 11:16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*88.7 %*		*80-120*		*P2F1505*	*06/15/22 10:07*	*06/16/22 11:16*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*106 %*		*80-120*		*P2F1505*	*06/15/22 10:07*	*06/16/22 11:16*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**27.5**	1.03	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 15:13	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**1480**	129	mg/kg dry	5	P2F1609	06/16/22 13:31	06/16/22 23:16	TPH 8015M	
>C12-C28	**8330**	129	mg/kg dry	5	P2F1609	06/16/22 13:31	06/16/22 23:16	TPH 8015M	
>C28-C35	**886**	129	mg/kg dry	5	P2F1609	06/16/22 13:31	06/16/22 23:16	TPH 8015M	
Surrogate: 1-Chlorooctane	*102 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 23:16*	*TPH 8015M*	
Surrogate: o-Terphenyl	*99.9 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 23:16*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**10700**	129	mg/kg dry	5	[CALC]	06/16/22 13:31	06/16/22 23:16	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (45')

2F15001-03 (Soil)

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	**0.00650**	0.00102	mg/kg dry	1	P2F1505	06/15/22 10:07	06/15/22 20:40	EPA 8021B	
Toluene	**0.118**	0.00102	mg/kg dry	1	P2F1505	06/15/22 10:07	06/15/22 20:40	EPA 8021B	
Ethylbenzene	**0.0854**	0.00102	mg/kg dry	1	P2F1505	06/15/22 10:07	06/15/22 20:40	EPA 8021B	
Xylene (p/m)	**0.388**	0.00204	mg/kg dry	1	P2F1505	06/15/22 10:07	06/15/22 20:40	EPA 8021B	
Xylene (o)	**0.143**	0.00102	mg/kg dry	1	P2F1505	06/15/22 10:07	06/15/22 20:40	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*97.1 %*		*80-120*		*P2F1505*	*06/15/22 10:07*	*06/15/22 20:40*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*113 %*		*80-120*		*P2F1505*	*06/15/22 10:07*	*06/15/22 20:40*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**28.3**	1.02	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 15:32	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**102**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 23:39	TPH 8015M	
>C12-C28	**1140**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 23:39	TPH 8015M	
>C28-C35	**128**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/16/22 23:39	TPH 8015M	
Surrogate: 1-Chlorooctane	*102 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 23:39*	*TPH 8015M*	
Surrogate: o-Terphenyl	*96.0 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/16/22 23:39*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**1370**	25.5	mg/kg dry	1	[CALC]	06/16/22 13:31	06/16/22 23:39	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (50')

2F15001-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:05	EPA 8021B	
Toluene	**0.0449**	0.00103	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:05	EPA 8021B	
Ethylbenzene	**0.0618**	0.00103	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:05	EPA 8021B	
Xylene (p/m)	**0.313**	0.00206	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:05	EPA 8021B	
Xylene (o)	**0.111**	0.00103	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:05	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*99.3 %*		*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 15:05*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*119 %*		*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 15:05*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**33.5**	1.03	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 15:51	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**92.1**	25.8	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:02	TPH 8015M	
>C12-C28	**788**	25.8	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:02	TPH 8015M	
>C28-C35	**93.9**	25.8	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:02	TPH 8015M	
Surrogate: 1-Chlorooctane	*103 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 00:02*	*TPH 8015M*	
Surrogate: o-Terphenyl	*100 %*		*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 00:02*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**974**	25.8	mg/kg dry	1	[CALC]	06/16/22 13:31	06/17/22 00:02	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (60')

2F15001-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:48	EPA 8021B	
Toluene	**0.00524**	0.00101	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:48	EPA 8021B	
Ethylbenzene	**0.00504**	0.00101	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:48	EPA 8021B	
Xylene (p/m)	**0.0257**	0.00202	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:48	EPA 8021B	
Xylene (o)	**0.00935**	0.00101	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 15:48	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*119 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 15:48*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*101 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 15:48*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**21.1**	1.01	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 16:29	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**28.1**	25.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:49	TPH 8015M	
>C12-C28	**540**	25.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:49	TPH 8015M	
>C28-C35	**70.0**	25.3	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 00:49	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 00:49*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 00:49*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**638**	25.3	mg/kg dry	1	[CALC]	06/16/22 13:31	06/17/22 00:49	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (70')

2F15001-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	**0.00648**	0.00102	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 16:31	EPA 8021B	
Toluene	**0.142**	0.00102	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 16:31	EPA 8021B	
Ethylbenzene	**0.0693**	0.00102	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 16:31	EPA 8021B	
Xylene (p/m)	**0.307**	0.00204	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 16:31	EPA 8021B	
Xylene (o)	**0.105**	0.00102	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 16:31	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 16:31*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 16:31*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8.72**	1.02	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 17:45	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**44.5**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 01:36	TPH 8015M	
>C12-C28	**449**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 01:36	TPH 8015M	
>C28-C35	**67.5**	25.5	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 01:36	TPH 8015M	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 01:36*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 01:36*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**561**	25.5	mg/kg dry	1	[CALC]	06/16/22 13:31	06/17/22 01:36	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

SB-1 (80')

