Received by OCD: 11/5/2020 10:51:25 AM Form C-141 State of New Mexico

Page 6

Oil Conservation Division

_		Page 1 of 138	8
	Incident ID	NRM2015337417	
	District RP		
	Facility ID		
	Application ID		

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

<u>Closure Report Attachment Checklist</u>: Each of the following	items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29	11 NMAC
Photographs of the remediated site prior to backfill or photo must be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- human health or the environment. In addition, OCD acceptance of	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in
email: <u>algroves@paalp.com</u>	Telephone: <u>575-200-5517</u>
OCD Only	
Received by: Chad Hensley	Date:04/16/2021
	y of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible //or regulations.
Closure Approved by:	Date:04/16/2021
Printed Name: Chad Hensley	Title:Environmental Specialist Advanced
-	



12600 WEST CO RD 91 MIDLAND, TX 79707 OFFICE: 432.653.4203

SOIL REMEDIATION ACTIVITIES CLOSURE REPORT

PLAINS PIPELINE, L.P.

PLAINS XTO PERLA VERDE RELEASE

LEA COUNTY, NM

INCIDENT ID: NRM2015337417

SRS #: 2020-051

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- Appendix C. Site Photographic Documentation
- Appendix D. Laboratory Analytical Reports
- Appendix E. Field Screening Delineation

October 28, 2020

New Mexico Oil Conservation Division	Ryan Mann
District 1	New Mexico State Land Office
1625 N. French Drive	914 N. Lincoln Street
Hobbs, New Mexico 88240	Hobbs, New Mexico 88240

Re: Soil Remediation Activities Closure Report Plains XTO Perla Verde Release Unit Letter J, Section 31, Township 19S, Range 35E GPS: N 32.613367°, W -103.496006° Lea County, New Mexico Incident ID: NRM2015337417 SRS #: 2020-051

1. Introduction

Dean Companies, Inc. (Dean) is pleased to present this Soil Remediation Activities Closure Report on behalf of Plains Pipeline, L.P. (Plains) to document the field soil remediation activities that were conducted at the XTO Perla Verde Release (site). The crude oil release occurred from an air elimination failure, located approximately 22.02 miles southwest of Hobbs on New Mexico State Trust Land, Lea County, New Mexico in Unit Letter J, Section 31, Township 19S, and Range 35E. The GPS coordinates for the site is N 32.613367° and W -103.496006°. A "Site Location Map" and "Topographic Map" are provided as Figure 1 and 2, respectively.

2. Release Description and Response

On May 23, 2020, a crude oil release occurred at the XTO Perla Verde and was attributed to failure of the air eliminator. Approximately ten (10) barrels (bbls) of crude oil was released with nine (9) bbls recovered for a net loss of one (1) bbl of crude oil. The release affected the immediate area adjacent to the Plains operated LACT unit and onto adjacent pad owned by XTO. The release measured approximately one hundred (100) feet (ft) in length by forty (40) ft in width to an estimated maximum depth of one and half (1.5) ft below ground surface (bgs).

On May 26, 2020, Dean was assigned management oversite responsibilities for impacted soil delineation, remediation, soil sampling, site restoration, and reporting activities by Plains. On May 28, 2020, Plains submitted an initial C-141 Form to NMOCD and was assigned incident number: NRM2015337417.

3. NMOCD Regulatory Limits

NMOCD assessment and cleanup levels for hydrocarbon and produced water releases are based on depth to groundwater and follow the criteria in the revised August 2018 Title 19 Chapter 15 Part 29 New Mexico Administration Code (19.15.29 NMAC) regulations. Groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and the United States Geological Survey (USGS) were accessed to determine if any registered water wells in or near Unit Letter J, Section 31, Township 19S, and Range 35E. Neither of the two databases identified any registered water wells in or near Unit Letter J, Section 31, Township 19S, and Range 35E. However, one water well (OSE L-04157) was listed in Section 6, Township 20S, and Range 35E with groundwater reported at 64 feet bgs. See Appendix B for the NMOSE depth to ground water near the site. In addition, according to the BLM the site is located in an area of low potential karst topography. See Figure 2 "Karst Topography Map". As outlined in 19.15.29.12.B. (4) NMAC, the release does not occur in referenced sensitive areas, with the nearest water body feature being the Laguna Tonto located approximately 10.44 miles west of the site. Meeting the previous criteria, the NMOCD restoration and cleanup levels for soils impacted by hydrocarbons with low karst topography is as follows:

- Chloride 10,000 mg/Kg
- Total TPH 2,500 mg/Kg
- GRO+DRO 1,000 mg/Kg
- Benzene 10 mg/Kg
- Total BTEX 50 mg/Kg

4. Soil Remediation with Bottom Hole and Wall Confirmation Soil Sampling

Between May 27 and September 25, 2020, Dean Personnel conducted soil delineation and oversite of third-party soil remediation activities at the site. Delineation was achieved by field screening soil samples simultaneously with excavation activities. Soil remediation of hydrocarbon impacted soils commenced utilizing hand excavation and a backhoe adjacent to the LACT unit

and onsite equipment with the excavated soils stockpiled on plastic. The site was excavated to a maximum depth of one (1) to two (2) ft bgs at which point the hydrocarbons visually appeared to be remediated both vertically and horizontally. Final dimensions of the excavation were between approximately twenty-one (21) ft and forty-two (42) ft in width, by one hundred and one (101) ft. in length to a depth between six (6) inches and two (2) ft bgs. Approximately 120 cubic yards of soil were removed and stockpiled on plastic at the site. See Appendix C for Site Photographs.

On June 17, 2020, thirteen (13) composite five (5) point bottom hole (CS-1 @ 6", CS-2 @ 6", CS-3 @ 6", CS-4 @ 6", CS-5 @ 6", CS-6 @ 6", CS-7 @ 6", CS-8 @ 6", CS-9 @ 6", CS-10 @ 6", CS-11 @ 6", CS-12 @ 6", and CS-13 @ 2") and eight (8) composite five (5) point wall samples (Pad North SW 6", Pad South SW 6", Pad West SW 6", Pad East SW 6", LACT North SW 1', LACT South SW 1', LACT West SW 1', LACT East SW 1') were collected within two hundred (200) square feet of each other from the bottom and four side walls and submitted for analysis of TPH, BTEX, and Chlorides to Permian Basin Environmental Lab in Midland, Texas. The bottom hole and wall sample analytical results were below the BTEX and Chloride NMOCD standards for all samples analyzed. The TPH results were below the NMOCD standards of 2,500 mg/Kg for all samples analyzed within the facility with the exception of CS-1 @ 6", CS-6 @ 6", Pad North SW 6", Pad West SW 6", Pad East SW 6", and LACT North SW 1', with a concentrations of 5,080 mg/Kg, 3,411 mg/Kg, 6,040 mg/Kg, 3,778 mg/Kg, 8,972 mg/Kg, and 2,933 mg/Kg, respectively. The TPH results for samples Pad South SW 6" and LACT South SW 1' did not exceed NMOCD standards of 2,500 mg/Kg but subsequently exceeded the GRO+DRO total of 1,000 mg/Kg with GRO+DRO results of 1,948.5 mg/Kg and 1,982 mg/Kg, respectively.

On August 25, 2020, after further excavation activities, two (2) composite five (5) point bottom hole samples (CS-1 @ 6" and CS-6 @ 6") and six (6) five (5) point composite wall samples (Pad North SW 6", Pad West SW 6", Pad East SW 6", LACT North SW 1', and LACT South SW 1') were resampled and submitted for analysis of TPH. The TPH concentrations were below the NMOCD standards of all samples analyzed with the exception of Pad North SW @ 6" with a result of 1,906 mg/Kg for TPH (GRO+DRO).

On September 25, 2020, after additional excavation activities, one additional (1) five (5) point composite wall sample (Pad North SW @ 6") was resampled and submitted for analysis of TPH. The TPH concentration was below the NMOCD standards of 2,500 mg/Kg. See Figure 4. "Site Details and Confirmation Soil Sample Location Map" and Table 1. for confirmation analytical results. See Appendix D for Laboratory Analytical Results.

Due to excavation and confirmation sampling extending past the initial ninety (90) days of closure, an extension was requested by Plains on August 28, 2020 which was granted on August 28, 2020. See Appendix A for C-141 Form and Extension Request.

5. Soil Disposal and Site Restoration

Plains was onsite the week of September 28, 2020 to remove the impacted soils offsite for disposal, backfill the excavation with locally sourced non-impacted soils, and bring site back to natural grade. Approximately 120 cubic yards of hydrocarbon impacted soils were transported offsite for disposal at Lazy Ace Land Farm, LLC in Eunice, New Mexico with waste manifests available upon request.

6. Closure Request

Based upon the analytical results of the requisite confirmation soil samples collected from the base and side walls of the excavation, the site has been remediated to within standards set by the NMOCD. In addition, the site was backfilled with locally sourced non-impacted soils and brought up to grade. Consequently, Plains respectfully requests site closure.

If you have any questions, or if additional information is required, please feel free to contact Amber Groves (email: ALGroves@paalp.com, cell: 575.200.5517) of Plains or Elizabeth Stuart (email: elizabethstuart@deandigs.com, cell: 432.227.5369) or Jeff Kindley (email: jeffreykindley@deandigs.com cell: 432.230.0920) of Dean.

Sincerely,

Clight Strat

Elizabeth Stuart Project Manager

y Kindley

Jeffrey Kindley, PG. Professional Geologist



TABLE



Chemistry Table 1

Concentrations of Benzene, BTEX, Chlorides, and TPH in soil

Plains Pipeline, L.P.

XTO Perla Verde Release

Lea County, New Mexico

SRS #2020-051

SAMPLE DI SAMPLE DATE DEPTH METHOD MATHAD ImpAnd	METHOD: E 300	METHOD: E 300 METHODS: EPA SW 846-8015M			м		
Billow Billow<	CHLORIDES (mg/kg)		GRO (mg/kg)	DRO (mg/kg)	GRO +DRO (mg/kg)	ORO (mg/kg)	TOTAL TPH (mg/kg)
CS-2@6* 06/17/20 6 in Composite soil 0.0203 0.0249 0.0288 0.106 0.031 CS-3@6* 06/17/20 6 in Composite soil 0.00177 0.00676 0.0333 0.153 0.0618 CS-5@6* 06/17/20 6 in Composite soil 0.00115 0.00575 0.0643 0.03673 0.04318 CS-5@6* 06/17/20 6 in Composite soil 0.00115 0.00772 0.00652 0.03246 0.0467 CS-6@6* 06/17/20 6 in Composite soil	198	198	276	4,200	4,476	604	5,080
CS-3 @6" 06/17/20 6 in Composite soil 0.00177 <0.00676 0.0393 0.153 0.0618 CS-4 @6" 06/17/20 6 in Composite soil <0.00175	-	-	<25.3	238	238	40.7	278.7
CS-4 @6' 06/17/20 6 in Composite soil soil <0.00115 <0.00575 0.00645 0.03673 0.04318 CS-5 @6'' 06/17/20 6 in Composite soil <0.0103	27.8	27.8	33.6	188	221.6	33.2	254.8
C5-6 @6" 06/17/20 6 in Composite omposite soil <0.00103 0.00772 0.00652 0.03246 0.0467 C5-6 @6" 06/17/20 6 in Composite soil 0.0021 0.0381 0.0878 0.3482 0.4762 C5-6 @6" 08/25/20 6 in Composite soil -	55.8	55.8	40.4	293	333.4	52.6	386
CS-6 @6" Obj 1/120 Gin Composite Soil OLORED OLORED <tholored< th=""> <tholored< th=""> OLORED</tholored<></tholored<>	109	109	<28.7	140	140	<28.7	140
CS-6 @6" 08/25/20 6 in Composite soil - - - -	103	103	52.3	827	879.3	147	1,026.3
CS-7@6" 06/17/20 6 in Composite soil <0.00104 <0.00521 <0.0185 0.0185 CS-8@6" 06/17/20 6 in Composite soil <0.00105	78.1	78.1	380	2,590	2,970	441	3,411
CS-8 @6" O6/17/20 6 in Composite soil <0.00103 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00515 <0.00516 <0.00516 <0.00516 <0.00517 <0.00516 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0.00517 <0	-	-	<25.0	26.4	26.4	<25.0	26
CS-966" 06/17/20 6 in Composite soil 0.0105 0.0145 0.0306 0.1456 0.19175 CS-1066" 06/17/20 6 in Composite soil 0.00271 0.0277 0.0602 0.2695 0.36011 CS-11@6" 06/17/20 6 in Composite soil <0.00104	38.3	38.3	<26.0	172	172	47.8	219.8
CS-10 @6" 06/17/20 6 in Composite soil soil 0.00271 0.0277 0.0602 0.2695 0.36011 CS-11 @6" 06/17/20 6 in Composite soil soil <0.00104	27.6	27.6	<25.8	29.8	29.8	<25.8	29.8
CS-11 @6" 06/17/20 6 in Composite soil <0.00104 <0.00521 0.00764 0.00764 CS-12 @6" 06/17/20 6 in Composite soil 0.00393 0.0187 0.053 0.2663 0.34193 CS-13 @2' 06/19/20 2 ft Composite soil 0.0245 0.0561 0.0542 0.31 0.4448 Pad North SW 6" 06/19/20 6 in Composite soil <.000101	39.7	39.7	77.3	637	714.3	91.8	806.1
CS-12 @6" 06/17/20 6 in Composite soil 0.00393 0.0187 0.053 0.2663 0.34193 CS-13 @2' 06/19/20 2 ft Composite soil 0.0245 0.0511 0.0542 0.31 0.4448 Pad North SW 6" 06/19/20 6 in Composite soil <.00010	38.3	38.3	68.4	485	553.4	78.9	632.3
CS-13 @2' O6/19/20 2 ft Composite soil 0.0245 0.0542 0.0342 0.0448 Pad North SW 6" 06/19/20 6 in Composite soil 0.0245 0.0561 0.0542 0.31 0.4448 Pad North SW 6" 06/19/20 6 in Composite soil -	45.2	45.2	<26.0	93.8	93.8	<26.0	93.8
Pad North SW 6" 06/19/20 6 in Composite soil <0.00101 <0.00505 <0.00905 0.00996 0.00996 Pad North SW 6" 08/25/20 6 in Composite soil -	15.7	15.7	75.5	485	560.5	71.5	632
Pad North SW 6" 08/25/20 6 in Composite soil -	10.3	10.3	95.3	545	640.3	85.5	725.8
Pad North SW 6" 09/25/20 6 in Composite soil .	238	238	258	5,270	5,528	512	6,040
Pad West SW 6" 06/19/20 6 in Composite soil 0.00547 0.0115 0.00811 0.0436 0.06868 Pad West SW 6" 08/25/20 6 in Composite soil -	-	-	45.9	1,860	1,906	329	2,234.9
Pad West SW 6" 08/25/20 6 in Composite soil -	-	-	<26.0	30.2	30.2	<26.0	30.2
Pad South SW 6" 06/19/20 6 in Composite soil 0.00429 0.00841 <0.00510 0.02321 0.03591 Pad South SW 6" 08/25/20 6 in Composite soil - </td <td>209</td> <td>209</td> <td>181</td> <td>3,120</td> <td>3,301</td> <td>477</td> <td>3,778</td>	209	209	181	3,120	3,301	477	3,778
Pad South SW 6" 08/25/20 6 in Composite soil .	-	-	<25.3	801	801	141	942
Pad East SW 6" Ob/1/20 6 in Composite soil 0.00215 0.0227 0.086 0.3351 0.44595 Pad East SW 6" 08/25/20 6 in Composite soil -	137	137	68.5	1,880	1,948.5	330	2,278.5
Pad East SW 6" 08/25/20 6 in Composite soil -	-	-	<25.3	68.2	68.2	38.7	106.9
LACT North SW 1' 06/19/20 1 ft Composite soil 0.0509 0.0988 0.1 0.3658 0.6155 LACT North SW 1' 08/25/20 1 ft Composite soil -	133	133	949	7,410	8,359	613	8,972
LACT North SW 1' 08/25/20 1 ft Composite soil i	-	-	<25.5	315	315	69.8	384.8
LACT South SW 1' 06/19/20 1 ft Composite soil 0.0211 0.0938 0.111 0.3867 0.6126 LACT South SW 1' 08/25/20 1 ft Composite soil -	16.2	16.2	208	2,360	2,568	365	2,933
LACT South SW 1' 08/25/20 1 ft Composite soil -	-	-	<25.0	262	262	43.8	305.8
LACT South SW 1' 08/25/20 1 ft Composite soil -	11.8	11.8	212	1,770	1,982	278	2,260
LACT East SW 1' 06/19/20 1 ft Composite soil <0.0010 0.00402 0.00205 0.00964 0.01571	-	-	<25.3	<25.3	<25.3	<25.3	<25.3
LACT West SW 1' 06/19/20 1 ft Composite soil 0.00166 0.00141 0.00101 0.0058 0.00988	23.5	23.5	<25.3	120	120	27.0	147
	9.21	9.21	26.5	454	480.5	74.7	555.2
MOCD Recommended Remediation Action Level 10 50 1	10.000	10.000	- 1	- 1	1.000	-	2,500

Exceeds NMOCD Level

•

FIGURES

. Released to Imaging: 4/16/2021 10:19:32 AM

Received by OCD: 11/5/2020 10:51:25 AM

Site Location Map Plains Pipeline LLC XTO Perla Verde Release SRS: 2020-51 GPS: 32.613367, -103.496006 Lea County, NM

Site Location

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Co-Rd 27-

2 mi











APPENDIX A

NMOCD C-141 FORM AND EXTENSION REQUEST

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	NRM2015337417
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 577 US HWY 385 N Seminole, TX 79360	

Location of Release Source

Latitude <u>32.613367</u>

Longitude <u>-103.496006</u>

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Plains XTO Perla Verde 31 State #002H	Site Type LACT Unit
Date Release Discovered 5/23/2020 @ 10:32 AM	API# (if applicable)

Unit Letter	Section	Township	Range	County
0	31	19S	35E	Lea

Surface Owner: State Federal Tribal Private (Name: _____

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) 10 bbls	Volume Recovered (bbls) 9 bbls
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Air eliminator failure resulting in an approximate release of 10 bbls of crude oil.