2F15001-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 17:15	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 17:15	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 17:15	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 17:15	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P2F2108	06/21/22 10:35	06/21/22 17:15	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*100 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 17:15*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		*P2F2108*	*06/21/22 10:35*	*06/21/22 17:15*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8.97**	1.04	mg/kg dry	1	P2F2107	06/21/22 10:04	06/21/22 19:01	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P2F1602	06/16/22 08:50	06/16/22 08:53	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 02:22	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 02:22	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P2F1609	06/16/22 13:31	06/17/22 02:22	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.0 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 02:22*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P2F1609*	*06/16/22 13:31*	*06/17/22 02:22*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	06/16/22 13:31	06/17/22 02:22	calc	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1505 - * DEFAULT PREP *** **										
Blank (P2F1505-BLK1)				Prepared & Analyzed: 06/15/22						
Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.122*		*"*	*0.120*		*102*	*80-120*			
LCS (P2F1505-BS1)				Prepared & Analyzed: 06/15/22						
Benzene	0.111	0.00100	mg/kg	0.100		111	80-120			
Toluene	0.108	0.00100	"	0.100		108	80-120			
Ethylbenzene	0.118	0.00100	"	0.100		118	80-120			
Xylene (p/m)	0.234	0.00200	"	0.200		117	80-120			
Xylene (o)	0.111	0.00100	"	0.100		111	80-120			
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.120*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.131*		*"*	*0.120*		*109*	*80-120*			
LCS Dup (P2F1505-BSD1)				Prepared & Analyzed: 06/15/22						
Benzene	0.0916	0.00100	mg/kg	0.100		91.6	80-120	19.2	20	
Toluene	0.0892	0.00100	"	0.100		89.2	80-120	19.0	20	
Ethylbenzene	0.0981	0.00100	"	0.100		98.1	80-120	18.2	20	
Xylene (p/m)	0.195	0.00200	"	0.200		97.4	80-120	18.4	20	
Xylene (o)	0.0916	0.00100	"	0.100		91.6	80-120	19.2	20	
Surrogate: 1,4-Difluorobenzene	*0.118*		*"*	*0.120*		*98.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.131*		*"*	*0.120*		*109*	*80-120*			
Calibration Blank (P2F1505-CCB1)				Prepared & Analyzed: 06/15/22						
Benzene	0.170		ug/kg							
Toluene	0.390		"							
Ethylbenzene	0.190		"							
Xylene (p/m)	0.320		"							
Xylene (o)	0.180		"							
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.120*		*"*	*0.120*		*100*	*80-120*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1505 - * DEFAULT PREP *** **										
Calibration Blank (P2F1505-CCB2)				Prepared & Analyzed: 06/15/22						
Benzene	0.180		ug/kg							
Toluene	0.330		"							
Ethylbenzene	0.190		"							
Xylene (p/m)	0.260		"							
Xylene (o)	0.150		"							
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.123*		*"*	*0.120*		*102*	*80-120*			
Calibration Check (P2F1505-CCV1)				Prepared & Analyzed: 06/15/22						
Benzene	0.103	0.00100	mg/kg	0.102		101	80-120			
Toluene	0.0997	0.00100	"	0.102		97.8	80-120			
Ethylbenzene	0.101	0.00100	"	0.102		99.3	80-120			
Xylene (p/m)	0.213	0.00200	"	0.204		105	80-120			
Xylene (o)	0.103	0.00100	"	0.102		101	80-120			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.120*		*106*	*75-125*			
Calibration Check (P2F1505-CCV2)				Prepared & Analyzed: 06/15/22						
Benzene	0.106	0.00100	mg/kg	0.102		104	80-120			
Toluene	0.102	0.00100	"	0.102		100	80-120			
Ethylbenzene	0.105	0.00100	"	0.102		103	80-120			
Xylene (p/m)	0.218	0.00200	"	0.204		107	80-120			
Xylene (o)	0.105	0.00100	"	0.102		103	80-120			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.120*		*98.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.130*		*"*	*0.120*		*109*	*75-125*			
Calibration Check (P2F1505-CCV3)				Prepared & Analyzed: 06/15/22						
Benzene	0.113	0.00100	mg/kg	0.102		111	80-120			
Toluene	0.110	0.00100	"	0.102		108	80-120			
Ethylbenzene	0.109	0.00100	"	0.102		107	80-120			
Xylene (p/m)	0.224	0.00200	"	0.204		110	80-120			
Xylene (o)	0.111	0.00100	"	0.102		109	80-120			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.120*		*99.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.130*		*"*	*0.120*		*108*	*75-125*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1505 - * DEFAULT PREP *** **										
Matrix Spike (P2F1505-MS1)	**Source: 2F10010-04**			Prepared & Analyzed: 06/15/22						
Benzene	0.0907	0.00100	mg/kg dry	0.100	ND	90.7	80-120			
Toluene	0.0871	0.00100	"	0.100	ND	87.1	80-120			
Ethylbenzene	0.0825	0.00100	"	0.100	ND	82.5	80-120			
Xylene (p/m)	0.159	0.00200	"	0.200	ND	79.5	80-120			QM-05
Xylene (o)	0.0762	0.00100	"	0.100	ND	76.2	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.140*		"	*0.120*		*116*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.125*		"	*0.120*		*104*	*80-120*			
Matrix Spike Dup (P2F1505-MSD1)	**Source: 2F10010-04**			Prepared & Analyzed: 06/15/22						
Benzene	0.0901	0.00100	mg/kg dry	0.100	ND	90.1	80-120	0.686	20	
Toluene	0.0826	0.00100	"	0.100	ND	82.6	80-120	5.32	20	
Ethylbenzene	0.0767	0.00100	"	0.100	ND	76.7	80-120	7.29	20	QM-05
Xylene (p/m)	0.146	0.00200	"	0.200	ND	72.9	80-120	8.66	20	QM-05
Xylene (o)	0.0667	0.00100	"	0.100	ND	66.7	80-120	13.3	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.136*		"	*0.120*		*113*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.123*		"	*0.120*		*103*	*80-120*			
Batch P2F2108 - * DEFAULT PREP *** **										
Blank (P2F2108-BLK1)				Prepared & Analyzed: 06/21/22						
Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.113*		"	*0.120*		*94.5*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.112*		"	*0.120*		*93.5*	*80-120*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F2108 - * DEFAULT PREP *** **										
LCS (P2F2108-BS1)				Prepared & Analyzed: 06/21/22						
Benzene	0.111	0.00100	mg/kg	0.100		111	80-120			
Toluene	0.110	0.00100	"	0.100		110	80-120			
Ethylbenzene	0.120	0.00100	"	0.100		120	80-120			
Xylene (p/m)	0.238	0.00200	"	0.200		119	80-120			
Xylene (o)	0.113	0.00100	"	0.100		113	80-120			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.129*		*"*	*0.120*		*108*	*80-120*			
LCS Dup (P2F2108-BSD1)				Prepared & Analyzed: 06/21/22						
Benzene	0.112	0.00100	mg/kg	0.100		112	80-120	0.601	20	
Toluene	0.111	0.00100	"	0.100		111	80-120	0.280	20	
Ethylbenzene	0.116	0.00100	"	0.100		116	80-120	2.92	20	
Xylene (p/m)	0.237	0.00200	"	0.200		119	80-120	0.131	20	
Xylene (o)	0.115	0.00100	"	0.100		115	80-120	0.921	20	
Surrogate: 4-Bromofluorobenzene	*0.128*		*"*	*0.120*		*107*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.6*	*80-120*			
Calibration Blank (P2F2108-CCB1)				Prepared & Analyzed: 06/21/22						
Benzene	0.410		ug/kg							
Toluene	0.220		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.230		"							
Xylene (o)	0.110		"							
Surrogate: 4-Bromofluorobenzene	*0.114*		*"*	*0.120*		*95.3*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.1*	*80-120*			
Calibration Check (P2F2108-CCV1)				Prepared & Analyzed: 06/21/22						
Benzene	0.114	0.00100	mg/kg	0.102		111	80-120			
Toluene	0.112	0.00100	"	0.102		110	80-120			
Ethylbenzene	0.116	0.00100	"	0.102		114	80-120			
Xylene (p/m)	0.238	0.00200	"	0.204		117	80-120			
Xylene (o)	0.119	0.00100	"	0.102		117	80-120			
Surrogate: 4-Bromofluorobenzene	*0.124*		*"*	*0.120*		*103*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.1*	*75-125*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F2108 - * DEFAULT PREP *** **										
Calibration Check (P2F2108-CCV3)				Prepared & Analyzed: 06/21/22						
Benzene	0.115	0.00100	mg/kg	0.102		113	80-120			
Toluene	0.115	0.00100	"	0.102		113	80-120			
Ethylbenzene	0.118	0.00100	"	0.102		115	80-120			
Xylene (p/m)	0.238	0.00200	"	0.204		117	80-120			
Xylene (o)	0.118	0.00100	"	0.102		115	80-120			
Surrogate: 4-Bromofluorobenzene	*0.138*		*"*	*0.120*		*115*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.122*		*"*	*0.120*		*101*	*75-125*			
Matrix Spike (P2F2108-MS1)		**Source: 2F15001-09**		Prepared & Analyzed: 06/21/22						
Benzene	0.0894	0.00101	mg/kg dry	0.101	0.000848	87.7	80-120			
Toluene	0.0839	0.00101	"	0.101	0.0124	70.8	80-120			QM-05
Ethylbenzene	0.0853	0.00101	"	0.101	0.00726	77.2	80-120			QM-05
Xylene (p/m)	0.167	0.00202	"	0.202	0.0348	65.6	80-120			QM-05
Xylene (o)	0.0775	0.00101	"	0.101	0.0112	65.6	80-120			QM-05
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.121*		*98.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.136*		*"*	*0.121*		*112*	*80-120*			
Matrix Spike Dup (P2F2108-MSD1)		**Source: 2F15001-09**		Prepared & Analyzed: 06/21/22						
Benzene	0.0887	0.00101	mg/kg dry	0.101	0.000848	87.0	80-120	0.802	20	
Toluene	0.0848	0.00101	"	0.101	0.0124	71.6	80-120	1.17	20	QM-05
Ethylbenzene	0.0864	0.00101	"	0.101	0.00726	78.3	80-120	1.38	20	QM-05
Xylene (p/m)	0.170	0.00202	"	0.202	0.0348	66.7	80-120	1.58	20	QM-05
Xylene (o)	0.0810	0.00101	"	0.101	0.0112	69.1	80-120	5.17	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.138*		*"*	*0.121*		*114*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.121*		*99.1*	*80-120*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1602 - * DEFAULT PREP *** **										
Blank (P2F1602-BLK1)				Prepared & Analyzed: 06/16/22						
% Moisture	ND	0.1	%							
Blank (P2F1602-BLK2)				Prepared & Analyzed: 06/16/22						
% Moisture	ND	0.1	%							
Duplicate (P2F1602-DUP1)		**Source: 2F14010-10**		Prepared & Analyzed: 06/16/22						
% Moisture	18.0	0.1	%		17.0			5.71	20	
Duplicate (P2F1602-DUP2)		**Source: 2F14010-20**		Prepared & Analyzed: 06/16/22						
% Moisture	31.0	0.1	%		31.0			0.00	20	
Duplicate (P2F1602-DUP3)		**Source: 2F15001-06**		Prepared & Analyzed: 06/16/22						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P2F1602-DUP4)		**Source: 2F15002-05**		Prepared & Analyzed: 06/16/22						
% Moisture	4.0	0.1	%		3.0			28.6	20	R3
Batch P2F2107 - * DEFAULT PREP *** **										
Blank (P2F2107-BLK1)				Prepared & Analyzed: 06/21/22						
Chloride	ND	1.00	mg/kg							
LCS (P2F2107-BS1)				Prepared & Analyzed: 06/21/22						
Chloride	40.6		mg/kg	40.0		102	90-110			
LCS Dup (P2F2107-BSD1)				Prepared & Analyzed: 06/21/22						
Chloride	40.5		mg/kg	40.0		101	90-110	0.182	10	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F2107 - * DEFAULT PREP *** **										
Calibration Blank (P2F2107-CCB1)				Prepared & Analyzed: 06/21/22						
Chloride	0.0380		mg/kg							
Calibration Blank (P2F2107-CCB2)				Prepared & Analyzed: 06/21/22						
Chloride	0.0400		mg/kg							
Calibration Check (P2F2107-CCV1)				Prepared & Analyzed: 06/21/22						
Chloride	19.9		mg/kg	20.0		99.6	90-110			
Calibration Check (P2F2107-CCV2)				Prepared & Analyzed: 06/21/22						
Chloride	20.1		mg/kg	20.0		101	90-110			
Calibration Check (P2F2107-CCV3)				Prepared & Analyzed: 06/21/22						
Chloride	20.2		mg/kg	20.0		101	90-110			
Matrix Spike (P2F2107-MS1)		**Source: 2F21001-01**		Prepared & Analyzed: 06/21/22						
Chloride	4530	10.4	mg/kg dry	521	4000	102	80-120			
Matrix Spike (P2F2107-MS2)		**Source: 2F15001-08**		Prepared & Analyzed: 06/21/22						
Chloride	249	1.02	mg/kg dry	255	8.72	94.1	80-120			
Matrix Spike Dup (P2F2107-MSD1)		**Source: 2F21001-01**		Prepared & Analyzed: 06/21/22						
Chloride	4520	10.4	mg/kg dry	521	4000	101	80-120	0.108	20	
Matrix Spike Dup (P2F2107-MSD2)		**Source: 2F15001-08**		Prepared & Analyzed: 06/21/22						
Chloride	240	1.02	mg/kg dry	255	8.72	90.6	80-120	3.68	20	

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1609 - TX 1005										
Blank (P2F1609-BLK1)				Prepared & Analyzed: 06/16/22						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*98.8*		*"*	*100*		*98.8*	*70-130*			
Surrogate: o-Terphenyl	*52.9*		*"*	*50.0*		*106*	*70-130*			
LCS (P2F1609-BS1)				Prepared & Analyzed: 06/16/22						
C6-C12	849	25.0	mg/kg	1000		84.9	75-125			
>C12-C28	946	25.0	"	1000		94.6	75-125			
Surrogate: 1-Chlorooctane	*109*		*"*	*100*		*109*	*70-130*			
Surrogate: o-Terphenyl	*57.3*		*"*	*50.0*		*115*	*70-130*			
LCS Dup (P2F1609-BSD1)				Prepared & Analyzed: 06/16/22						
C6-C12	850	25.0	mg/kg	1000		85.0	75-125	0.155	20	
>C12-C28	949	25.0	"	1000		94.9	75-125	0.321	20	
Surrogate: 1-Chlorooctane	*106*		*"*	*100*		*106*	*70-130*			
Surrogate: o-Terphenyl	*58.6*		*"*	*50.0*		*117*	*70-130*			
Calibration Check (P2F1609-CCV1)				Prepared & Analyzed: 06/16/22						
C6-C12	450	25.0	mg/kg	500		89.9	85-115			
>C12-C28	461	25.0	"	500		92.1	85-115			
Surrogate: 1-Chlorooctane	*115*		*"*	*100*		*115*	*70-130*			
Surrogate: o-Terphenyl	*52.3*		*"*	*50.0*		*105*	*70-130*			
Calibration Check (P2F1609-CCV2)				Prepared & Analyzed: 06/16/22						
C6-C12	479	25.0	mg/kg	500		95.7	85-115			
>C12-C28	476	25.0	"	500		95.2	85-115			
Surrogate: 1-Chlorooctane	*122*		*"*	*100*		*122*	*70-130*			
Surrogate: o-Terphenyl	*55.9*		*"*	*50.0*		*112*	*70-130*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2F1609 - TX 1005										
Calibration Check (P2F1609-CCV3)				Prepared: 06/16/22 Analyzed: 06/17/22						
C6-C12	470	25.0	mg/kg	500		93.9	85-115			
>C12-C28	496	25.0	"	500		99.3	85-115			
Surrogate: 1-Chlorooctane	*123*		*"*	*100*		*123*	*70-130*			
Surrogate: o-Terphenyl	*55.2*		*"*	*50.0*		*110*	*70-130*			
Matrix Spike (P2F1609-MS1)		**Source: 2F15001-11**		Prepared: 06/16/22 Analyzed: 06/17/22						
C6-C12	759	25.5	mg/kg dry	1020	13.0	73.1	75-125			QM-05
>C12-C28	873	25.5	"	1020	14.0	84.2	75-125			QM-05
Surrogate: 1-Chlorooctane	*108*		*"*	*102*		*106*	*70-130*			
Surrogate: o-Terphenyl	*43.9*		*"*	*51.0*		*86.1*	*70-130*			
Matrix Spike Dup (P2F1609-MSD1)		**Source: 2F15001-11**		Prepared: 06/16/22 Analyzed: 06/17/22						
C6-C12	763	25.5	mg/kg dry	1020	13.0	73.5	75-125	0.533	20	QM-05
>C12-C28	873	25.5	"	1020	14.0	84.2	75-125	0.0166	20	QM-05
Surrogate: 1-Chlorooctane	*106*		*"*	*102*		*104*	*70-130*			
Surrogate: o-Terphenyl	*44.7*		*"*	*51.0*		*87.6*	*70-130*			