Page	2

Oil Conservation Division

Incident ID	NRM2015337417
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
5	
release as defined by	
19.15.29.7(A) NMAC?	
()	
🗌 Yes 🖾 No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

 \square 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: <u>Amber Groves</u>	Title: <u>Remediation Coordinator</u>
Signature:	Date:
email: <u>algroves@paalp.com</u>	Telephone: (575)200-5517
OCD Only	
Received by: Ramona Marcus	Date: <u>6/1/2020</u>

NRM2015337417

•

Amber L Groves

From:	Tommy J Bacon
Sent:	Thursday, May 28, 2020 12:35 PM
То:	Amber L Groves
Subject:	Spill Calculations for Perla Verde CTB

20' X 20' X 1.5 X 0.0154 = 10.7BBLS

Tommy Bacon District Manager Southwest Division PPW 575-200-8025 tjbacon@paalp.com

From:	Hamlet, Robert, EMNRD
To:	"Amber L Groves"
Cc:	Bratcher, Mike, EMNRD; "Sylwia Reynolds"; Venegas, Victoria, EMNRD; Eads, Cristina, EMNRD
Subject:	RE: NRM2015337417 Plains XTO Perla Verde Extension Request
Date:	Tuesday, September 15, 2020 9:43:00 AM
•	RE: NRM2015337417 Plains XTO Perla Verde Extension Request

RE: Incident #NRM2015337417

Amber,

Your request for an extension to **October 28th, 2020** is approved. Plains requests a 60 day extension for NRM2015337417 Plains XTO Perla Verde. The initial C-141 was filed on the OCD portal on May 28th. Plains has endeavored to complete remediation activities within 90 days, however excavation and confirmation sampling has taken longer than expected.

Thank you,

Robert J Hamlet State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210 (575) 748-1283 <u>Robert.Hamlet@state.nm.us</u>

From: Amber L Groves <ALGroves@paalp.com>
Sent: Friday, August 28, 2020 11:24 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Venegas, Victoria, EMNRD
<Victoria.Venegas@state.nm.us>; Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; 'Sylwia Reynolds'
<Sylwiareynolds@deandigs.com>
Subject: [EXT] NRM2015337417 Plains XTO Perla Verde Extension Request

Good Morning,

Plains respectfully requests a 60 day extension for NRM2015337417 Plains XTO Perla Verde. The initial C-141 was filed on the OCD portal on May 28th. Plains has endeavored to complete remediation activities within 90 days, however excavation and confirmation sampling has taken longer than expected. Please feel free to give me a call should you have any questions.

Thank you,

Amber L. Groves Remediation Coordinator Plains All American 3112 W. US Hwy 82 Lovington, NM 88260 575-200-5517

Attention:

The information contained in this message and/or attachments is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. If you received this in error, please contact the Plains Service Desk at 713-646-4444 and delete the material from any system and destroy any copies.

This footnote also confirms that this email message has been scanned for Viruses and Content and cleared.

APPENDIX B OSE GROUND WATER DATA



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New Mexico Office of the State Engineer Point of Diversion Summary

			 . 	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in meters)		
Well Tag	POD	Number	Q64 Q1	6 Q4	Sec	Tws	Rng	Х	Y		
	L 04	4157	3	3	06	208	35E	640483	3607561*		
Driller Lice	ense:	208	Driller Co	mpar	ıy:	VA	N NOY,	W.L.			
Driller Nan	ne:										
Drill Start]	Date:	12/12/1959	Drill Fini	sh Da	te:	12	2/13/195	59 P	ug Date:		
Log File Da	ite:	12/18/1959	PCW Rev	Date	:			S	ource:	Shallow	
Pump Type	:		Pipe Disc	harge	Size	:		E	stimated Yield	l:	
Casing Size	:	5.00	Depth We	ell:		7) feet	D	epth Water:	64 feet	
	Wate	er Bearing Stratif	fications:	Т	op 1	Bottom	Desci	ription			
				(55	68	Sands	stone/Grave	el/Conglomerat	e	
		Casing Per	forations:	Т	op 1	Bottom	l				
				-	50	70)				

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the data.

5/27/20 1:52 PM

POINT OF DIVERSION SUMMARY

APPENDIX C SITE PHOTOGRAPHIC DOCUMENTATION



Photograph No 1.						
Date: May 27, 2020	Direction: East					
Description: View of release area.						















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Photogr	aph No 9.
Date: September 25, 2020	Direction: Southeast
Description: View of excavation activities.	



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APPENDIX D LABORATORY ANALYTICAL REPORTS

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



Analytical Report

Prepared for:

Sylwia Reynolds Dean 12600 W County Rd 91 Midland, TX 79707

Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Location: Lea County, New Mexico

Lab Order Number: 0F23004



NELAP/TCEQ # T104704516-17-8

Report Date: 07/09/20

Fax:

Dean	Project:	Plains: XTO Perla Verde
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051
Midland TX, 79707	Project Manager:	Sylwia Reynolds

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-1 (6")	0F23004-01	Soil	06/17/20 12:23	06-23-2020 07:40
CS-2 (6")	0F23004-02	Soil	06/17/20 12:25	06-23-2020 07:40
CS-3 (6")	0F23004-03	Soil	06/17/20 12:30	06-23-2020 07:40
CS-4 (6")	0F23004-04	Soil	06/17/20 12:35	06-23-2020 07:40
CS-5 (6")	0F23004-05	Soil	06/17/20 12:37	06-23-2020 07:40
CS-6 (6")	0F23004-06	Soil	06/17/20 12:40	06-23-2020 07:40
CS-7 (6")	0F23004-07	Soil	06/17/20 12:42	06-23-2020 07:40
CS-8 (6")	0F23004-08	Soil	06/17/20 13:38	06-23-2020 07:40
CS-9 (6")	0F23004-09	Soil	06/17/20 13:43	06-23-2020 07:40
CS-10 (6")	0F23004-10	Soil	06/17/20 13:48	06-23-2020 07:40
CS-11 (6")	0F23004-11	Soil	06/17/20 13:50	06-23-2020 07:40
CS-12 (6")	0F23004-12	Soil	06/17/20 13:55	06-23-2020 07:40
CS-13 (6")	0F23004-13	Soil	06/17/20 14:58	06-23-2020 07:40
Pad North SW 6"	0F23004-14	Soil	06/19/20 14:10	06-23-2020 07:40
Pad West SW 6"	0F23004-15	Soil	06/19/20 15:10	06-23-2020 07:40
Pad South SW 6"	0F23004-16	Soil	06/19/20 15:25	06-23-2020 07:40
Pad East SW 6"	0F23004-17	Soil	06/19/20 15:20	06-23-2020 07:40
Lact North SW 1'	0F23004-18	Soil	06/19/20 15:00	06-23-2020 07:40
Lact South SW 1'	0F23004-19	Soil	06/19/20 14:10	06-23-2020 07:40
Lact East SW 1'	0F23004-20	Soil	06/19/20 14:00	06-23-2020 07:40
Lact West SW 1'	0F23004-21	Soil	06/19/20 14:15	06-23-2020 07:40

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

CS-1 (6'') 0F23004-01 (Soil)

Reporting Units Dilution Batch Analyzed Method Notes Result Limit Prepared Analyte Permian Basin Environmental Lab, L.P. BTEX by 8021B ND Benzene 0.00101 mg/kg dry 1 P0F2408 06/24/20 06/24/20 EPA 8021B 0.00752 Toluene 0.00505 mg/kg dry 1 P0F2408 EPA 8021B 06/24/20 06/24/20 P0F2408 EPA 8021B 0.0247 mg/kg dry 1 Ethylbenzene 0.00505 06/24/20 06/24/20 mg/kg dry P0F2408 EPA 8021B Xylene (p/m) 0.107 0.00505 1 06/24/20 06/24/20 EPA 8021B 0.0402 1 P0F2408 Xylene (o) 0.00505 mg/kg dry 06/24/20 06/24/20 Surrogate: 4-Bromofluorobenzene 93.0% 75-125 P0F2408 06/24/20 06/24/20 EPA 8021B Surrogate: 1,4-Difluorobenzene 75-125 P0F2408 06/24/20 06/24/20 EPA 8021B 97.6% General Chemistry Parameters by EPA / Standard Methods mg/kg dry 1 P0F2310 EPA 300.0 Chloride 198 1.01 06/23/20 06/24/20 % Moisture 1.0 0.1 % 1 P0F2401 ASTM D2216 06/24/20 06/24/20 Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M TPH 8015M 1 P0F2305 C6-C12 276 25.3 mg/kg dry 06/23/20 06/23/20 mg/kg dry P0F2305 TPH 8015M >C12-C28 4200 25.3 1 06/23/20 06/23/20 >C28-C35 604 25.3 mg/kg dry 1 P0F2305 06/23/20 06/23/20 TPH 8015M Surrogate: 1-Chlorooctane TPH 8015M 118 % 70-130 P0F2305 06/23/20 06/23/20 P0F2305 06/23/20 TPH 8015M Surrogate: o-Terphenyl 107 % 70-130 06/23/20 5080 25.3 mg/kg dry 1 [CALC] 06/23/20 06/23/20 calc **Total Petroleum Hydrocarbon** C6-C35

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Dean 12600 W County Rd 91 Midland TX, 79707	Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Project Manager: Sylwia Reynolds								
Witeranie 1A, /9/0/		,	$\frac{2}{2S-2 (6'')}$	Reynolds					
			004-02 (Soi	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Peri	nian Basin I	Environme	ntal Lab, I	L .P.				
BTEX by 8021B									
Benzene	0.00203	0.00108	mg/kg dry	1	P0F2408	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0249	0.00538	mg/kg dry	1	P0F2408	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0298	0.00538	mg/kg dry	1	P0F2408	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.106	0.00538	mg/kg dry	1	P0F2408	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0310	0.00538	mg/kg dry	1	P0F2408	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		93.2 %	75-1	25	P0F2408	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.0 %	75-1	25	P0F2408	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	27.8	1.08	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	7.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	C35 by EPA Method 80)15M							
C6-C12	33.6	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	188	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	33.2	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		92.6 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		100 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	255	26.9	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.
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Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			CS-3 (6'') 004-03 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmen	ital Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.00177	0.00135	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00676	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0393	0.00676	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.153	0.00676	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0618	0.00676	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		61.3 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		98.5 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Methoo	ls							
Chloride	55.8	1.35	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	26.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80)15M							
C6-C12	40.4	33.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	293	33.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	52.6	33.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		101 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	386	33.8	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean		Proj		Fax:					
12600 W County Rd 91		Project Num	ber: PP-206	2/SRS#202	0-051				
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds					
		C	S-4 (6'')						
r		0F23	004-04 (Soi	l)					
		Reporting	T T 1		D - 1	D 1			N T -
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmer	ntal Lab, l	P.				
BTEX by 8021B									
Benzene	ND	0.00115	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00575	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.00645	0.00575	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.0276	0.00575	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.00913	0.00575	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		87.7 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.1 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	109	1.15	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	13.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
<u>Total Petroleum Hydrocarbons C6-C</u>	35 by EPA Method 80)15M							
C6-C12	ND	28.7	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	140	28.7	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		106 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		115 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon	140	28.7	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	
C6-C35									

Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			CS-5 (6'')						
		0F23	004-05 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin H	Environmen	ital Lab, I	L.P.				
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.00772	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.00652	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.0257	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.00676	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.6 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.8 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by EI	PA / Standard Method	ls							
Chloride	103	1.03	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	3.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C.	35 by EPA Method 80)15M							
C6-C12	52.3	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	827	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	147	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		106 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		110 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	1030	25.8	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

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Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			CS-6 (6'') 004-06 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin H	Environmer	ıtal Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.00210	0.00103	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0381	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0878	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.262	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0862	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		63.7 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		95.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by El	PA / Standard Method	ls							
Chloride	78.1	1.03	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	3.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	015M							
C6-C12	380	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	2590	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	441	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		104 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		113 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	3410	25.8	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
Mulanu 1.A, 79707		Project Mana	28-7 (6'')	Reynolus					
			.3-7 (0°) 004-07 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin H	Environmer	ital Lab, I	L .P.				
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.0185	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.6 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		91.6 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by El	PA / Standard Method	ls							
Chloride	38.3	1.04	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	4.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M							
C6-C12	ND	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	172	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	47.8	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		108 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		113 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	220	26.0	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			CS-8 (6'') 004-08 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin H	Environmen	tal Lab, l	L .P.				
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	ND	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	ND	0.00515	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.9 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		91.2 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Method	s							
Chloride	27.6	1.03	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	3.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	ND	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	29.8	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		111 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		117 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	29.8	25.8	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

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Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			28-9 (6'') 004-09 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin H	Environmen	ital Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.00105	0.00105	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0145	0.00526	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0306	0.00526	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.115	0.00526	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0306	0.00526	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.0 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		106 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by El	PA / Standard Method	ls							
Chloride	39.7	1.05	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	5.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80)15M							
C6-C12	77.3	26.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	637	26.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	91.8	26.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		111 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		116 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon	806	26.3	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	
C6-C35									

Dean 12600 W County Rd 91			Fax:						
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds					
			S-10 (6'')						
		0F23	004-10 (Soi	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin I	Environmei	ntal Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.00271	0.00104	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0277	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0602	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.206	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (0)	0.0635	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.6 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		68.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	38.3	1.04	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	4.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	C35 by EPA Method 80	15M							
C6-C12	68.4	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	485	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	78.9	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		112 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		117 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	633	26.0	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean		Proj		Fax:					
12600 W County Rd 91		Project Num	ber: PP-2062	2/SRS#202	0-051				
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds					
			S-11 (6'')						
		0F23	004-11 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin H	Environmer	ital Lab, l	L.P.				
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.00764	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	ND	0.00521	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.0 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.2 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	45.2	1.04	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	4.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	015M							
C6-C12	ND	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	93.8	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		117 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		123 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	93.8	26.0	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean 12600 W County Rd 91		Fax:							
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds					
			S-12 (6'')						
		0F23	004-12 (Soi	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ıtal Lab, l	L.P.				
BTEX by 8021B									
Benzene	0.00393	0.00116	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0187	0.00581	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0530	0.00581	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.198	0.00581	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0683	0.00581	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		92.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		64.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
General Chemistry Parameters by EF	A / Standard Method	s							
Chloride	15.7	1.16	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	14.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	75.5	29.1	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	485	29.1	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	71.5	29.1	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		115 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		120 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon	632	29.1	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	
C6-C35									

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Dean 12600 W County Rd 91 Midland TX, 79707		Fax:							
			S-13 (6'') 004-13 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin H	Environmen	ital Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.0245	0.00108	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0561	0.00538	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.0542	0.00538	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.183	0.00538	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.127	0.00538	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		100 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		69.4 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
General Chemistry Parameters by EP	A / Standard Method	ls							
Chloride	10.3	1.08	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	7.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80)15M							
C6-C12	95.3	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	545	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	85.5	26.9	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		118 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		121 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	726	26.9	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean		Proj		Fax:					
12600 W County Rd 91		Project Num			0-051				
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds					
			North SW	-					
		0F23	004-14 (Soi	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin I	Environmer	ntal Lab, l	L .P.				
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.00996	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		103 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		90.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	238	1.01	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	C35 by EPA Method 80	15M							
C6-C12	258	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
>C12-C28	5270	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
>C28-C35	512	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
Surrogate: 1-Chlorooctane		108 %	70-1	30	P0F2307	06/23/20	06/25/20	TPH 8015M	
Surrogate: o-Terphenyl		91.4 %	70-1	30	P0F2307	06/23/20	06/25/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	6040	126	mg/kg dry	5	[CALC]	06/23/20	06/25/20	calc	

Dean 12600 W County Rd 91 Midland TX - 70707		Proj Project Num		Fax:					
Midland TX, 79707		Project Mana	ger: Sylwia	Reynoids					
		Pad V	West SW 6	5''					
		0F23	004-15 (Soi	l)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	nvironmen	ital Lab, l	L .P.				
BTEX by 8021B									
Benzene	0.00547	0.00101	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0115	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.00811	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.0326	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0110	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		96.6 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		91.8 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Method	ls							
Chloride	209	1.01	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	181	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	3120	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	477	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		117 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		118 %	70-1.	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon	3780	25.3	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	
C6-C35					-				