Plains All American EH & S	Project: Endurance
1301 S. County Road 1150	Project Number: 12566934
Midland TX, 79706-4476	Project Manager: Karolanne Hudgens

Notes and Definitions

ROI	Received on Ice
R3	The RPD exceeded the acceptance limit due to sample matrix effects.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
NPBEL C(	Chain of Custody was not generated at PBELAB
BULK	Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 6/23/2022

Brent Barron, Laboratory Director/Technical Director

Plains All American EH & S	Project:	Endurance
1301 S. County Road 1150	Project Number:	12566934
Midland TX, 79706-4476	Project Manager:	Karolanne Hudgens

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Page 1 of 1

Project Manager: [redacted] K. Hugens

Company Name: [redacted] Plains

Company Address:

City/State/Zip:

Telephone No:

Fax No:

Sampler Signature: (signature)

e-mail: K HUGENS@PAALP.com, B. Haskell@GWD.com, l.mullins@shd.com, CBryant@PAALP.com

Project Name: Endurance

Project #: 12566934

Project Loc:

PO #: SRS#

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 2F15001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP Benzene	HOLD	Standard TAT
1	SB-1 (35')		35	6/13/22	1215												X								X			X				X
2	SB-1 (40')		40	↓	1225												↓								↓			↓				↓
3	SB-1 (45')		45	↓	1235												↓								↓			↓			X	↓
4	SB-1 (50')		50	↓	1245												↓								↓			↓				↓
5	SB-1 (55')		55	↓	1255												↓								↓			↓			X	↓
6	SB-1 (60')		60	↓	1305												↓								↓			↓				↓
7	SB-1 (65')		65	↓	1315												↓								↓			↓			X	↓
8	SB-1 (70')		70	↓	1325												↓								↓			↓				↓
9	SB-1 (75')		75	↓	1335												↓								↓			↓			X	↓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
(signature)	6/14/22	1230	(signature)	6/14/20	1230
(signature)	6/14/22	1659			
			Received by PBEL: (signature)	6/14/22	17:00

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 4.8 °C CF+1
Adjusted: 5.8 °C Factor

Received by OCD: 1/30/2023 1:39:59 PM

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Page 1 of 2

Page 22 of 23

Project Manager: ~~[illegible]~~ K. Hugens

Company Name: ~~[illegible]~~ Plains

Company Address:

City/State/Zip:

Telephone No:

Sampler Signature: [signature]

Project Name: Endurance

Project #: 12566934

Project Loc:

PO #:

Fax No:

e-mail: KHUGENS@PAALP.COM B.Haskell@GHD.com @PAALP.com

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 2F15001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP Benzene	HOLD	Standard TAT
* 10	SB-1 (80')		80	6/13/22	1345																													
11	SB-1 (85')		85	6/13/22	1355																												X	

Preservation & # of Containers: Ice, HNO_3, HCl, H_2SO_4, NaOH, $Na_2S_2O_3$, None, Other (Specify). Matrix: DW, GW, NP. Analyze For: TCLP: / TOTAL:. (Rush TAT: ...ule) 24, 48, 72 hrs)

Special Instructions:

	Date	Time		Date	Time
Relinquished by: [signature]	6/14/22	1230	Received by: [signature]	6/14/22	1230
Relinquished by: [signature]	6/14/22	1659	Received by:		
Relinquished by:			Received by PBEL: [signature]	6/14/22	16:59

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Labels on container(s)	(Y)	N
Custody seals on container(s)	(Y)	N
Custody seals on cooler(s)	(Y)	N
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	(Y)	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 4.8 5.8 °C CF+1
Adjusted: °C Factor 4

Released to Imaging: 2/17/2023 12:00:57 PM

Gmail Sara Gotcher <sara@pbelab.com>

Endurance 2F15001

2 messages

Sara Gotcher <sara@pbelab.com> Thu, Jun 23, 2022 at 1:04 PM
To: Karolanne Hudgens <khudgens@paalp.com>, Camille J Bryant <cjbryant@paalp.com>, B.Haskell@ghd.com, L.Mullins@ghd.com, Brent Barron <BrentBarron@pbelab.com>, Tressa bledsoe <tressa@pbelab.com>

--
Sara Gotcher
Senior Chemist
432-686-7235
sara@pbelab.com

2F15001 PBELSTD_TNI21 FINAL 06 23 22 1301.pdf
416K

Karolanne Hudgens <KHudgens@paalp.com> Thu, Jun 23, 2022 at 1:19 PM
To: Sara Gotcher <sara@pbelab.com>, Camille J Bryant <CJBryant@paalp.com>, "B.Haskell@ghd.com" <B.Haskell@ghd.com>, "L.Mullins@ghd.com" <L.Mullins@ghd.com>, Brent Barron <BrentBarron@pbelab.com>, Tressa bledsoe <tressa@pbelab.com>

Sara,

Can you please run the sample that we have on hold for the depth of 45’ (SB-1(45’))? We will run the same analyses on this sample as the other samples (BTEX, TPH, chloride).

If you have any questions, or need anything else, please let me know.