Dean 12600 W County Rd 91		Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Project Manager: Sylwia Reynolds									
Midland TX, 79707		Project Mana	ger: Sylwia	Reynolds							
		Pad S	South SW	6''							
		0F23	004-16 (Soi	l)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Perr	nian Basin H	Environmer	ıtal Lab, l	P.						
BTEX by 8021B											
Benzene	0.00429	0.00102	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Toluene	0.00841	0.00510	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Ethylbenzene	ND	0.00510	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Xylene (p/m)	0.0181	0.00510	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Xylene (0)	0.00511	0.00510	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		88.4 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		95.6 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B			
General Chemistry Parameters by E	PA / Standard Method	ls									
Chloride	137	1.02	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0			
% Moisture	2.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216			
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M									
C6-C12	68.5	25.5	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M			
>C12-C28	1880	25.5	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M			
>C28-C35	330	25.5	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M			
Surrogate: 1-Chlorooctane		117 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M			
Surrogate: o-Terphenyl		118 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	2280	25.5	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc			

Dean	Proj		Fax:					
12600 W County Rd 91	Project Num			0-051				
Midland TX, 79707	Project Mana	ger: Sylwia I	Reynolds					
		East SW 6						
	0F23	004-17 (Soil)					
Analyte Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P	Permian Basin H	Environmen	tal Lab, l	L. P.				
BTEX by 8021B								
Benzene 0.00215	0.00101	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene 0.0227	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene 0.0860	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m) 0.244	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o) 0.0911	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	63.7 %	75-12	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	103 %	75-12	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
<u>General Chemistry Parameters by EPA / Standard Met</u>	hods							
Chloride 133	1.01	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture 1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method	1 8015M							
C6-C12 949	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
>C12-C28 7410	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
>C28-C35 613	126	mg/kg dry	5	P0F2307	06/23/20	06/25/20	TPH 8015M	
Surrogate: 1-Chlorooctane	94.8 %	70-13	30	P0F2307	06/23/20	06/25/20	TPH 8015M	
Surrogate: o-Terphenyl	94.9 %	70-13	30	P0F2307	06/23/20	06/25/20	TPH 8015M	
Total Petroleum Hydrocarbon 8970	126	mg/kg dry	5	[CALC]	06/23/20	06/25/20	calc	
C6-C35								

Dean 12600 W County Rd 91 Midland TX, 79707		Proj Project Num Project Mana		Fax:					
		Lact	North SW	1'					
		0F23	004-18 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmer	ıtal Lab, l	L.P.				
BTEX by 8021B									
Benzene	0.0509	0.00101	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Toluene	0.0988	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Ethylbenzene	0.100	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (p/m)	0.275	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Xylene (o)	0.0908	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		64.9 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		96.4 %	75-1	25	P0F2409	06/24/20	06/25/20	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Method	ls							
Chloride	16.2	1.01	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0	
% Moisture	1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	208	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C12-C28	2360	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
>C28-C35	365	25.3	mg/kg dry	1	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: 1-Chlorooctane		117 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Surrogate: o-Terphenyl		125 %	70-1	30	P0F2307	06/23/20	06/23/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	2940	25.3	mg/kg dry	1	[CALC]	06/23/20	06/23/20	calc	

Dean 12600 W County Rd 91 Midland TX, 79707		Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Project Manager: Sylwia Reynolds									
Michanu 1.X, 79707			South SW	-							
		0F23	004-19 (Soi	I)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Pern	nian Basin H	Environmen	ital Lab, I	L.P.						
BTEX by 8021B											
Benzene	0.0211	0.00101	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Toluene	0.0938	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Ethylbenzene	0.111	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Xylene (p/m)	0.291	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Xylene (o)	0.0957	0.00505	mg/kg dry	1	P0F2409	06/24/20	06/25/20	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		102 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		74.2 %	75-1.	25	P0F2409	06/24/20	06/25/20	EPA 8021B	S-GC		
General Chemistry Parameters by EP	A / Standard Method	ls									
Chloride	11.8	1.01	mg/kg dry	1	P0F2310	06/23/20	06/24/20	EPA 300.0			
% Moisture	1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216			
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M									
C6-C12	212	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
>C12-C28	1770	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
>C28-C35	278	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
Surrogate: 1-Chlorooctane		123 %	70-1.	30	P0F2307	06/23/20	06/24/20	TPH 8015M			
Surrogate: o-Terphenyl		127 %	70-1.	30	P0F2307	06/23/20	06/24/20	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	2250	25.3	mg/kg dry	1	[CALC]	06/23/20	06/24/20	calc			

Dean 12600 W County Rd 91 Midland TX, 79707		Project:Plains: XTO Perla VerdeProject Number:PP-2062/SRS#2020-051Project Manager:Sylwia Reynolds									
			East SW 004-20 (Soi								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Pern	nian Basin H	Environmer	ıtal Lab, l	L .P.						
BTEX by 8021B											
Benzene	ND	0.00101	mg/kg dry	1	P0G0105	07/01/20	07/01/20	EPA 8021B			
Toluene	0.00402	0.00101	mg/kg dry	1	P0G0105	07/01/20	07/01/20	EPA 8021B			
Ethylbenzene	0.00205	0.00101	mg/kg dry	1	P0G0105	07/01/20	07/01/20	EPA 8021B			
Xylene (p/m)	0.00735	0.00202	mg/kg dry	1	P0G0105	07/01/20	07/01/20	EPA 8021B			
Xylene (o)	0.00229	0.00101	mg/kg dry	1	P0G0105	07/01/20	07/01/20	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		94.2 %	75-1	25	P0G0105	07/01/20	07/01/20	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		86.6 %	75-1	25	P0G0105	07/01/20	07/01/20	EPA 8021B			
General Chemistry Parameters by E	PA / Standard Method	ls									
Chloride	23.5	1.01	mg/kg dry	1	P0F2403	06/24/20	06/24/20	EPA 300.0			
% Moisture	1.0	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216			
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M									
C6-C12	ND	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
>C12-C28	120	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
<u>>C28-C35</u>	27.0	25.3	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M			
Surrogate: 1-Chlorooctane		119 %	70-1	30	P0F2307	06/23/20	06/24/20	TPH 8015M			
Surrogate: o-Terphenyl		124 %	70-1	30	P0F2307	06/23/20	06/24/20	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	147	25.3	mg/kg dry	1	[CALC]	06/23/20	06/24/20	calc			

Dean 12600 W County Rd 91		Proj Project Num			Fax:				
Midland TX, 79707		Project Mana			0-031				
		- -							
			West SW 004-21 (Soi						
		0F23	004-21 (50)	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmer	ıtal Lab, l	P.				
BTEX by 8021B									
Benzene	0.00166	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Toluene	0.00141	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Ethylbenzene	0.00101	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (p/m)	0.00395	0.00200	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Xylene (o)	0.00185	0.00100	mg/kg dry	1	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		92.4 %	75-1	25	P0F2905	06/29/20	06/30/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.2 %	75-1	25	P0F2905	06/29/20	06/30/20	EPA 8021B	
General Chemistry Parameters by E	PA / Standard Method	ls							
Chloride	9.21	1.00	mg/kg dry	1	P0F2403	06/24/20	06/24/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F2401	06/24/20	06/24/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	C35 by EPA Method 80	15M							
C6-C12	26.5	25.0	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M	
>C12-C28	454	25.0	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M	
>C28-C35	74.7	25.0	mg/kg dry	1	P0F2307	06/23/20	06/24/20	TPH 8015M	
Surrogate: 1-Chlorooctane		118 %	70-1	30	P0F2307	06/23/20	06/24/20	TPH 8015M	
Surrogate: o-Terphenyl		124 %	70-1	30	P0F2307	06/23/20	06/24/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	555	25.0	mg/kg dry	1	[CALC]	06/23/20	06/24/20	calc	

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2408 - General Preparation (GC)										
Blank (P0F2408-BLK1)				Prepared &	Analyzed:	06/24/20				
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.00500	"							
Xylene (o)	ND	0.00500	"							
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.3	75-125			
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		90.3	75-125			
LCS (P0F2408-BS1)				Prepared &	Analyzed:	06/24/20				
Benzene	0.101	0.00100	mg/kg wet	0.100		101	70-130			
Toluene	0.100	0.00500	"	0.100		100	70-130			
Ethylbenzene	0.103	0.00500	"	0.100		103	70-130			
Xylene (p/m)	0.209	0.00500	"	0.200		105	70-130			
Xylene (o)	0.112	0.00500	"	0.100		112	70-130			
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		90.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.2	75-125			
LCS Dup (P0F2408-BSD1)				Prepared &	Analyzed:	06/24/20				
Benzene	0.105	0.00100	mg/kg wet	0.100		105	70-130	4.05	20	
Toluene	0.104	0.00500	"	0.100		104	70-130	3.73	20	
Ethylbenzene	0.101	0.00500	"	0.100		101	70-130	2.24	20	
Xylene (p/m)	0.217	0.00500	"	0.200		109	70-130	3.67	20	
Xylene (o)	0.115	0.00500	"	0.100		115	70-130	3.19	20	
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.0	75-125			
Calibration Check (P0F2408-CCV1)				Prepared &	Analyzed:	06/24/20				
Benzene	0.103	0.00100	mg/kg wet	0.100		103	80-120			
Toluene	0.102	0.00500	"	0.100		102	80-120			
Ethylbenzene	0.109	0.00500	"	0.100		109	80-120			
Xylene (p/m)	0.209	0.00500	"	0.200		104	80-120			
Xylene (o)	0.113	0.00500	"	0.100		113	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		91.1	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

Permian	Basin	Environmental	Lab,	L.P.
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2408 - General Preparation (GC)										
Calibration Check (P0F2408-CCV2)				Prepared &	analyzed:	06/24/20				
Benzene	0.100	0.00100	mg/kg wet	0.100		100	80-120			
Toluene	0.111	0.00500	"	0.100		111	80-120			
Ethylbenzene	0.106	0.00500	"	0.100		106	80-120			
Xylene (p/m)	0.198	0.00500	"	0.200		99.0	80-120			
Xylene (o)	0.107	0.00500	"	0.100		107	80-120			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		95.2	75-125			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.4	75-125			
Calibration Check (P0F2408-CCV3)				Prepared: ()6/24/20 At	nalyzed: 06	/25/20			
Benzene	0.103	0.00100	mg/kg wet	0.100		103	80-120			
Toluene	0.102	0.00500		0.100		102	80-120			
Ethylbenzene	0.106	0.00500		0.100		106	80-120			
Xylene (p/m)	0.201	0.00500		0.200		100	80-120			
Xylene (o)	0.112	0.00500	"	0.100		112	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		86.0	75-125			
Matrix Spike (P0F2408-MS1)	Sou	rce: 0F23002	-01	Prepared: ()6/24/20 At	nalyzed: 06	/25/20			
Benzene	0.0946	0.00111	mg/kg dry	0.111	0.00890	77.2	80-120			QM-05
Toluene	0.0951	0.00556	"	0.111	0.0102	76.3	80-120			QM-05
Ethylbenzene	0.107	0.00556	"	0.111	ND	96.7	80-120			
Xylene (p/m)	0.188	0.00556		0.222	0.00749	81.2	80-120			
Xylene (o)	0.0931	0.00556		0.111	ND	83.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.132		"	0.133		98.8	75-125			
Surrogate: 4-Bromofluorobenzene	0.134		"	0.133		100	75-125			
Matrix Spike Dup (P0F2408-MSD1)	Sou	rce: 0F23002	-01	Prepared: ()6/24/20 At	nalyzed: 06	/25/20			
Benzene	0.0934	0.00111	mg/kg dry	0.111	0.00890	76.1	80-120	1.44	20	QM-0
Toluene	0.0934	0.00556		0.111	0.0102	74.8	80-120	2.00	20	QM-05
Ethylbenzene	0.103	0.00556	"	0.111	ND	93.1	80-120	3.82	20	
Xylene (p/m)	0.184	0.00556		0.222	0.00749	79.5	80-120	2.09	20	QM-05
Xylene (o)	0.100	0.00556	"	0.111	ND	90.1	80-120	7.33	20	
Surrogate: 1,4-Difluorobenzene	0.128		"	0.133		96.0	75-125			
	0.127		"	0.133		94.9	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2409 - General Preparation (GC)										
Blank (P0F2409-BLK1)				Prepared: ()6/24/20 Ar	nalyzed: 06	/25/20			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.00500	"							
Xylene (o)	ND	0.00500	"							
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.5	75-125			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		85.7	75-125			
LCS (P0F2409-BS1)				Prepared: ()6/24/20 Ar	nalyzed: 06	/25/20			
Benzene	0.106	0.00100	mg/kg wet	0.100		106	70-130			
Toluene	0.105	0.00500	"	0.100		105	70-130			
Ethylbenzene	0.112	0.00500	"	0.100		112	70-130			
Xylene (p/m)	0.213	0.00500	"	0.200		106	70-130			
Xylene (o)	0.114	0.00500	"	0.100		114	70-130			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		85.7	75-125			
LCS Dup (P0F2409-BSD1)				Prepared: ()6/24/20 Ar	nalyzed: 06	/25/20			
Benzene	0.103	0.00100	mg/kg wet	0.100		103	70-130	2.65	20	
Toluene	0.103	0.00500	"	0.100		103	70-130	2.02	20	
Ethylbenzene	0.112	0.00500	"	0.100		112	70-130	0.411	20	
Xylene (p/m)	0.211	0.00500	"	0.200		105	70-130	0.774	20	
Xylene (o)	0.113	0.00500	"	0.100		113	70-130	0.590	20	
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.5	75-125			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.8	75-125			
Calibration Check (P0F2409-CCV1)				Prepared: ()6/24/20 Ar	nalyzed: 06	/25/20			
Benzene	0.103	0.00100	mg/kg wet	0.100		103	80-120			
Toluene	0.102	0.00500	"	0.100		102	80-120			
Ethylbenzene	0.106	0.00500	"	0.100		106	80-120			
Xylene (p/m)	0.201	0.00500	"	0.200		100	80-120			
Xylene (o)	0.112	0.00500	"	0.100		112	80-120			
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		86.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.6	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
		Linit	Onito	Level	nesun	JUILE	Linins	NI D	Linit	110105
Batch P0F2409 - General Preparation (GC	<u>(</u>)									
Calibration Check (P0F2409-CCV2)				Prepared: (06/24/20 At	nalyzed: 06	/25/20			
Benzene	0.100	0.00100	mg/kg wet	0.100		100	80-120			
Toluene	0.0992	0.00500	"	0.100		99.2	80-120			
Ethylbenzene	0.104	0.00500	"	0.100		104	80-120			
Xylene (p/m)	0.196	0.00500	"	0.200		97.9	80-120			
Xylene (o)	0.108	0.00500		0.100		108	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.0	75-125			
Calibration Check (P0F2409-CCV3)				Prepared: ()6/24/20 Ai	nalyzed: 06	/25/20			
Benzene	0.0990	0.00100	mg/kg wet	0.100		99.0	80-120			
Toluene	0.0970	0.00500		0.100		97.0	80-120			
Ethylbenzene	0.100	0.00500		0.100		100	80-120			
Xylene (p/m)	0.186	0.00500		0.200		92.9	80-120			
Xylene (o)	0.101	0.00500	"	0.100		101	80-120			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		84.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.8	75-125			
Matrix Spike (P0F2409-MS1)	Sou	rce: 0F23004	-05	Prepared: ()6/24/20 At	nalyzed: 06	/25/20			
Benzene	0.0869	0.00103	mg/kg dry	0.103	ND	84.3	80-120			
Toluene	0.0786	0.00515	"	0.103	0.00772	68.7	80-120			QM-0
Ethylbenzene	0.0863	0.00515	"	0.103	0.00652	77.4	80-120			QM-0
Xylene (p/m)	0.147	0.00515	"	0.206	0.0257	59.0	80-120			QM-0
Xylene (o)	0.0800	0.00515	"	0.103	0.00676	71.1	80-120			QM-0
Surrogate: 1,4-Difluorobenzene	0.120		"	0.124		96.7	75-125			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.124		96.2	75-125			
Matrix Spike Dup (P0F2409-MSD1)	Sou	irce: 0F23004	-05	Prepared: (06/24/20 At	nalyzed: 06	/25/20			
Benzene	0.0849	0.00103	mg/kg dry	0.103	ND	82.4	80-120	2.33	20	
Toluene	0.0771	0.00515	"	0.103	0.00772	67.2	80-120	2.18	20	QM-0
Ethylbenzene	0.0842	0.00515		0.103	0.00652	75.3	80-120	2.71	20	QM-0
Xylene (p/m)	0.137	0.00515	"	0.206	0.0257	54.0	80-120	8.89	20	QM-0
Xylene (o)	0.0726	0.00515		0.103	0.00676	63.9	80-120	10.6	20	QM-0
Surrogate: 1,4-Difluorobenzene	0.121		"	0.124		97.8	75-125			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.124		90.3	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2905 - General Preparation (C	GC)									
Blank (P0F2905-BLK1)				Prepared: (06/29/20 Ar	nalyzed: 06	/30/20			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		89.3	75-125			
LCS (P0F2905-BS1)				Prepared: (06/29/20 Ar	nalyzed: 06	/30/20			
Benzene	0.0984	0.00100	mg/kg wet	0.100		98.4	70-130			
Toluene	0.0950	0.00100	"	0.100		95.0	70-130			
Ethylbenzene	0.103	0.00100	"	0.100		103	70-130			
Xylene (p/m)	0.197	0.00200	"	0.200		98.7	70-130			
Xylene (o)	0.103	0.00100	"	0.100		103	70-130			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.7	75-125			
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		89.8	75-125			
LCS Dup (P0F2905-BSD1)				Prepared: ()6/29/20 Ar	nalyzed: 06	/30/20			
Benzene	0.103	0.00100	mg/kg wet	0.100		103	70-130	4.53	20	
Toluene	0.102	0.00100	"	0.100		102	70-130	7.31	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	70-130	0.543	20	
Xylene (p/m)	0.207	0.00200	"	0.200		104	70-130	4.85	20	
Xylene (o)	0.109	0.00100	"	0.100		109	70-130	5.50	20	
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.4	75-125			
Calibration Blank (P0F2905-CCB1)				Prepared: (06/29/20 Ar	nalyzed: 06	/30/20			
Benzene	0.00		mg/kg wet							
Toluene	0.420		"							
Ethylbenzene	0.330		"							
Xylene (p/m)	0.530		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		87.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.7	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2905 - General Preparation (G0	C)									
Calibration Blank (P0F2905-CCB2)				Prepared: ()6/29/20 Aı	nalyzed: 06	/30/20			
Benzene	0.00		mg/kg wet							
Toluene	0.770		"							
Ethylbenzene	0.620		"							
Xylene (p/m)	1.12		"							
Xylene (o)	0.470		"							
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		92.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		93.8	75-125			
Calibration Blank (P0F2905-CCB3)				Prepared: ()6/29/20 Ai	nalyzed: 06	/30/20			
Benzene	0.00		mg/kg wet							
Toluene	0.410		"							
Ethylbenzene	0.400		"							
Xylene (p/m)	1.03		"							
Xylene (o)	0.390		"							
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.8	75-125			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.6	75-125			
Calibration Check (P0F2905-CCV1)				Prepared: ()6/29/20 Aı	nalyzed: 06	/30/20			
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.104	0.00100	"	0.100		104	80-120			
Ethylbenzene	0.109	0.00100	"	0.100		109	80-120			
Xylene (p/m)	0.210	0.00200	"	0.200		105	80-120			
Xylene (o)	0.113	0.00100	"	0.100		113	80-120			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		87.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		96.2	75-125			
Calibration Check (P0F2905-CCV2)				Prepared: ()6/29/20 Aı	nalyzed: 06	/30/20			
Benzene	0.104	0.00100	mg/kg wet	0.100		104	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.197	0.00200	"	0.200		98.5	80-120			
Xylene (o)	0.109	0.00100	"	0.100		109	80-120			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.8	75-125			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.8	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2905 - General Preparation (0	GC)									
Calibration Check (P0F2905-CCV3)				Prepared: (06/29/20 A	nalyzed: 06	/30/20			
Benzene	0.101	0.00100	mg/kg wet	0.100		101	80-120			
Toluene	0.0970	0.00100	"	0.100		97.0	80-120			
Ethylbenzene	0.0973	0.00100	"	0.100		97.3	80-120			
Xylene (p/m)	0.185	0.00200	"	0.200		92.6	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.5	75-125			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.5	75-125			
Matrix Spike (P0F2905-MS1)	Sou	rce: 0F26003	-01	Prepared: (06/29/20 A	nalyzed: 06	/30/20			
Benzene	0.0778	0.00110	mg/kg dry	0.110	ND	70.8	80-120			QM-0
Toluene	0.0679	0.00110	"	0.110	ND	61.8	80-120			QM-0
Ethylbenzene	0.0606	0.00110	"	0.110	ND	55.2	80-120			QM-0
Xylene (p/m)	0.158	0.00220	"	0.220	ND	71.9	80-120			QM-0
Xylene (o)	0.0859	0.00110		0.110	ND	78.2	80-120			QM-0
Surrogate: 1,4-Difluorobenzene	0.127		"	0.132		96.4	75-125			
Surrogate: 4-Bromofluorobenzene	0.120		"	0.132		91.0	75-125			
Matrix Spike Dup (P0F2905-MSD1)	Sou	rce: 0F26003	-01	Prepared: (06/29/20 A	nalyzed: 06	/30/20			
Benzene	0.0898	0.00110	mg/kg dry	0.110	ND	81.7	80-120	14.2	20	
Toluene	0.0809	0.00110	"	0.110	ND	73.6	80-120	17.4	20	QM-0
Ethylbenzene	0.0733	0.00110	"	0.110	ND	66.7	80-120	19.0	20	QM-0
Xylene (p/m)	0.179	0.00220	"	0.220	ND	81.4	80-120	12.4	20	
Xylene (o)	0.0977	0.00110	"	0.110	ND	88.9	80-120	12.8	20	
Surrogate: 4-Bromofluorobenzene	0.120		"	0.132		91.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.128		"	0.132		97.1	75-125			
Batch P0G0105 - General Preparation (GC)									
Blank (P0G0105-BLK1)				Prepared &	analyzed:	07/01/20				
Benzene	ND	0.00100	mg/kg wet		-					
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100								
Xylene (p/m)	ND	0.00200								
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		89.6	75-125			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.0	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

Benzene 0.0939 0.0010 mgkg wet 0.100 93.9 70-130 Toluene 0.0924 0.0010 " 0.100 92.4 70-130 Ehylphenzene 0.0952 0.00100 " 0.100 92.4 70-130 Xylene (pin) 0.188 0.0020 " 0.200 93.8 70-130 Surrogate: 4.Bromfuluorobenzene 0.010 " 0.100 97.5 75-125 Surrogate: 4.Bromfuluorobenzene 0.101 " 0.120 89.7 75-125 Surogate: 4.Bromfuluorobenzene 0.101 mgk wet 0.100 100 70-130 8.4 20 Surogate: 4.Bromfuluorobenzene 0.101 mgk wet 0.100 100 8.4 20 Surogate: 4.Bromfuluorobenzene 0.100 0.001 9.8 70-130 8.4 20 Surogate: 4.Bromfuluorobenzene 0.100 0.001 9.8 70-130 8.7 20 Surogate: 4.Bromfuluorobenzene 0.101 10.0 9.10 10.7 20 </th <th></th>											
Barke PUG0105 - General Preparation (GC) Barke PUG0105 - General Preparation (GC) Benzene 0.00100 menzene 0.00100 menzene 0.100 93.9 0.00100 9.100 93.9 0.00100 9.100 93.9 7.130 Strengte: Jacobia Market Ma		D I		T T 1 .	-		ANDEC		000		N T - (
DCs (PPGO105-HS1) Prepared & Analyzet: 07/01/20' Brazens 0.099 0.0000 ngk wet 0.100 93.9 70-130 Tolacens 0.0992 0.00100 - 0.100 95.2 70-130 Ethylbenzens 0.0952 0.0100 - 0.100 95.2 70-130 Sylens (o'n) 0.188 0.0200 - 0.010 97.5 75-125 Swrogate: 1,4.0/fluorobenzene 0.101 - 0.120 97.7 75-125 Swrogate: 1,4.0/fluorobenzene 0.101 0.0100 mgk wet 0.100 70-130 6.53 20 Brazene 0.100 0.0100 mgk wet 0.100 70-130 8.44 20 Ethylbenzene 0.0010 - 0.100 90.10 8.04 20 Syrogate: 1,4.0/fluorobenzene 0.0010 - 0.100 9.13 8.30 20 Syrogate: 1,4.0/fluorobenzene 0.010 - 0.100 9.13 7,125 - - <tr< td=""><td>Analyte</td><td>Result</td><td>Limit</td><td>Units</td><td>Level</td><td>Result</td><td>%REC</td><td>Limits</td><td>RPD</td><td>Limit</td><td>Notes</td></tr<>	Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Benzene 0.0939 0.0010 mg/kg wet 0.100 93.9 70-130 Toluene 0.0924 0.0010 * 0.100 92.4 70-130 Kiphylensene 0.0952 0.00100 * 0.100 92.5 70-130 Xylene (p'm) 0.188 0.0020 * 0.100 97.5 70-130 Surrogate: 4.9700 0000 0.010 97.5 70-130 * * Surrogate: 4.9700 0000 87.7 7.5-125 * * * Surrogate: 4.9700 0000 100 97.5 7.5-125 * * Surrogate: 4.9700 0000 100 98.97 7.5-125 * * Benzene 0.101 0.0100 1000 1000 8.04 20 Surrogate: 4.9700 0.010 * 0.100 1000 8.04 20 Surrogate: 4.9700 0.010 * 0.120 9.13 8.04 20	Batch P0G0105 - General Preparation (G	C)									
Toluene 0.0924 0.0010 0.100 92.4 70-130 Edhylsenzene 0.0952 0.00100 0.100 95.2 70-130 Xylene (p'm) 0.188 0.00200 0.200 93.8 70-130 Surrogate: 1.470 (huorobenzene 0.108 "0.120 89.7 75-125 Surrogate: 1.470 (huorobenzene 0.100 0.010 0.95.7 75-125 Benzene 0.100 0.00100 ngkg wet 0.100 100 6.53 20 Toluene 0.100 0.00100 ngkg wet 0.100 100 70-130 8.04 20 Edhylsenzene 0.0081 0.00100 ngkg wet 0.100 100 70-130 8.04 20 Stylene (p'm) 0.204 0.00200 0.200 102 70-130 8.30 20 Surrogate: 1.47.01 (huorobenzene 0.117 "0.120 95.5 75-125 " " Surrogate: 1.47.01 (huorobenzene 0.110 "0.120 94.6 75-125 " " 1 S	LCS (P0G0105-BS1)				Prepared &	Analyzed:	07/01/20				
Balylenzene 0.0952 0.0100 " 0.100 95.2 70-130 Xylene (n) 0.08 0.000 " 0.200 93.8 70-130 Xylene (n) 0.097 0.000 " 0.100 97.5 70-130 Surrogate: 1,4-Difluorobenzene 0.07 0.100 97.5 70-130 Banzene 0.010 1.012 95.7 75-125 Benzene 0.00 0.0010 mgk svet 0.100 100 70-130 6.53 20 Benzene 0.0010 0.0010 " 0.100 100 70-130 8.30 20 Sylene (n/m) 0.010 0.0010 " 0.100 100 70-130 8.30 20 Sylene (n/m) 0.0204 0.0200 " 0.200 102 70-130 8.30 20 Sylene (n/m) 0.019 0.0100 " 0.100 109 70-130 8.30 20 Sylene (n/m) 0.115 " 0.120 92.0 75-15	Benzene	0.0939	0.00100	mg/kg wet	0.100		93.9	70-130			
Ny 0.188 0.0020 " 0.200 93.8 70-130 Sylene (p/n) 0.0075 0.0100 " 0.100 97.5 70-130 Surrogate: 4-Bromofluorobenzene 0.108 " 0.120 89.7 75-125 Surrogate: 1-4-Difluorobenzene 0.105 " 0.120 89.7 75-125 Benzene 0.010 0.00100 mg/k wet 0.100 100 70-130 6.53 20 Toluene 0.00 0.00100 " 0.100 100 70-130 8.44 20 Sylene (p/n) 0.0010 0.00100 " 0.100 100 70-130 8.30 20 Sylene (p/n) 0.0104 0.00100 " 0.100 98.1 70-130 8.30 20 Sylene (p/n) 0.019 0.0100 " 0.100 98.1 70-130 8.30 20 Sylene (p/n) 0.109 0.0100 " 0.120 95.5 75-125 5 5 5 5 5 5 5 5 5 5	Toluene	0.0924	0.00100	"	0.100		92.4	70-130			
Xylen (a) 0.0975 0.0100 " 0.100 97.5 70-130 Surrogate: 4-Bromofluorobenzene 0.108 " 0.120 88.7 75-125 Surrogate: 1,4-Difluorobenzene 0.101 " 0.120 95.7 75-125 LCS Dup (PGC0105-BSD1) Prepared & Analyzed: 07/01/20 8.04 20 Benzene 0.100 0.00100 " 0.100 100 8.04 20 Ethylbenzene 0.0981 0.00100 " 0.100 98.1 70-130 8.04 20 Sturrogate: 1,4-Difluorobenzene 0.0981 0.00100 " 0.100 98.1 70-130 8.04 20 Sturrogate: 1,4-Difluorobenzene 0.010 0.0010 " 0.100 109 70-130 8.30 20 Sturrogate: 1,4-Difluorobenzene 0.115 " 0.120 95.5 75-125 5 Sturrogate: 1,4-Difluorobenzene 0.110 " 0.120 94.3 75-125 5 5 5 5 5 5 5 5 5 5 5 5	Ethylbenzene	0.0952	0.00100	"	0.100		95.2	70-130			
Normagnic + Abromalituarobenzene 0.108 " 0.120 89.7 75-125 Surrogatic : 1,4-Diftuorobenzene 0.115 " 0.120 95.7 75-125 LCS Dup (P0C0105-BSD1) Prepared & Analyzed: 07/01/20 Benzene 0.100 0.00100 " 0.100 100 70-130 6.53 20 Toluene 0.100 0.00100 " 0.100 100 70-130 8.04 20 Sylene (pm) 0.204 0.00200 " 0.100 100 70-130 8.04 20 Sylene (pm) 0.204 0.00200 " 0.100 109 70-130 8.04 20 Sylene (pm) 0.204 0.00200 " 0.100 109 70-130 10.7 20 Surrogatic : 1.4-Diffuorobenzene 0.110 " 0.120 95.5 75-125 Surrogatic : 1.4-Diffuorobenzene 0.110 " 0.120 94.3 75-125 Surrogatic : 1.4-Diffuorobenzene 0.320 " Surrogatic : 1	Xylene (p/m)	0.188	0.00200	"	0.200		93.8	70-130			
analogies Performantation element 0.100 0.113 7.12 7.5-125 LCS Dup (PG0105-BSD1) Prepared & Analyzed: 07/01/20 6.53 20 Banzene 0.100 0.00100 " 0.100 70-130 8.04 20 Ehtylbenzene 0.0081 0.00100 " 0.100 100 70-130 8.04 20 Ehtylbenzene 0.0981 0.00100 " 0.100 98.1 70-130 8.04 20 Sylene (p/m) 0.204 0.00100 " 0.100 98.1 70-130 8.30 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.120 95.5 75-125 75-125 Surrogate: 1.4-Difluorobenzene 0.110 " 0.120 92.0 75-125 75-125 Surrogate: 1.4-Difluorobenzene 0.100 " 0.120 92.0 75-125 75-125 Surrogate: 1.4-Difluorobenzene 0.300 " 0.120 94.3 75-125 75-125 Surrogate: 1.4-Difluorobenzene 0.131 " 0.120 94.3 75-125 75-125	Xylene (o)	0.0975	0.00100	"	0.100		97.5	70-130			
Darrogate 1,9-12 yuborobeneene 1,9-12 yuborobeneene LCS Dup (POG0165-BSD1) Prepared & Analyzed: 07/01/20 Benzene 0.100 0.00100 ng/kg wet 0.100 100 70-130 8.04 20 Benzene 0.0981 0.00100 " 0.100 98.1 70-130 2.91 20 Kylene (p/m) 0.204 0.00200 " 0.100 109 70-130 8.30 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.100 109 70-130 8.30 20 Surrogate: 1.4-Difluorobenzene 0.109 0.00100 " 0.100 109 70-130 8.30 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.120 92.0 75-125 T T T 10 20 <	Surrogate: 4-Bromofluorobenzene	0.108		"	0.120		89.7	75-125			
Benzene 0.100 0.00100 mg/kg wet 0.100 100 70-130 6.53 20 Toluene 0.100 0.00100 " 0.100 100 70-130 8.04 20 Ethylbenzene 0.0981 0.00100 " 0.100 98.1 70-130 2.91 20 Xylene (p'm) 0.204 0.00200 " 0.200 102 70-130 8.07 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.120 92.0 75-125 Termination Blank (PGG0105-CCB1) Prepared & Analyzed: 07/01/20 75-125 Termination Blank (PGG0105-CCB1) " 0.120 92.0 75-125 Termination Blank (PGG0105-CCB1) " 0.120 92.0 75-125 Termination Blank (PGG0105-CCB1) " 0.120 92.0 75-125 Termination Blank (PGG0105-CCB1) " Termination Blank (PGG0105-CCB2) " Termination Blank (PGG0105-CCB2) " Termination Blank (PGG0105-CCB2) Termination Blank (PGG0105-CCB2) Termination Blank (PGG0105-CCB2) Termination Blank (PGG0105-CCB2) Termination Blank	Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.7	75-125			
Toluene 0.00 0.00100 0.0100 100 70.130 8.04 20 Ethylbenzene 0.0981 0.00100 0.100 98.1 70.130 2.91 20 Xylene (p/m) 0.204 0.00200 " 0.200 102 70.130 8.30 20 Xylene (p/m) 0.204 0.00200 " 0.200 102 70.130 8.30 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.120 95.5 75.125 5 Surrogate: 4-Bromofluorobenzene 0.110 " 0.120 92.0 75.125 5 Surrogate: 4-Bromofluorobenzene 0.100 " 0.120 92.0 75.125 5 Surrogate: 4-Bromofluorobenzene 0.101 " 0.120 92.0 75.125 5 Ethylbenzene 0.320 " " 1.120 94.3 75.125 5 Surrogate: 1.4-Difluorobenzene 0.113 " 0.120 94.6 75.125 5 Surrogate: 1.4-Difluorobenzene 0.131 " 0.120 94.6	LCS Dup (P0G0105-BSD1)				Prepared &	Analyzed:	07/01/20				
Ethylbezene 0.0981 0.000 " 0.100 98.1 70-130 2.91 20 Xylene (y'm) 0.204 0.0020 " 0.200 102 70-130 8.30 20 Xylene (y'm) 0.109 0.0100 " 0.100 109 70-130 8.70 20 Xylene (y'm) 0.010 0.0100 " 0.100 109 70-130 8.70 20 Surrogate: 1.4-Diffuorobenzene 0.117 " 0.120 92.0 75-125 - - - - - 100 100 107 20 <t< td=""><td>Benzene</td><td>0.100</td><td>0.00100</td><td>mg/kg wet</td><td>0.100</td><td></td><td>100</td><td>70-130</td><td>6.53</td><td>20</td><td></td></t<>	Benzene	0.100	0.00100	mg/kg wet	0.100		100	70-130	6.53	20	
Nylene (p/m) 0.204 0.00200 " 0.200 102 70-130 8.30 20 Xylene (o) 0.109 0.00100 " 0.100 109 70-130 10.7 20 Surrogate: 1.4-Difluorobenzene 0.115 " 0.120 95.5 75-125 - - - Catibration Blank (P0G0105-CCB1) Prepared & Analyzed: 07/01/20 P <th< td=""><td>Toluene</td><td>0.100</td><td>0.00100</td><td>"</td><td>0.100</td><td></td><td>100</td><td>70-130</td><td>8.04</td><td>20</td><td></td></th<>	Toluene	0.100	0.00100	"	0.100		100	70-130	8.04	20	
Append (p) 0.000 0.000 0.000 102 102 0.000 102 </td <td>Ethylbenzene</td> <td>0.0981</td> <td>0.00100</td> <td>"</td> <td>0.100</td> <td></td> <td>98.1</td> <td>70-130</td> <td>2.91</td> <td>20</td> <td></td>	Ethylbenzene	0.0981	0.00100	"	0.100		98.1	70-130	2.91	20	
Surrogate: 1,4-Diffuorobenzene 0,115 " 0,120 95.5 75-125 Surrogate: 4-Bromofluorobenzene 0,110 " 0,120 92.0 75-125 Calibration Blank (P0G0105-CCB1) Prepared & Analyzed: 07/01/20 Benzene 0.00 mg/kg wet Toluene 0.470 " - Ehylbenzene 0.320 " - Xylene (p/m) 0.640 " - Surrogate: 1,4-Difluorobenzene 0,113 " 0,120 94.3 75-125 Surrogate: 1,4-Difluorobenzene 0,113 " 0,120 94.6 75-125 Surrogate: 4-Bromofluorobenzene 0,113 " 0,120 94.6 75-125 Calibration Blank (P0G0105-CCB2) Prepared & Analyzed: 07/01/20 - - Benzene 0.330 mg/kg wet - - - - Surrogate: 4-Bromofluorobenzene 0.530 " - - -	Xylene (p/m)	0.204	0.00200	"	0.200		102	70-130	8.30	20	
Jahr egite: 1,10 1,10 1,10 1,51 1,513 1,513 Surrogate: 4,870 " 0.120 92,0 75-125 Calibration Blank (POG0105-CCB1) Prepared & Analyzed: 07/01/20 Benzene 0.00 mg/kg wet Toluene 0.470 " Kylene (p/m) 0.640 " Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0,113 " Oluene 0,113 " 0,120 94,3 Toluene 0,113 " 0,120 94,6 Toluene 0,680 " " Toluene 0,680 " " Toluene 0,530 " " Sylene (p/m) 3,19 " " Xylene (o) 0,800 " "	Xylene (o)	0.109	0.00100	"	0.100		109	70-130	10.7	20	
Prepared & Analyzed: 07/01/20 Benzene 0.00 mg/kg wet Toluene 0.470 " Ethylbenzene 0.320 " Version (1000) Xylene (p/m) 0.640 " Version (1000) Tolueno Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Calibration Blank (POG0105-CCB2) Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet " " Surrogate: 0.701/20 Surrogate: 1,4-Difluorobenzene 0.330 mg/kg wet " " Surrogate: 0.701/20 Surrogate: 1,4-Difluorobenzene 0.330 mg/kg wet " " " " Surrogate: 0.701/20 Surrogate: 1,4-Difluorobenzene 0.330 " " " " Surrogate: 0.701/20 Surrogate: 1,4-Difluorobenzene 0.530 " " " Surrogate: 0.701/20 Surrogate: 0.701/20 Surrogate: 1,4-Difluorobenzene 0.701 " "	Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.5	75-125			
Benzene 0.00 mg/kg wet Toluene 0.470 " Ethylbenzene 0.320 " Xylene (p/m) 0.640 " Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (POG0105-CCB2) Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet - - - Toluene 0.680 " - - - Ethylbenzene 0.530 " - - - Sylene (p/m) 3.19 " - - - - Surrogate: 1,4-Difluorobenzene 0.800 " -	Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		92.0	75-125			
Toluene 0.470 " Ethylbenzene 0.320 " Xylene (p/m) 0.640 " Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (P0G0105-CCB2) Prepared & Analyzed: 07/01/20 94.6 75-125 Benzene 0.330 mg/kg wet - - Toluene 0.680 " - - Kylene (p/m) 3.19 " - - - - Xylene (o) 0.800 " 0.120 93.8 75-125	Calibration Blank (P0G0105-CCB1)				Prepared &	Analyzed:	07/01/20				
Indication 0.470 Ethylbenzene 0.320 " Xylene (p/m) 0.640 " Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (POG0105-CCB2) Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 "	Benzene	0.00		mg/kg wet							
Entrybenzene 0.520 Xylene (p/m) 0.640 " Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (POG0105-CCB2) Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet " - - Toluene 0.680 " - - - Ethylbenzene 0.530 " - - - Xylene (p/m) 3.19 " - - - Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Toluene	0.470		"							
Xylene (o) 0.00 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (POG0105-CCB2) Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Ethylbenzene	0.320		"							
Xylene (6) 0.00 Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 94.3 75-125 Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (P0G0105-CCB2) Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 "	Xylene (p/m)	0.640		"							
Surrogate: 4-Bromofluorobenzene 0.113 " 0.120 94.6 75-125 Calibration Blank (P0G0105-CCB2) Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 "	Xylene (o)	0.00		"							
Calibration Blank (P0G0105-CCB2) Prepared & Analyzed: 07/01/20 Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.3	75-125			
Benzene 0.330 mg/kg wet Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Surrogate: 4-Bromofluorobenzene	0.113		"	0.120		94.6	75-125			
Toluene 0.680 " Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Calibration Blank (P0G0105-CCB2)				Prepared &	Analyzed:	07/01/20				
Indicate 0.680 Ethylbenzene 0.530 " Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Benzene	0.330		mg/kg wet							
Xylene (p/m) 3.19 " Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Toluene	0.680		"							
Xylene (o) 0.800 " Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Ethylbenzene	0.530		"							
Surrogate: 1,4-Difluorobenzene 0.113 " 0.120 93.8 75-125	Xylene (p/m)	3.19		"							
Surrogate. 1,4-Dijutorobenzene 0.115 0.120 95.0 /5-125	Xylene (o)	0.800		"							
Surrogate: 4-Bromofluorobenzene 0.110 " 0.120 91.4 75-125	Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		93.8	75-125			
	Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.4	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0G0105 - General Preparation (GC)									
Calibration Blank (P0G0105-CCB3)				Prepared: (07/01/20 Ar	nalyzed: 07	/02/20			
Benzene	0.00		mg/kg wet							
Toluene	0.940		"							
Ethylbenzene	0.830		"							
Xylene (p/m)	1.70		"							
Xylene (o)	0.690		"							
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		95.4	75-125			
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.7	75-125			
Calibration Check (P0G0105-CCV1)				Prepared &	Analyzed:	07/01/20				
Benzene	0.0967	0.00100	mg/kg wet	0.100		96.7	80-120			
Toluene	0.0949	0.00100	"	0.100		94.9	80-120			
Ethylbenzene	0.0988	0.00100	"	0.100		98.8	80-120			
Xylene (p/m)	0.193	0.00200	"	0.200		96.4	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.7	75-125			
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.8	75-125			
Calibration Check (P0G0105-CCV2)				Prepared &	Analyzed:	07/01/20				
Benzene	0.0981	0.00100	mg/kg wet	0.100		98.1	80-120			
Toluene	0.105	0.00100	"	0.100		105	80-120			
Ethylbenzene	0.0969	0.00100	"	0.100		96.9	80-120			
Xylene (p/m)	0.208	0.00200	"	0.200		104	80-120			
Xylene (o)	0.0996	0.00100	"	0.100		99.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.9	75-125			
Calibration Check (P0G0105-CCV3)				Prepared: (07/01/20 Ar	nalyzed: 07	/02/20			
Benzene	0.103	0.00100	mg/kg wet	0.100		103	80-120			
Toluene	0.100	0.00100	"	0.100		100	80-120			
Ethylbenzene	0.102	0.00100	"	0.100		102	80-120			
Xylene (p/m)	0.193	0.00200	"	0.200		96.6	80-120			
Xylene (o)	0.106	0.00100	"	0.100		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.2	75-125			
Surrogate: 4-Bromofluorobenzene	0.105		"	0.120		87.5	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: X	XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062	2/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia F	Reynolds	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch P0G0105 - General Preparation (GC)