Thanks,

Karolanne Hudgens

HSE Remediation Specialist II

Plains All American

1106 Griffith Drive

Midland, Texas 79706

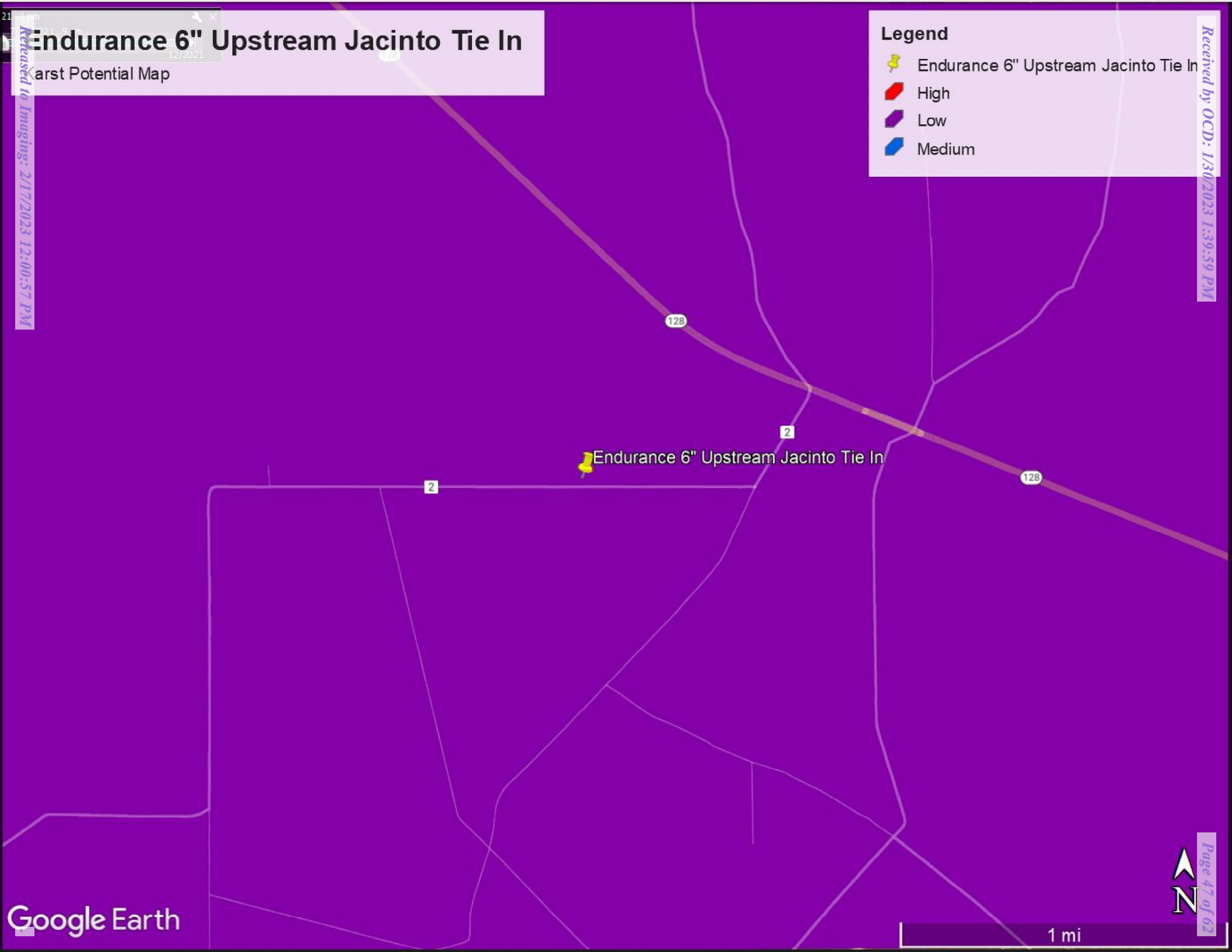
Office: 432.221.7921

Mobile: 575.200.5517

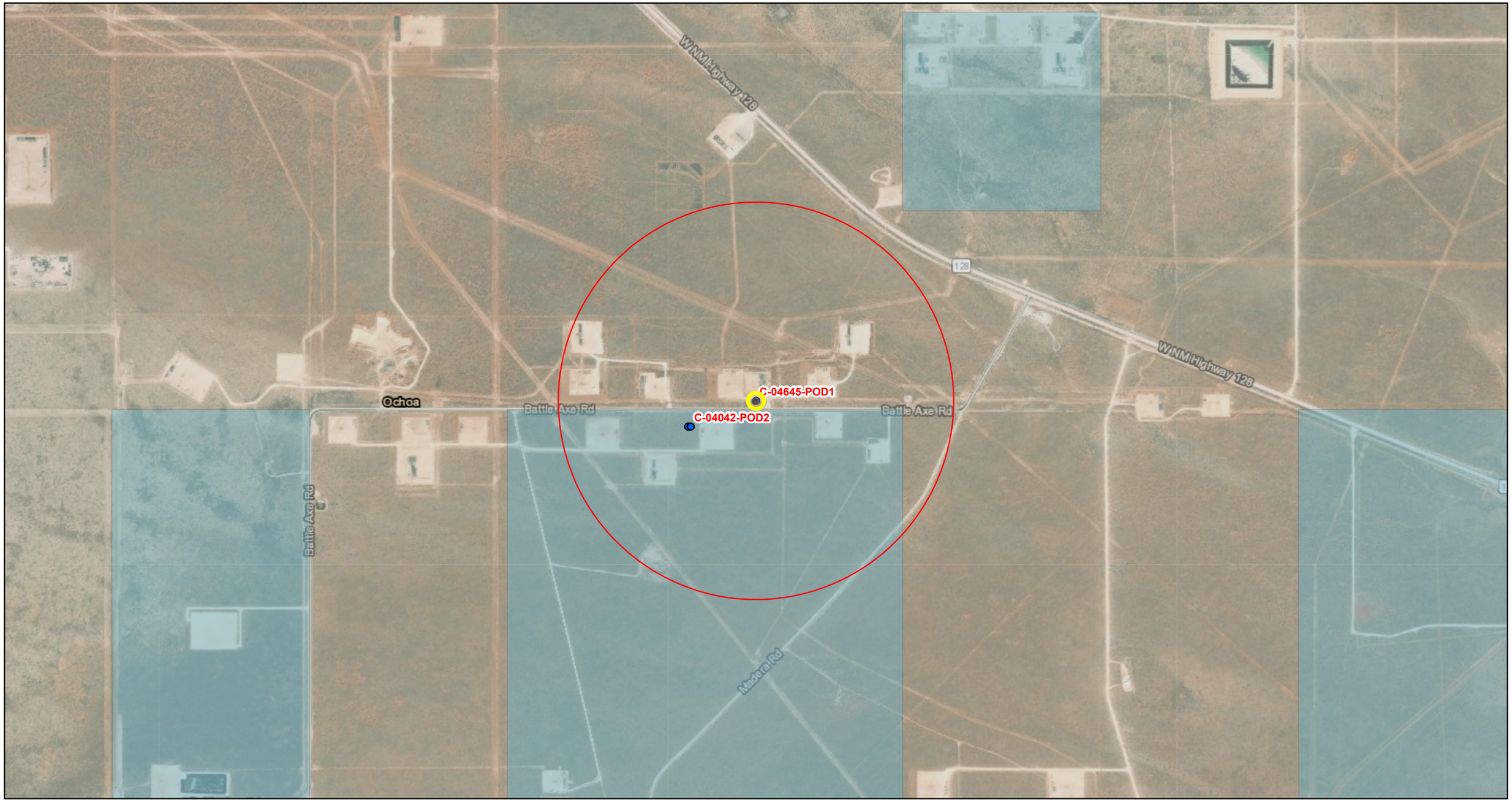
Attachment C
Site Characterization Documentation