Matrix Spike (P0G0105-MS1)	Sour	ce: 0G01013	8-06	Prepared:	07/01/20 An	alyzed: 07	7/02/20			
Benzene	0.0887	0.00104	mg/kg dry	0.104	ND	85.1	80-120			
Toluene	0.0807	0.00104	"	0.104	0.00614	71.5	80-120			QM-10
Ethylbenzene	0.0840	0.00104	"	0.104	0.00539	75.5	80-120			QM-10
Xylene (p/m)	0.147	0.00208	"	0.208	0.0263	58.1	80-120			QM-10
Xylene (o)	0.0791	0.00104	"	0.104	0.0104	66.0	80-120			QM-10
Surrogate: 4-Bromofluorobenzene	0.109		"	0.125		87.1	75-125			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.125		97.5	75-125			
Matrix Spike Dup (P0G0105-MSD1)	Sour	ce: 0G01013	8-06	Prepared:	07/01/20 An	alyzed: 07	7/02/20			
Benzene	0.0876	0.00104	mg/kg dry	0.104	ND	84.1	80-120	1.25	20	
Toluene	0.0790	0.00104	"	0.104	0.00614	69.9	80-120	2.29	20	QM-10
Ethylbenzene	0.0830	0.00104	"	0.104	0.00539	74.5	80-120	1.29	20	QM-10
Xylene (p/m)	0.146	0.00208	"	0.208	0.0263	57.4	80-120	1.20	20	QM-10
Xylene (o)	0.0800	0.00104	"	0.104	0.0104	66.8	80-120	1.24	20	QM-10
Surrogate: 4-Bromofluorobenzene	0.108		"	0.125		86.6	75-125			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.125		97.4	75-125			

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

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 P0F2310 - *** DEFAULT PREP ***										
Blank (P0F2310-BLK1)				Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	ND	1.00	mg/kg wet							
LCS (P0F2310-BS1)				Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	407	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P0F2310-BSD1)				Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	413	1.00	mg/kg wet	400		103	80-120	1.61	20	
Calibration Check (P0F2310-CCV1)				Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	20.1		mg/kg	20.0		100	0-200			
Calibration Check (P0F2310-CCV2)				Prepared:	06/23/20 A	nalyzed: 06	5/24/20			
Chloride	20.0		mg/kg	20.0		100	0-200			
Matrix Spike (P0F2310-MS1)	Sou	rce: 0F23003	-01	Prepared: 06/23/20 Analyzed: 06/24/20						
Chloride	623	1.04	mg/kg dry	521	168	87.4	80-120			
Matrix Spike (P0F2310-MS2)	Sou	rce: 0F23004	-10	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	508	1.04	mg/kg dry	521	38.3	90.2	80-120			
Matrix Spike Dup (P0F2310-MSD1)	Sou	rce: 0F23003	-01	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	598	1.04	mg/kg dry	521	168	82.5	80-120	4.10	20	
Matrix Spike Dup (P0F2310-MSD2)	Sou	rce: 0F23004	-10	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
Chloride	523	1.04	mg/kg dry	521	38.3	93.1	80-120	2.94	20	
Batch P0F2401 - *** DEFAULT PREP ***										
Blank (P0F2401-BLK1)				Prepared &	& Analyzed:	06/24/20				
% Moisture	ND	0.1	%							

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2401 - *** DEFAULT PREP ***										
Duplicate (P0F2401-DUP1)	Sou	rce: 0F23004-	13	Prepared &	Analyzed:	06/24/20				
% Moisture	8.0	0.1	%		7.0			13.3	20	
Duplicate (P0F2401-DUP2)	Sou	rce: 0F23009-	01	Prepared &	Analyzed:	06/24/20				
% Moisture	14.0	0.1	%		13.0			7.41	20	
Duplicate (P0F2401-DUP3)	Sou	rce: 0F23009-	14	Prepared &	z Analyzed:	06/24/20				
% Moisture	12.0	0.1	%	*	12.0			0.00	20	
Batch P0F2403 - *** DEFAULT PREP ***										
Blank (P0F2403-BLK1)				Prepared &	Analyzed:	06/24/20				
Chloride	ND	1.00	mg/kg wet							
LCS (P0F2403-BS1)				Prepared &	Analyzed:	06/24/20				
Chloride	420	1.00	mg/kg wet	400		105	80-120			
LCS Dup (P0F2403-BSD1)				Prepared &	Analyzed:	06/24/20				
Chloride	404	1.00	mg/kg wet	400	~	101	80-120	3.88	20	
Calibration Check (P0F2403-CCV1)				Prepared &	Analyzed:	06/24/20				
Chloride	18.9		mg/kg	20.0	•	94.4	0-200			
Calibration Check (P0F2403-CCV2)				Prepared: ()6/24/20 A	nalyzed: 06	/25/20			
Chloride	19.2		mg/kg	20.0		96.1	0-200			
Matrix Spike (P0F2403-MS1)	Sou	rce: 0F23004-	20	Prepared &	Analyzed:	06/24/20				
Chloride	503	1.01	mg/kg dry	505	23.5	94.9	80-120			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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 P0F2403 - *** DEFAULT PREP ***										
Matrix Spike Dup (P0F2403-MSD1)	Source: 0F23004-20 P		Prepared & Analyzed: 06/24/20							
Chloride	479	1.01 m	ng/kg dry	505	23.5	90.3	80-120	4.78	20	

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2305 - TX 1005										
Blank (P0F2305-BLK1)				Prepared &	Analyzed:	06/23/20				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	51.5		"	50.0		103	70-130			
LCS (P0F2305-BS1)				Prepared &	z Analyzed:	06/23/20				
C6-C12	1100	25.0	mg/kg wet	1000		110	75-125			
>C12-C28	1200	25.0	"	1000		120	75-125			
Surrogate: 1-Chlorooctane	114		"	100		114	70-130			
Surrogate: o-Terphenyl	45.0		"	50.0		90.0	70-130			
LCS Dup (P0F2305-BSD1)				Prepared &	z Analyzed:	06/23/20				
C6-C12	1100	25.0	mg/kg wet	1000		110	75-125	0.693	20	
>C12-C28	1220	25.0	"	1000		122	75-125	1.49	20	
Surrogate: 1-Chlorooctane	115		"	100		115	70-130			
Surrogate: o-Terphenyl	45.7		"	50.0		91.4	70-130			
Calibration Blank (P0F2305-CCB1)				Prepared &	Analyzed:	06/23/20				
C6-C12	10.7		mg/kg wet							
>C12-C28	9.85		"							
Surrogate: 1-Chlorooctane	95.7		"	100		95.7	70-130			
Surrogate: o-Terphenyl	48.6		"	50.0		97.1	70-130			
Calibration Blank (P0F2305-CCB2)				Prepared &	Analyzed:	06/23/20				
C6-C12	8.93		mg/kg wet		•					
>C12-C28	17.2		"							
Surrogate: 1-Chlorooctane	99.1		"	100		99.1	70-130			
Surrogate: o-Terphenyl	49.5		"	50.0		99.0	70-130			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2305 - TX 1005										
Calibration Check (P0F2305-CCV1)				Prepared &	analyzed:	06/23/20				
C6-C12	512	25.0	mg/kg wet	500		102	85-115			
>C12-C28	542	25.0	"	500		108	85-115			
Surrogate: 1-Chlorooctane	98.3		"	100		98.3	70-130			
Surrogate: o-Terphenyl	44.0		"	50.0		88.1	70-130			
Calibration Check (P0F2305-CCV2)				Prepared &	analyzed:	06/23/20				
C6-C12	507	25.0	mg/kg wet	500		101	85-115			
>C12-C28	527	25.0		500		105	85-115			
Surrogate: 1-Chlorooctane	98.5		"	100		98.5	70-130			
Surrogate: o-Terphenyl	43.7		"	50.0		87.5	70-130			
Matrix Spike (P0F2305-MS1)	Sou	rce: 0F22005	-10	Prepared:	06/23/20 A	nalyzed: 06	/24/20			
C6-C12	1320	27.5	mg/kg dry	1100	13.4	119	75-125			
>C12-C28	1350	27.5	"	1100	22.2	121	75-125			
Surrogate: 1-Chlorooctane	135		"	110		123	70-130			
Surrogate: o-Terphenyl	55.7		"	54.9		101	70-130			
Matrix Spike Dup (P0F2305-MSD1)	Sou	rce: 0F22005	-10	Prepared:	06/23/20 A	nalyzed: 06	/24/20			
C6-C12	1320	27.5	mg/kg dry	1100	13.4	119	75-125	0.104	20	
>C12-C28	1360	27.5	"	1100	22.2	122	75-125	1.00	20	
Surrogate: 1-Chlorooctane	135		"	110		123	70-130			
Surrogate: o-Terphenyl	57.3		"	54.9		104	70-130			
Batch P0F2307 - TX 1005										
Blank (P0F2307-BLK1)				Prepared &	& Analyzed:	06/23/20				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0								
>C28-C35	ND	25.0	"							

100

50.0

"

"

108

53.7

Permian Basin Environmental Lab, L.P.

Surrogate: 1-Chlorooctane

Surrogate: o-Terphenyl

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

108

107

70-130

70-130

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2307 - TX 1005										
LCS (P0F2307-BS1)				Prepared &	analyzed:	06/23/20				
C6-C12	889	25.0	mg/kg wet	1000		88.9	75-125			
>C12-C28	1010	25.0	"	1000		101	75-125			
Surrogate: 1-Chlorooctane	96.2		"	100		96.2	70-130			
Surrogate: o-Terphenyl	46.8		"	50.0		93.5	70-130			
LCS Dup (P0F2307-BSD1)				Prepared 8	analyzed:	06/23/20				
C6-C12	902	25.0	mg/kg wet	1000		90.2	75-125	1.42	20	
>C12-C28	1010	25.0	"	1000		101	75-125	0.153	20	
Surrogate: 1-Chlorooctane	96.9		"	100		96.9	70-130			
Surrogate: o-Terphenyl	47.3		"	50.0		94.6	70-130			
Calibration Check (P0F2307-CCV1)				Prepared &	د Analyzed:	06/23/20				
C6-C12	502	25.0	mg/kg wet	500		100	85-115			
>C12-C28	527	25.0	"	500		105	85-115			
Surrogate: 1-Chlorooctane	80.8		"	100		80.8	70-130			
Surrogate: o-Terphenyl	39.9		"	50.0		79.9	70-130			
Calibration Check (P0F2307-CCV2)				Prepared &	د Analyzed:	06/23/20				
C6-C12	519	25.0	mg/kg wet	500		104	85-115			
>C12-C28	555	25.0	"	500		111	85-115			
Surrogate: 1-Chlorooctane	91.3		"	100		91.3	70-130			
Surrogate: o-Terphenyl	45.5		"	50.0		91.0	70-130			
Calibration Check (P0F2307-CCV3)				Prepared: (06/23/20 A	nalyzed: 06	/24/20			
C6-C12	531	25.0	mg/kg wet	500		106	85-115			
>C12-C28	545	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	96.4		"	100		96.4	70-130			
Surrogate: o-Terphenyl	48.1		"	50.0		96.2	70-130			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2307 - TX 1005										
Matrix Spike (P0F2307-MS1)	Sour	ce: 0F23004	-02	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
C6-C12	1090	26.9	mg/kg dry	1080	33.6	97.8	75-125			
>C12-C28	1310	26.9	"	1080	188	104	75-125			
Surrogate: 1-Chlorooctane	117		"	108		109	70-130			
Surrogate: o-Terphenyl	57.7		"	53.8		107	70-130			
Matrix Spike Dup (P0F2307-MSD1)	Sour	ce: 0F23004	-02	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
C6-C12	1100	26.9	mg/kg dry	1080	33.6	99.1	75-125	1.29	20	
>C12-C28	1340	26.9	"	1080	188	107	75-125	2.18	20	
Surrogate: 1-Chlorooctane	119		"	108		111	70-130			
Surrogate: o-Terphenyl	58.4		"	53.8		109	70-130			
Dean	Project:	Plains: XTO Perla Verde	Fax:							
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12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051								
Midland TX, 79707	Project Manager:	Sylwia Reynolds								

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
QM-10	LCS/LCSD were analyzed in place of MS/MSD.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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.
BULK	Samples received in Bulk soil containers
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:

nen Barron

7/9/2020

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Date:

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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Permian Basin Environmental Lab, L.P.

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



Revised Analytical Report

Prepared for:

Sylwia Reynolds Dean 12600 W County Rd 91 Midland, TX 79707

Project: Plains-Perla Verde Project Number: PP-2062 Location: Lea County, NM

Lab Order Number: 0H26009



Current Certification

Report Date: 08/27/20

Fax:

Dean	Project:	Plains-Perla Verde
12600 W County Rd 91	Project Number:	PP-2062
Midland TX, 79707	Project Manager:	Sylwia Reynolds

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-1 @ 6" CS-6 @ 6"	0H26009-01	Soil	08/25/20 13:00	08-26-2020 10:46
Pad West SW @ 6"	0H26009-02	Soil	08/25/20 13:20	08-26-2020 10:46
Pad North SW @ 6"	0H26009-03	Soil	08/25/20 14:30	08-26-2020 10:46
Pad South SW @ 6"	0H26009-04	Soil	08/25/20 11:00	08-26-2020 10:46
Pad East SW @ 6"	0H26009-05	Soil	08/25/20 10:30	08-26-2020 10:46
LACT North SW @ 1'	0H26009-06	Soil	08/25/20 11:37	08-26-2020 10:46
LACT South SW @ 1'	0H26009-07	Soil	08/25/20 11:20	08-26-2020 10:46
	0H26009-08	Soil	08/25/20 14:00	08-26-2020 10:46

On 08/27/20 PBELAB was advised by the client to Move these samples to 24 Hour TAT.

On 08/27/20 PBELAB was advised by the client that sample labeled Pad North SW @ 6" time sampled 230/1430 lab number on COC #3 should be renamed to Pad West SW @ 6"

Dean	Project:	Plains-Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

CS-1 @ 6''

0H26009-01 (Soil)

		Reporting											
Analyte	Result	Limit Uni	ts Dilution	Batch	Prepared	Analyzed	Method	Notes					
	Permian Basin Environmental Lab, L.P.												
General Chemistry Parameter	General Chemistry Parameters by EPA / Standard Methods												
% Moisture	1.0	0.1	% 1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216						
Total Petroleum Hydrocarbon	s C6-C35 by E	PA Method 8	015M										
C6-C12	ND	25.3 mg/k	g dry 1	P0H2607	08/26/20 13:20	08/27/20 09:14	TPH 8015M						
>C12-C28	238	25.3 mg/k	g dry 1	P0H2607	08/26/20 13:20	08/27/20 09:14	TPH 8015M						
>C28-C35	40.7	25.3 mg/k	g dry 1	P0H2607	08/26/20 13:20	08/27/20 09:14	TPH 8015M						
Surrogate: 1-Chlorooctane		97.8 %	70-130	P0H2607	08/26/20 13:20	08/27/20 09:14	TPH 8015M						
Surrogate: o-Terphenyl		115 %	70-130	P0H2607	08/26/20 13:20	08/27/20 09:14	TPH 8015M						
Total Petroleum Hydrocarbon C6-C35	279	25.3 mg/k	ig dry 1	[CALC]	08/26/20 13:20	08/27/20 09:14	calc						

Dean				Proiec	t: Plains-Perla	Verde		Fax:	
12600 W County Rd 91			Proi	·	r: PP-2062				
Midland TX, 79707					r: Sylwia Reyno	olds			
				CS	·6 @ 6''				
				0H260	09-02 (Soil)				
		Reporting							
Analyte	Result	Limit U	nits	Dilution	Batch	Prepared	Analyzed	Method	Notes
		р	ormion	Rasin Fr	vironmental L	ah I P			
		1	erman	Dasin En	vii oninciitai 1	au, L.I.			
General Chemistry Paramete	rs by EPA / Sta	ndard Met	hods						
% Moisture	ND	0.1	%	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216	
Total Petroleum Hydrocarboi	18 C6-C35 by E	PA Method	8015M	[
		25.0 m	/kø drv	1	P0H2607	08/26/20 13:20	08/27/20 09:37	TPH 8015M	
C6-C12	ND	25.0 mg		-	10112007	00/20/20 10120	00/2//20 09.57	1111 0010101	
C6-C12 >C12-C28	ND 26.4	25.0 m		1	P0H2607	08/26/20 13:20	08/27/20 09:37	TPH 8015M	
			g/kg dry	1					
>C12-C28	26.4	25.0 m	g/kg dry	1 1 30	P0H2607	08/26/20 13:20	08/27/20 09:37	TPH 8015M	
>C12-C28 >C28-C35	26.4	25.0 mg	g/kg dry g/kg dry		P0H2607 P0H2607	08/26/20 13:20 08/26/20 13:20	08/27/20 09:37 08/27/20 09:37	TPH 8015M TPH 8015M	

Dean	Dean Project:					Plains-Perla Verde			Fax:	
12600 W County Rd 91			Pro	ject Numbe	r: PP-2062					
Midland TX, 79707			Proj	ect Manage	r: Sylwia Reyn	olds				
				Pad We	est SW @ 6''					
					09-03 (Soil)					
		Reporting								
Analyte	Result	Limit U	Inits	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		Р	ermiar	Basin En	vironmental l	Lab, L.P.				
General Chemistry Paramet	ers by EPA / Sta	ndard Met	hods							
% Moisture	1.0	0.1	%	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216		
<u>Fotal Petroleum Hydrocarbo</u>	ons C6-C35 by E	PA Method	I 8015N	1						
C6-C12	ND	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 09:59	TPH 8015M		
>C12-C28	801	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 09:59	TPH 8015M		
>C28-C35	141	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 09:59	TPH 8015M		
Surrogate: 1-Chlorooctane		90.3 %	70-1	30	P0H2607	08/26/20 13:20	08/27/20 09:59	TPH 8015M		
Surrogate: o-Terphenyl		102 %	70-1	30	P0H2607	08/26/20 13:20	08/27/20 09:59	TPH 8015M		
Total Petroleum Hydrocarbon C6-C35	942	25.3 mg	g/kg dry	1	[CALC]	08/26/20 13:20	08/27/20 09:59	calc		

Dean				Projec	t: Plains-Perla	Verde		Fax:	
12600 W County Rd 91			Pro		r: PP-2062				
Midland TX, 79707				5	r: Sylwia Reyn	olds			
				Pad Nor	th SW @ 6''				
					09-04 (Soil)				
		Reporting							
Analyte	Result	Limit U	Jnits	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Paramete	ers by EPA / Sta			ı Basin En	vironmental I	Lab, L.P.			
% Moisture	1.0	0.1	%	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216	
Total Petroleum Hydrocarbo	ns C6-C35 by E	PA Method	<u>I 8015N</u>	1					
C6-C12	45.9	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 10:22	TPH 8015M	
>C12-C28	1860	25.3 m	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 10:22	TPH 8015M	
>C28-C35	329	25.3 m	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 10:22	TPH 8015M	
Surrogate: 1-Chlorooctane		93.6 %	70-1	30	P0H2607	08/26/20 13:20	08/27/20 10:22	TPH 8015M	
Surrogate: o-Terphenyl		110 %	70-1	30	P0H2607	08/26/20 13:20	08/27/20 10:22	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	2230	25.3 m	g/kg dry	1	[CALC]	08/26/20 13:20	08/27/20 10:22	calc	

Dean			Projec	et: Plains-Perla	Verde		Fax:	
12600 W County Rd 91			Project Numbe					
Midland TX, 79707			2	er: Sylwia Reyn	olds			
			Pad Sou	th SW @ 6''				
			0H260	09-05 (Soil)				
		Reporting						
Analyte	Result	Limit Units	5 Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Paramete	rs by EPA / Sta		nian Basin Er 1s	vironmental]	Lab, L.P.			
% Moisture	1.0	0.1 %	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216	
Total Petroleum Hydrocarbo	ns C6-C35 by E	PA Method 8)15M					
C6-C12	ND	25.3 mg/kg	g dry 1	P0H2607	08/26/20 13:20	08/27/20 10:45	TPH 8015M	
>C12-C28	68.2	25.3 mg/kg	g dry 1	P0H2607	08/26/20 13:20	08/27/20 10:45	TPH 8015M	
>C28-C35	38.7	25.3 mg/kg	g dry 1	P0H2607	08/26/20 13:20	08/27/20 10:45	TPH 8015M	
Surrogate: 1-Chlorooctane		98.8 %	70-130	P0H2607	08/26/20 13:20	08/27/20 10:45	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-130	P0H2607	08/26/20 13:20	08/27/20 10:45	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	107	25.3 mg/kg	g dry 1	[CALC]	08/26/20 13:20	08/27/20 10:45	calc	

Dean			Proje	ct: Plains-Perla	Verde		Fax:	
12600 W County Rd 91]	Project Numbe					
Midland TX, 79707		F	Project Manage	er: Sylwia Reyr	nolds			
			Pad Ea	st SW @ 6''				
			0H260	09-06 (Soil)				
		Reporting						
Analyte	Result	Limit Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Perm	ian Basin Er	vironmental	Lab, L.P.			
General Chemistry Paramete	rs by EPA / Sta	ndard Methods	ŝ					
% Moisture	2.0	0.1 %	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216	
Total Petroleum Hydrocarbo	ns C6-C35 by E	PA Method 801	5M					
C6-C12	ND	25.5 mg/kg d	lry 1	P0H2607	08/26/20 13:20	08/27/20 11:07	TPH 8015M	
>C12-C28	315	25.5 mg/kg d	lry 1	P0H2607	08/26/20 13:20	08/27/20 11:07	TPH 8015M	
>C28-C35	69.8	25.5 mg/kg d	lry 1	P0H2607	08/26/20 13:20	08/27/20 11:07	TPH 8015M	
Surrogate: 1-Chlorooctane		101 % 7	0-130	P0H2607	08/26/20 13:20	08/27/20 11:07	TPH 8015M	
Surrogate: o-Terphenyl		114 % 7	0-130	P0H2607	08/26/20 13:20	08/27/20 11:07	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	385	25.5 mg/kg d	lry 1	[CALC]	08/26/20 13:20	08/27/20 11:07	calc	

Dean				Proiec	t: Plains-Perla	Verde		Fax:	
12600 W County Rd 91			Pro	•	r: PP-2062				
Midland TX, 79707				5	r: Sylwia Reyn	olds			
				LACT NO	orth SW @ 1	,			
					09-07 (Soil)				
		Reporting							
Analyte	Result	Limit U	Jnits	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Р	ermia	n Basin En	vironmental I	Lab, L.P.			
General Chemistry Paramet	ers by EPA / Sta	undard Met	hods						
% Moisture	ND	0.1	%	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216	
Total Petroleum Hydrocarbo	ons C6-C35 by E	PA Method	1 8015I	М					
C6-C12	ND	25.0 m	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:30	TPH 8015M	
>C12-C28	262	25.0 m	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:30	TPH 8015M	
>C28-C35	43.8	25.0 m	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:30	TPH 8015M	
Surrogate: 1-Chlorooctane		94.3 %	70-	130	P0H2607	08/26/20 13:20	08/27/20 11:30	TPH 8015M	
Surrogate: o-Terphenyl		110 %	70-	130	P0H2607	08/26/20 13:20	08/27/20 11:30	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	306	25.0 m	g/kg dry	1	[CALC]	08/26/20 13:20	08/27/20 11:30	calc	

Dean				Proje	ct: Plains-Perla	Verde		Fax:					
12600 W County Rd 91			Proj		er: PP-2062								
Midland TX, 79707			Proje	ect Manage	er: Sylwia Reyn	olds							
			I	ACTS	outh SW @ 1	,							
0H26009-08 (Soil)													
		Reporting											
Analyte	Result	Limit U	nits	Dilution	Batch	Prepared	Analyzed	Method	Notes				
		р	ormion	Racin Fr	nvironmental I	ah I P							
				Dasin Ei	ivii onnientai 1	240, 12.1.							
General Chemistry Parameters				1	D0110701								
% Moisture	1.0	0.1	%	1	P0H2701	08/27/20 09:18	08/27/20 09:24	ASTM D2216					
Total Petroleum Hydrocarbons	6 C6-C35 by E	EPA Method	1 8015M	[
C6-C12	ND	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:53	TPH 8015M					
>C12-C28	ND	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:53	TPH 8015M					
>C28-C35	ND	25.3 mg	g/kg dry	1	P0H2607	08/26/20 13:20	08/27/20 11:53	TPH 8015M					
Surrogate: 1-Chlorooctane		93.5 %	70-13	30	P0H2607	08/26/20 13:20	08/27/20 11:53	TPH 8015M					
Surrogate: o-Terphenyl		108 %	70-13	30	P0H2607	08/26/20 13:20	08/27/20 11:53	TPH 8015M					
Total Petroleum Hydrocarbon C6-C35	ND	25.3 mg	g/kg dry	1	[CALC]	08/26/20 13:20	08/27/20 11:53	calc					