Endurance 6" Upstream Jacinto Tie In

Karst Potential Map



OSE POD Locations Map



1/12/2023, 12:45:06 PM

GIS WATERS PODs
- Active
- Pending

OSE District Boundary

Water Right Regulations
- Closure Area

New Mexico State Trust Lands
- Both Estates
- SiteBoundaries

1:18,056

0 0.17 0.35 0.7 mi

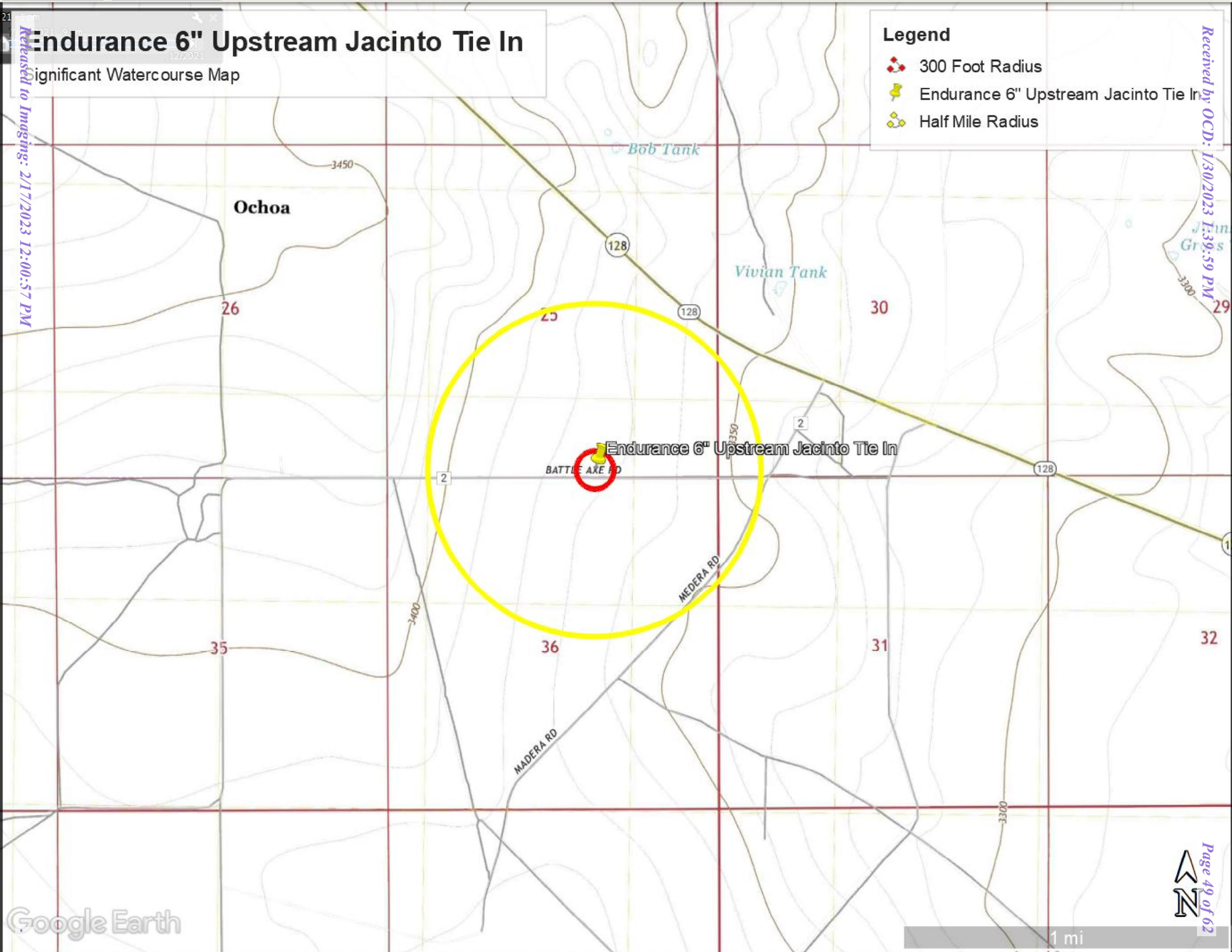
0 0.3 0.6 1.2 km

Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC, Maxar

Web Generated Map
Map is generated by web users.