Dean	Project:	Plains-Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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 P0H2701 - *** DEFAULT PREP ***										
Blank (P0H2701-BLK1)				Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%							
Blank (P0H2701-BLK2)				Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%							
Blank (P0H2701-BLK3)				Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%							
Blank (P0H2701-BLK4)				Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%							
Blank (P0H2701-BLK5)				Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%							
Duplicate (P0H2701-DUP1)	Sou	rce: 0H26003-	-01	Prepared &	Analyzed:	08/27/20				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P0H2701-DUP2)	Sou	rce: 0H26005-	.09	Prepared &	Analyzed:	08/27/20				
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P0H2701-DUP3)	Sou	rce: 0H26009-	07	Prepared &	Analyzed:	08/27/20				
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0H2701-DUP4)	Source: 0H26018-02 Pro		Prepared &	Analyzed:	08/27/20					
% Moisture	12.0 0.1 %				12.0			0.00	20	
Duplicate (P0H2701-DUP5)	Source: 0H26022-01 Pre			Prepared &	Analyzed:	08/27/20				
% Moisture	4.0	0.1	%	-	5.0			22.2	20	

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains-Perla Verde	Fax:	
12600 W County Rd 91	Project Number:	PP-2062		
Midland TX, 79707	Project Manager:	Sylwia Reynolds		

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Spike	Source		%REC		RPD			
Analyte	Result	Reporting Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0H2701 - *** DEFAULT PREP ***										
Duplicate (P0H2701-DUP6)	Sour	ce: 0H26023-0	Prepared &	Analyzed:	08/27/20					
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0H2701-DUP7)	Sour	ce: 0H26024-0	01	Prepared &	Analyzed:	08/27/20				
% Moisture	10.0	0.1	%		10.0			0.00	20	
Duplicate (P0H2701-DUP8)	Sour	ce: 0H26024-1	11	Prepared &	Analyzed:	08/27/20				
% Moisture	13.0	0.1	%		12.0			8.00	20	
Duplicate (P0H2701-DUP9)	Sour	ce: 0H26026-0	02	Prepared &	Analyzed:	08/27/20				
% Moisture	12.0	0.1	%		12.0			0.00	20	
Duplicate (P0H2701-DUPA)	Source: 0H26026-12			Prepared &	Analyzed:	08/27/20				
% Moisture	13.0 0.1 %				13.0			0.00	20	

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains-Perla Verde	Fax:	
12600 W County Rd 91	Project Number:	PP-2062		
Midland TX, 79707	Project Manager:	Sylwia Reynolds		

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD				
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes			
Batch P0H2607 - TX 1005													
Blank (P0H2607-BLK1)				Prepared: ()8/26/20 Ai	nalyzed: 08	/27/20						
C6-C12	ND	25.0	mg/kg wet										
>C12-C28	ND	25.0	"										
>C28-C35	ND	25.0	"										
Surrogate: 1-Chlorooctane	83.9		"	100		83.9	70-130						
Surrogate: o-Terphenyl	46.8		"	50.0		93.6	70-130						
LCS (P0H2607-BS1)				Prepared: (08/26/20 At	nalyzed: 08	/27/20						
C6-C12	884	25.0	mg/kg wet	1000		88.4	75-125						
>C12-C28	1050	25.0	"	1000		105	75-125						
Surrogate: 1-Chlorooctane	109		"	100		109	70-130						
Surrogate: o-Terphenyl	46.9		"	50.0		93.8	70-130						
LCS Dup (P0H2607-BSD1)		Prepared: 08/26/20 Analyzed: 08/27/20											
C6-C12	864	25.0	mg/kg wet	1000		86.4	75-125	2.24	20				
>C12-C28	1040	25.0	"	1000		104	75-125	0.976	20				
Surrogate: 1-Chlorooctane	107		"	100		107	70-130						
Surrogate: o-Terphenyl	46.3		"	50.0		92.7	70-130						
Calibration Check (P0H2607-CCV1)				Prepared: ()8/26/20 At	nalyzed: 08	/27/20						
C6-C12	470	25.0	mg/kg wet	500		93.9	85-115						
>C12-C28	510	25.0		500		102	85-115						
Surrogate: 1-Chlorooctane	97.9		"	100		97.9	70-130						
Surrogate: o-Terphenyl	48.3		"	50.0		96.6	70-130						
Calibration Check (P0H2607-CCV2)				Prepared: ()8/26/20 At	nalyzed: 08	/27/20						
C6-C12	450	25.0	mg/kg wet	500		90.0	85-115						
>C12-C28	486	25.0		500		97.3	85-115						
Surrogate: 1-Chlorooctane	92.2		"	100		92.2	70-130						
Surrogate: o-Terphenyl	46.2		"	50.0		92.4	70-130						

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains-Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0H2607 - TX 1005										
Calibration Check (P0H2607-CCV3)				Prepared: (08/26/20 A	nalyzed: 08	/27/20			
C6-C12	457	25.0	mg/kg wet	500		91.3	85-115			
>C12-C28	521	25.0	"	500		104	85-115			
Surrogate: 1-Chlorooctane	95.6		"	100		95.6	70-130			
Surrogate: o-Terphenyl	48.1		"	50.0		96.3	70-130			
Matrix Spike (P0H2607-MS1)	Sou	rce: 0H26009	9-08	Prepared:	08/26/20 A	nalyzed: 08	/27/20			
C6-C12	919	25.3	mg/kg dry	1010	10.6	89.9	75-125			
>C12-C28	1130	25.3	"	1010	17.4	110	75-125			
Surrogate: 1-Chlorooctane	109		"	101		108	70-130			
Surrogate: o-Terphenyl	50.6		"	50.5		100	70-130			
Matrix Spike Dup (P0H2607-MSD1)	Sou	rce: 0H26009	9-08	Prepared:	08/26/20 A	nalyzed: 08	/27/20			
C6-C12	933	25.3	mg/kg dry	1010	10.6	91.3	75-125	1.55	20	
>C12-C28	1140	25.3	"	1010	17.4	111	75-125	1.45	20	
Surrogate: 1-Chlorooctane	112		"	101		110	70-130			
Surrogate: o-Terphenyl	49.2		"	50.5		97.4	70-130			

Permian Basin Environmental Lab, L.P.

Notes and Definitions

ROI	Received on Ice
BULK	Samples received in Bulk soil containers
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

Duplicate

Dup

Barron

Report Approved By:

Date:

8/27/2020

Brent Barron, Laboratory Director/Technical Director

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Permian Basin Environmental Lab, L.P.

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Received by OCD: 11/5/2020 10:51:25 AM

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



Analytical Report

Prepared for:

Sylwia Reynolds Dean 12600 W County Rd 91 Midland, TX 79707

Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Location: Lea County, NM

Lab Order Number: 0I28006



Current Certification

Report Date: 09/30/20

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pad North SW 6"	0I28006-01	Soil	09/25/20 13:30	09-28-2020 15:12

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Pad North SW 6"

0I28006-01 (Soil)

Analyte	Result	Reporting Limit Ur	nits D	ilution	Batch	Prepared	Analyzed	Method	Notes
			Permia	n Basi	n Environme	ntal Lab, L.P.			
General Chemistry Paramet	ers by EPA / S	Standard M	ethods						
% Moisture	4.0	0.1	%	1	P0I2901	09/29/20 08:18	09/29/20 08:20	ASTM D2216	
Total Petroleum Hydrocarbo	ons C6-C35 by	y EPA Meth	od 8015	M					
C6-C12	ND	26.0 mg/	/kg dry	1	P0I2802	09/28/20 15:30	09/28/20 20:33	TPH 8015M	
>C12-C28	30.2	26.0 mg/	kg dry	1	P0I2802	09/28/20 15:30	09/28/20 20:33	TPH 8015M	
>C28-C35	ND	26.0 mg/	kg dry	1	P0I2802	09/28/20 15:30	09/28/20 20:33	TPH 8015M	
Surrogate: 1-Chlorooctane		85.3 %	70-130		P0I2802	09/28/20 15:30	09/28/20 20:33	TPH 8015M	
Surrogate: o-Terphenyl		93.6 %	70-130		P012802	09/28/20 15:30	09/28/20 20:33	TPH 8015M	
Total Petroleum	30.2	26.0 mg/	kg dry	1	[CALC]	09/28/20 15:30	09/28/20 20:33	calc	

Permian Basin Environmental Lab, L.P.

Dean Project	t: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91 Project Number	r: PP-2062/SRS#2020-051	
Midland TX, 79707 Project Manage	r: Sylwia Reynolds	

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 P0I2901 - *** DEFAULT PREP ***										
Blank (P0I2901-BLK1)				Prepared &	Analyzed:	09/29/20				
% Moisture	ND	0.1	%							

Permian Basin Environmental Lab, L.P.

Dean	Project: Plains: XTO Perla Verde	Fax:	
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051		Ĺ
Midland TX, 79707	Project Manager: Sylwia Reynolds		

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
Anaryte	Kesuit	Limit	Units	Level	Kesuit	70KEC	Limits	KPD	Limit	Notes
Batch P0I2802 - TX 1005										
Blank (P0I2802-BLK1)				Prepared &	Analyzed:	09/28/20				
C6-C12	ND	25.0	mg/kg wet							-
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	82.0		"	100		82.0	70-130			
Surrogate: o-Terphenyl	41.9		"	50.0		83.8	70-130			
LCS (P0I2802-BS1)				Prepared: (09/28/20 A	nalyzed: 09	/29/20			
C6-C12	917	25.0	mg/kg wet	1000		91.7	75-125			
>C12-C28	1130	25.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	114		"	100		114	70-130			
Surrogate: o-Terphenyl	48.2		"	50.0		96.5	70-130			
LCS Dup (P0I2802-BSD1)				Prepared &	Analyzed:	09/28/20				
C6-C12	987	25.0	mg/kg wet	1000		98.7	75-125	7.36	20	
>C12-C28	1100	25.0	"	1000		110	75-125	2.73	20	
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	51.0		"	50.0		102	70-130			
Calibration Check (P0I2802-CCV1)				Prepared &	Analyzed:	09/28/20				
C6-C12	526	25.0	mg/kg wet	500		105	85-115			
>C12-C28	524	25.0		500		105	85-115			
Surrogate: 1-Chlorooctane	92.6		"	100		92.6	70-130			
Surrogate: o-Terphenyl	44.1		"	50.0		88.2	70-130			
Calibration Check (P0I2802-CCV2)				Prepared &	Analyzed:	09/28/20				
C6-C12	508	25.0	mg/kg wet	500		102	85-115			
>C12-C28	567	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	104		"	100		104	70-130			
Surrogate: o-Terphenyl	50.2		"	50.0		100	70-130			

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0I2802 - TX 1005										
Matrix Spike (P0I2802-MS1)	Sour	ce: 0I25018-	07	Prepared &	a Analyzed:	: 09/28/20				
C6-C12	892	25.3	mg/kg dry	1010	15.5	86.7	75-125			
>C12-C28	1100	25.3		1010	122	96.4	75-125			
Surrogate: 1-Chlorooctane	103		"	101		102	70-130			
Surrogate: o-Terphenyl	47.0		"	50.5		93.0	70-130			
Matrix Spike Dup (P0I2802-MSD1)	Sour	ce: 0I25018-	07	Prepared &	Analyzed:	: 09/28/20				
C6-C12	923	25.3	mg/kg dry	1010	15.5	89.8	75-125	3.49	20	
>C12-C28	1090	25.3	"	1010	122	96.1	75-125	0.382	20	
Surrogate: 1-Chlorooctane	106		"	101		105	70-130			
Surrogate: o-Terphenyl	48.3		"	50.5		95.7	70-130			

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Notes and Definitions

ROI	Received on Ice
BULK	Samples received in Bulk soil containers
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

Barron

Date:

9/30/2020

Report Approved By:

Brent Barron, Laboratory Director/Technical Director

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Permian Basin Environmental Lab, L.P.

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



Analytical Report

Prepared for:

Sylwia Reynolds Dean 12600 W County Rd 91 Midland, TX 79707

Project: Plains: XTO Perla Verde Project Number: PP-2062/SRS#2020-051 Location:

Lab Order Number: 0F23003



NELAP/TCEQ # T104704516-18-9

Report Date: 07/20/20

Dean	Project: Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number: PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager: Sylwia Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WC-1	0F23003-01	Soil	06/17/20 00:00	06-23-2020 07:40

TCLP Benzene, TCLP Metals and RCI analysis were subcontracted to ALS Houston. Their report is attached after the Chain of Custody. Their TCEQ TNI certification number can be found here: https://www.tceq.texas.gov/assets/public/compliance/compliance_support/ga/labs/als_svcs houston.pdf

NORM analysis were subcontracted to ARS International, Port Allen LA. Their report is attached to the email due to an incompatibility with our LIMS Reporting module.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

WC-1

0F23003-01 (Soil) Reporting Dilution Batch Method Result Limit Units Prepared Analyzed Notes Analyte Permian Basin Environmental Lab, L.P. **General Chemistry Parameters by EPA / Standard Methods** mg/kg dry 1 P0F2310 EPA 300.0 Chloride 168 1.04 06/23/20 06/24/20 Reactive Cyanide ND 100 mg/kg 1 P0G0804 06/30/20 06/30/20 SW846 9010B SUB-13 °F P0G0804 06/06/20 ASTM D93-80 Ignitability by Flashpoint > 212 1 06/06/20 SUB-13 pH Units 1 P0G0804 EPA 9045B 7.89 0.10 07/01/20 pН 07/01/20 SUB-13 % Moisture 4.0 0.1 % 1 P0F2401 06/24/20 ASTM D2216 06/24/20 100 1 P0G0804 06/30/20 06/30/20 SW846 9030B Reactive Sulfide ND mg/kg SUB-13 Naturally Occuring Radioactive Material (N.O.R.M.) pCi/g 1 P0G2009 EPA 901.1 Radium 226 2.09 1.35 07/10/20 07/10/20 SUB12 Radium 228 ND 0.31 pCi/g 1 P0G2009 07/10/20 07/10/20 EPA 901.1 SUB12 Lead 210 1.29 P0G2009 07/10/20 07/10/20 EPA 901.1 ND pCi/g 1 SUB12 **Total Gamma** pCi/g 1 P0G2009 EPA 901.1 SUB12 7.26 07/10/20 07/10/20 1.29 +/- 2 Sigma EPA 901.1 Lead 210 Analysis Error ND 1 P0G2009 07/10/20 07/10/20 SUB12 1.35 +/- 2 Sigma 07/10/20 07/10/20 EPA 901.1 Radium 226 Analysis Error ND 1 P0G2009 SUB12 0.31 +/- 2 Sigma P0G2009 07/10/20 07/10/20 EPA 901.1 Radium 228 Analysis Error ND 1 SUB12 TCLP Metals 1311 by EPA / Standard Methods EPA 7470A ND 0.000200 mg/L 1 P0G0804 06/26/20 06/29/20 Mercury SUB-13 Chromium ND 0.0500 mg/L 1 P0G0804 06/26/20 06/26/20 EPA 6020A SUB-13 06/26/20 EPA 6020A Arsenic ND 0.0500 mg/L 1 P0G0804 06/26/20 SUB-13 ND 0.0500 P0G0804 06/26/20 06/26/20 EPA 6020A Selenium mg/L 1 SUB-13 Silver ND 0.0500 mg/L 1 P0G0804 06/26/20 06/26/20 EPA 6020A SUB-13 Cadmium ND 0.0500 mg/L 1 P0G0804 06/26/20 06/26/20 EPA 6020A SUB-13 mg/L 1 P0G0804 EPA 6020A Barium 0.705 0.200 06/26/20 06/26/20 SUB-13 Lead ND 0.0500 mg/L 1 P0G0804 06/26/20 06/26/20 EPA 6020A SUB-13

Permian Basin Environmental Lab, L.P.