Endurance 6" Upstream Jacinto Tie In

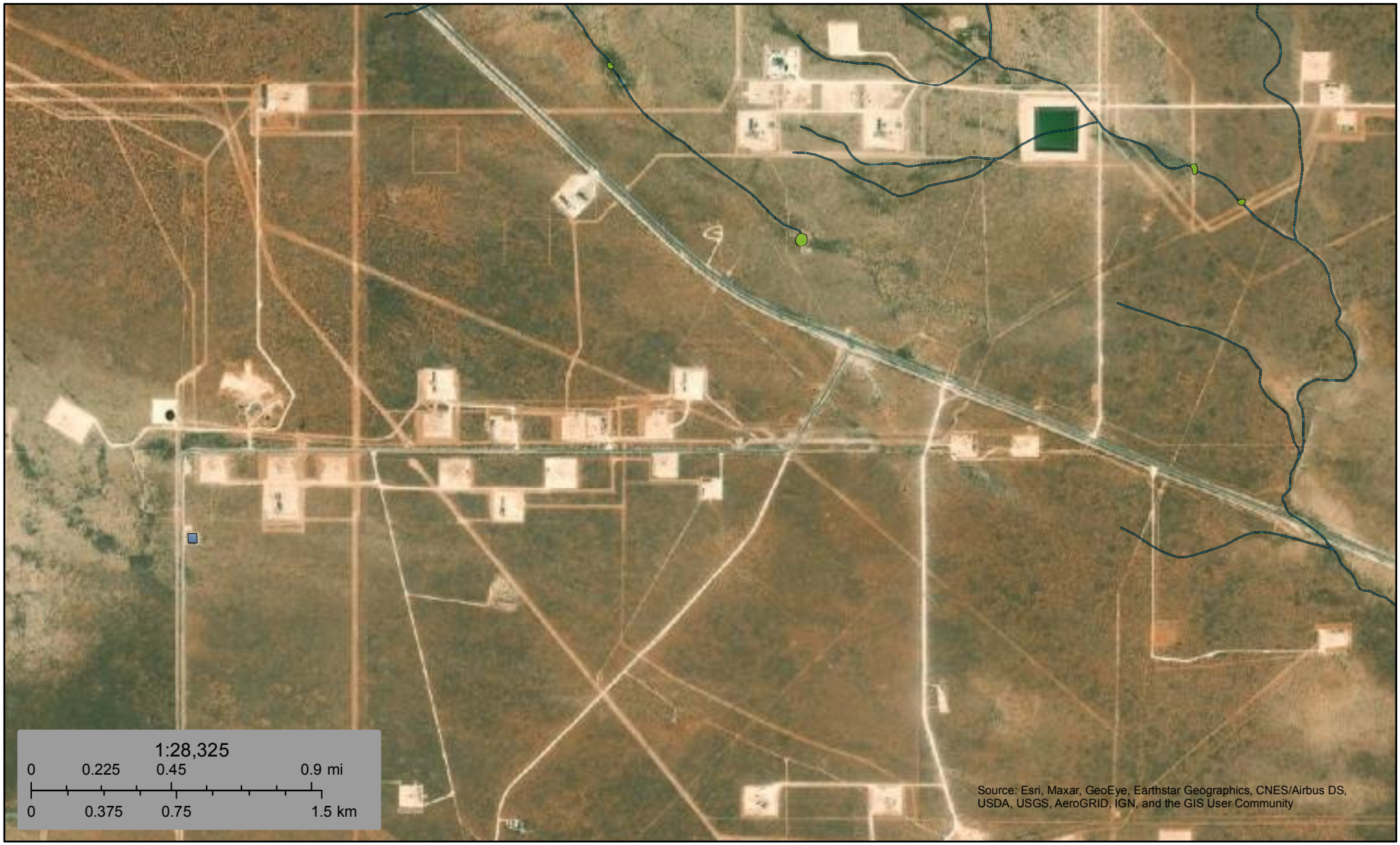
Significant Watercourse Map



U.S. Fish and Wildlife Service

National Wetlands Inventory

Endurance 6" Upstream Jacinto Tie In



December 14, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

FEMA

103°25'36"W 32°11'9"N

103°24'59"W 32°10'38"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/14/2021 at 4:46 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment D
Regulatory Correspondence

From: Curtis D Stanley
To: J.T. Murrey
Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 69789 [External]
Date: Monday, January 23, 2023 3:25:06 PM

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, January 3, 2022 12:34 PM
To: Amber L Groves <ALGroves@paalp.com>
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 69789 [External]

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2129935504, with the following conditions:

- **Variance as outlined in report/work plan for liner is approved.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Bradford Billings
Hydrologist/E.Spec.A
505-670-6549
bradford.billings@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: Nobui, Jennifer, EMNRD
To: Karolanne Hudgens
Cc: Bratcher, Michael, EMNRD; Billings, Bradford, EMNRD; Velez, Nelson, EMNRD; Harimon, Jocelyn, EMNRD
Subject: RE: [EXTERNAL] nAPP2129935504 Plains Endurance 6" Extension Request
Date: Thursday, November 10, 2022 5:51:30 PM

Hello Karolanne

The OCD is going to approve a FINAL 90-day extension to January 31, 2023. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Karolanne Hudgens <KHudgens@paalp.com>
Sent: Thursday, November 10, 2022 3:29 PM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Subject: [EXTERNAL] nAPP2129935504 Plains Endurance 6" Extension Request

Jennifer,

I hope all is well! I wanted to touch base with you on our Endurance release site, and submit a request for an extension based on our current path forward.

On July 25, 2022, Plains was granted an extension request for the Endurance 6” Upstream Jacinto Tie-In Release Site (Incident ID nAPP2129935504) until October 28, 2022. This was initially requested in order to complete drilling a soil bore with the intention to submit an SVE workplan. At the time of the request, we were dealing with a lack of availability in drillers and their schedules. The extension was granted to allow us additional time to complete the drilling activities to evaluate/submit the SVE workplan for OCD approval.

However, in order to complete SVE at this site, Plains would be required to drill through approximately 19 feet of backfill material. This issue was discussed during an in-person meeting with Plains and the OCD conducted in August 2022 at the OCD office in Albuquerque. Mr. Bradford Billings and Mr. Nelson Velez were present during this meeting. Bradford stressed the importance of compaction and suggested a water truck/roller, but I am concerned that we will not be able to adequately achieve this at depth to facilitate the scope in our original SVE workplan and be effective with this remediation strategy.

In an effort to mitigate this concern, we have been working with our consultants (GHD) to find other options that would be as effective without the issues of compaction of the backfill material. GHD has recently conducted a pilot study of injection activities for hydrocarbon impacts at 6 sites in similar areas of SE NM. They are completing their remediation verification sampling this week to determine the effectiveness, and if the data shows positive improvements we would like to submit a formal workplan to the OCD to attempt these injections as well.

Plains would like to request another 90-day extension for this site in order to allow for review of the data associated with the remediation verification study, and to subsequently submit an injection workplan to the OCD.

Please feel free to contact me with any questions.

Thanks for your time,

Karolanne Hudgens
HSE Remediation Specialist II
Plains All American
1106 Griffith Drive
Midland, Texas 79706
Office: 432.221.7921
Mobile: 575.200.5517

Attachment E
Photographic Log

Site Photographs

Photo 1 *Excavation facing west.*

Photo 2 *Excavation facing south with Battle Axe Road in the background.*

Photo 3 *Excavation facing southeast.*

Photo 4 *Plains pipeline and riser on the west side of the excavation.*

Photo 5 *Excavation facing north with Conoco Phillips pad in the background.*

Photo 6 *View to the west at the excavation with the liner being installed.*

Photo 7 *View to the east following liner installation activities.*

Photo 8 *View to the east during excavation backfill activities.*

Photo 7 View to the east/northeast at the backfilled area.

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

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

CONDITIONS

Action 180754

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 180754
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Site Assessment report accepted by OCD. Work plan for additional lateral delineation accepted.	2/17/2023