Dean 12600 W County Rd 91 Midland TX, 79707		Proj Project Num Project Mana		2/SRS#202				Fax:	
		0F23	WC-1 003-01 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	iian Basin H	Environme	ntal Lab, 1	L .P.				
TCLP Volatile Organic Compounds by Benzene	y EPA Method 1311/8 ND	260B 100	ug/l	1	P0G0804	06/26/20	06/30/20	EPA 8260B	SUB-13
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	1990	130	mg/kg dry	5	P0F2308	06/23/20	06/25/20	TPH 8015M	
>C12-C28	6100	130	mg/kg dry	5	P0F2308	06/23/20	06/25/20	TPH 8015M	
>C28-C35	476	130	mg/kg dry	5	P0F2308	06/23/20	06/25/20	TPH 8015M	
Surrogate: 1-Chlorooctane		104 %	70-1	30	P0F2308	06/23/20	06/25/20	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-1	30	P0F2308	06/23/20	06/25/20	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	8570	130	mg/kg dry	5	[CALC]	06/23/20	06/25/20	calc	
Physical Parameters by APHA/ASTM	/EPA Methods								
Free Liquid	> 212		N/A	1	P0G0804	06/24/20	06/24/20	EPA 9095	SUB-13

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2310 - *** DEFAULT PREP ***										
Blank (P0F2310-BLK1)				Prepared:	06/23/20 A	nalyzed: 06	5/24/20			
Chloride	ND	1.00	mg/kg wet							
LCS (P0F2310-BS1)				Prepared: (06/23/20 A	analyzed: 06	5/24/20			
Chloride	407	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P0F2310-BSD1)				Prepared:	06/23/20 A	analyzed: 06	6/24/20			
Chloride	413	1.00	mg/kg wet	400		103	80-120	1.61	20	
Calibration Check (P0F2310-CCV1)				Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	20.1		mg/kg	20.0		100	0-200			
Calibration Check (P0F2310-CCV2)				Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	20.0		mg/kg	20.0		100	0-200			
Matrix Spike (P0F2310-MS1)	Sou	rce: 0F23003	-01	Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	623	1.04	mg/kg dry	521	168	87.4	80-120			
Matrix Spike (P0F2310-MS2)	Sou	rce: 0F23004	-10	Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	508	1.04	mg/kg dry	521	38.3	90.2	80-120			
Matrix Spike Dup (P0F2310-MSD1)	Sou	rce: 0F23003	-01	Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	598	1.04	mg/kg dry	521	168	82.5	80-120	4.10	20	
Matrix Spike Dup (P0F2310-MSD2)	Sou	rce: 0F23004	-10	Prepared:	06/23/20 A	analyzed: 06	5/24/20			
Chloride	523	1.04	mg/kg dry	521	38.3	93.1	80-120	2.94	20	
Batch P0F2401 - *** DEFAULT PREP ***										
Blank (P0F2401-BLK1)				Prepared &	& Analyzed	: 06/24/20				
% Moisture	ND	0.1	%	-						

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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 P0F2401 - *** DEFAULT PREP ***										
Duplicate (P0F2401-DUP1)	Sourc	e: 0F23004-	13	Prepared &	Analyzed:	06/24/20				
% Moisture	8.0	0.1	%		7.0			13.3	20	
Duplicate (P0F2401-DUP2)	Sourc	e: 0F23009-	01	Prepared &	Analyzed:	06/24/20				
% Moisture	14.0	0.1	%		13.0			7.41	20	
Duplicate (P0F2401-DUP3)	Sourc	e: 0F23009-	14	Prepared &	Analyzed:	06/24/20				
% Moisture	12.0	0.1	%		12.0			0.00	20	

Permian Basin Environmental Lab, L.P.

Dean	Project:	Plains: XTO Perla Verde	Fax:	
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051		
Midland TX, 79707	Project Manager:	Sylwia Reynolds		

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 P0F2308 - TX 1005										
Blank (P0F2308-BLK1)				Prepared: ()6/23/20 Ai	nalyzed: 06	/24/20			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	55.2		"	50.0		110	70-130			
LCS (P0F2308-BS1)				Prepared: ()6/23/20 Ai	nalyzed: 06	/24/20			
C6-C12	1140	25.0	mg/kg wet	1000		114	75-125			
>C12-C28	1210	25.0	"	1000		121	75-125			
Surrogate: 1-Chlorooctane	99.9		"	100		99.9	70-130			
Surrogate: o-Terphenyl	52.9		"	50.0		106	70-130			
LCS Dup (P0F2308-BSD1)				Prepared: ()6/23/20 Ai	nalyzed: 06	/24/20			
C6-C12	1210	25.0	mg/kg wet	1000		121	75-125	6.42	20	
>C12-C28	1240	25.0	"	1000		124	75-125	1.94	20	
Surrogate: 1-Chlorooctane	126		"	100		126	70-130			
Surrogate: o-Terphenyl	54.3		"	50.0		109	70-130			
Calibration Check (P0F2308-CCV1)				Prepared: ()6/23/20 Ai	nalyzed: 06	/24/20			
C6-C12	528	25.0	mg/kg wet	500		106	85-115			
>C12-C28	551	25.0	"	500		110	85-115			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	48.8		"	50.0		97.7	70-130			
Calibration Check (P0F2308-CCV2)				Prepared: ()6/23/20 Ai	nalyzed: 06	/24/20			
C6-C12	550	25.0	mg/kg wet	500		110	85-115			
>C12-C28	560	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	107		"	100		107	70-130			
Surrogate: o-Terphenyl	48.0		"	50.0		96.0	70-130			

Permian Basin Environmental Lab, L.P.
Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P0F2308 - TX 1005										
Calibration Check (P0F2308-CCV3)				Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
C6-C12	536	25.0	mg/kg wet	500		107	85-115			
>C12-C28	575	25.0	"	500		115	85-115			
Surrogate: 1-Chlorooctane	104		"	100		104	70-130			
Surrogate: o-Terphenyl	47.0		"	50.0		94.1	70-130			
Matrix Spike (P0F2308-MS1)	Sou	rce: 0F23006	-01	Prepared: (06/23/20 A	nalyzed: 06	6/24/20			
C6-C12	1130	25.3	mg/kg dry	1010	14.0	111	75-125			
>C12-C28	2430	25.3	"	1010	1810	60.9	75-125			QM-05
Surrogate: 1-Chlorooctane	116		"	101		115	70-130			
Surrogate: o-Terphenyl	55.3		"	50.5		109	70-130			
Matrix Spike Dup (P0F2308-MSD1)	Sou	rce: 0F23006	-01	Prepared: (06/23/20 A	nalyzed: 06	5/24/20			
C6-C12	1110	25.3	mg/kg dry	1010	14.0	109	75-125	2.01	20	
>C12-C28	2440	25.3	"	1010	1810	61.8	75-125	1.43	20	QM-05
Surrogate: 1-Chlorooctane	114		"	101		113	70-130			
Surrogate: o-Terphenyl	47.0		"	50.5		93.1	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Notes and Definitions

- SUB-13 Subcontract of analyte/analysis to ALS Houston.
- SUB12 Analysis was subcontracted to ARS Port Allen Lousiana.
- 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.
- BULK Samples received in Bulk soil containers
- DET Analyte DETECTED
- Analyte NOT DETECTED at or above the reporting limit ND
- NR Not Reported
- Sample results reported on a dry weight basis dry
- Relative Percent Difference RPD
- LCS Laboratory Control Spike
- MS Matrix Spike
- Duplicate Dup

Report Approved By:

Sun Barron

Date: 7/20/2020

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

Dean	Project:	Plains: XTO Perla Verde	Fax:
12600 W County Rd 91	Project Number:	PP-2062/SRS#2020-051	
Midland TX, 79707	Project Manager:	Sylwia Reynolds	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

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Page 112 of 138

Received by OCD: 11/5/2020 10:51:25 AM

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

July 01, 2020

Brent Barron Permian Basin Environmental Lab, LP 10014 SCR 1213 Midland, TX 79706

Work Order: HS20061240

Laboratory Results for: OF23003

Dear Brent Barron,

ALS Environmental received 1 sample(s) on Jun 25, 2020 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL Andy C. Neir

Page 1 of 21

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Date:	01-Jul-20
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ALS Houston,	US				Date: 0	01-Jul-20	
Client: Project: Work Order:	Permian Basin Environme OF23003 HS20061240	SAMPLE SUM	MARY				
Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold	
HS20061240-01	OF23003-1	Soil		17-Jun-2020 08:00	25-Jun-2020 09:00		

CASE NARRATIVE

ALS Houston, US

Client:Permian Basin Environmental Lab, LPProject:OF23003Work Order:HS20061240

Work Order Comments

• Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

GCMS Volatiles by Method SW8260

Batch ID: 154830

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

Metals by Method SW7470

Batch ID: 154976

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

Metals by Method SW1311/6020

Batch ID: 154895

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

WetChemistry by Method SW7.3.3.2

Batch ID: R364270

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

WetChemistry by Method SW9045D

Batch ID: R364326

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

WetChemistry by Method SW7.3.4.2

Batch ID: R364268

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

WetChemistry by Method ASTM D92-12b

Batch ID: R364047

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

ALS Houston, US

Client:	Permian Basin Environmental Lab, LP	ANALYTICAL REPORT
Project:	OF23003	WorkOrder:HS20061240
Sample ID:	OF23003-1	Lab ID:HS20061240-01
Collection Date:	17-Jun-2020 08:00	Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES		Method:SW8260	Leache:SW1311 / 26-Jun-2020	Prep:SW1311 / 2	26-Jun-2020	Analyst: PC
Benzene	ND		0.10	mg/L	20	30-Jun-2020 03:38
Surr: 1,2-Dichloroethane-d4	77.5		70-126	%REC	20	30-Jun-2020 03:38
Surr: 4-Bromofluorobenzene	97.5		82-124	%REC	20	30-Jun-2020 03:38
Surr: Dibromofluoromethane	84.1		77-123	%REC	20	30-Jun-2020 03:38
Surr: Toluene-d8	111		82-127	%REC	20	30-Jun-2020 03:38
TCLP METALS BY SW6020A	N	lethod:SW1311/6020	Leache:SW1311 / 26-Jun-2020	Prep:SW3010A	/ 26-Jun-2020	Analyst: JHD
Arsenic	ND		0.0500	mg/L	1	26-Jun-2020 23:21
Barium	0.705		0.200	mg/L	1	26-Jun-2020 23:21
Cadmium	ND		0.0500	mg/L	1	26-Jun-2020 23:21
Chromium	ND		0.0500	mg/L	1	26-Jun-2020 23:21
Lead	ND		0.0500	mg/L	1	26-Jun-2020 23:21
Selenium	ND		0.0500	mg/L	1	26-Jun-2020 23:21
Silver	ND		0.0500	mg/L	1	26-Jun-2020 23:21
TCLP MERCURY BY SW7470A		Method:SW7470	Leache:SW1311 / 26-Jun-2020	Prep:SW7470 / 2	29-Jun-2020	Analyst: FO
Mercury	ND		0.000200	mg/L	1	29-Jun-2020 15:20
FLASH POINT BY CLEVELAND OPEN CUP ASTM D92-12B	I M	ethod:ASTM D92-12b				Analyst: TH
Flash Point	> 212	n	50.0	°F	1	26-Jun-2020 17:30
REACTIVE CYANIDE		Method:SW7.3.3.2		Prep:SW7.3.3.2		Analyst: KVL
Reactive Cyanide	ND	n	100	mg/Kg	1	30-Jun-2020 16:00
REACTIVE SULFIDE		Method:SW7.3.4.2				Analyst: KVL
Reactive Sulfide	ND	n	100	mg/Kg	1	30-Jun-2020 16:10
PH SOIL BY SW9045D		Method:SW9045D				Analyst: JAC
рН	7.89	Н	0.100	pH Units	1	01-Jul-2020 13:37
Temp Deg C @pH	23.8	Н	0	°C	1	01-Jul-2020 13:37

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

Page 4 of 21

Weight / Prep Log

Client:Permian Basin Environmental Lab, LPProject:OF23003WorkOrder:HS20061240

Batch ID: 154828		Start Da	te: 25 Jun 20	20 16:00	End Date: 26 Jun 2020 09:00
Method: TCLP MERCURY	EXTRACTION	ON BY SW13	311		Prep Code: 1311LHG EXT
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20061240-01		100 (grams)	2000 (mL)	20	
Batch ID: 154829		Start Da	te: 25 Jun 20	20 16:00	End Date: 26 Jun 2020 09:00
Method: TCLP METALS E	XTRACTION	I BY SW1311			Prep Code: 1311LM EXT
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20061240-01		100 (grams)	2000 (mL)	20	
Batch ID: 154830		Start Da	te: 25 Jun 20	20 16:00	End Date: 26 Jun 2020 09:00
Method: TCLP ZHE (VOL	EXTRACTIO	N)			Prep Code: 1311ZHE
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20061240-01		25 (g)	500 (mL)	20	
Batch ID: 154895		Start Da	te: 26 Jun 20	20 16:00	End Date: 26 Jun 2020 16:00
Method: TCLP LEACHATE	E DIGESTIO	N BY SW301	0A		Prep Code: 3010A_TCLP
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20061240-01		1 (mL)	10 (mL)	10	
Batch ID: 154976		Start Da	te: 29 Jun 20	20 10:00	End Date: 29 Jun 2020 12:00
Method: MERCURY TCLF	PREP BY S	Prep Code: 1311_HGPR			
Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS20061240-01		10 (mL)	10 (mL)	1	

Client: Project: WorkOrder:	Permiar OF2300 HS2006	3	ronmental Lab, LP			DATES RE	PORT
Sample ID	Client Sam	p ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 154830	(0)	Test Name :	TCLP VOLATILES			Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00	26 Jun 2020 09:00	26 Jun 2020 11:37	30 Jun 2020 03:38	20
Batch ID: 154895	(0)	Test Name :	TCLP METALS BY SWE	5020A		Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00	26 Jun 2020 09:00	26 Jun 2020 16:00	26 Jun 2020 23:21	1
Batch ID: 154976	(0)	Test Name :	TCLP MERCURY BY S	W7470A		Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00	26 Jun 2020 09:00	29 Jun 2020 10:00	29 Jun 2020 15:20	1
Batch ID: R36404	47(0)	Test Name :	FLASH POINT BY CLE	VELAND OPEN CUP	ASTM D92-12B	Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00			26 Jun 2020 17:30	1
Batch ID: R36426	68 (0)	Test Name :	REACTIVE SULFIDE			Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00			30 Jun 2020 16:10	1
Batch ID: R36427	70(0)	Test Name :	REACTIVE CYANIDE			Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00			30 Jun 2020 16:00	1
Batch ID: R36432	26(0)	Test Name :	PH SOIL BY SW9045D			Matrix: Soil	
HS20061240-01	OF23003-1		17 Jun 2020 08:00			01 Jul 2020 13:37	1

QC BATCH REPORT

Client:	Permian Basin Environmental Lab, LP
Project:	OF23003
WorkOrder:	HS20061240

Batch ID:	154895(0)	Instr	ument:	ICPMS04	N	lethod: 1	CLP META	LS BY SW60	20A
MBLK	Sample ID:	MBLKT2-154895		Units:	mg/L	Ana	alysis Date:	26-Jun-2020	22:48
Client ID:		Ru	n ID: ICP	MS04_363979	SeqNo:	5638870	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		ND	0.0500						
Barium		ND	0.200	1					
Cadmium		ND	0.0500						
Chromium		ND	0.0500						
Lead		ND	0.0500						
Selenium		ND	0.0500	1					
Silver		ND	0.0500						
MBLK	Sample ID:	MBLKT3-154895		Units:	mg/L	Ana	alysis Date:	26-Jun-2020	22:50
Client ID:		Ru	n ID: ICP	MS04_363979	SeqNo:	5638871	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		ND	0.0500						
Barium		ND	0.200	1					
Cadmium		ND	0.0500						
Chromium		ND	0.0500	1					
Lead		ND	0.0500						
Selenium		ND	0.0500	1					
Silver		ND	0.0500						
MBLK	Sample ID:	MBLKT1-154895		Units:	mg/L	Ana	alysis Date:	26-Jun-2020	22:45
Client ID:		Ru	n ID: ICP	MS04_363979	SeqNo:	5638869	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		ND	0.0500						
Barium		ND	0.200	1					
Cadmium		ND	0.0500						
Chromium		ND	0.0500	1					
Lead		ND	0.0500						
Selenium		ND	0.0500)					
		ND	0.0500						

QC BATCH REPORT

ALS Houston, US

Lead

Client:	Permian Basin Environmental Lab, LP
Project:	OF23003
WorkOrder:	HS20061240

Batch ID:	154895(0)	Instr	ument:	ICPMS04	M	ethod: T	CLP METAI	LS BY SW602	20A
MBLK	Sample ID:	MBLK-154895		Units:	mg/L	Ana	alysis Date:	26-Jun-2020	22:43
Client ID:		Rı	in ID: ICPN	/IS04_363979	SeqNo: 5	638868	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		ND	0.00500						
Barium		ND	0.0200						
Cadmium		ND	0.00500						
Chromium		ND	0.00500						
Lead		ND	0.00500						
Selenium		ND	0.00500						
Silver		ND	0.00500						
LCS	Sample ID:	LCS-154895		Units:	mg/L	Ana	alysis Date:	27-Jun-2020	13:21
Client ID:		Ru	In ID: ICPN	/S04_364038	SeqNo: 5			26-Jun-2020	
Analyte		Result	PQL	– SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		0.04411	0.00500	0.05	0	88.2	80 - 120		
Barium		0.04303	0.0200	0.05	0	86.1	80 - 120		
Cadmium		0.04391	0.00500	0.05	0	87.8	80 - 120		
Chromium		0.04315	0.00500	0.05	0	86.3	80 - 120		
Selenium		0.04511	0.00500	0.05	0	90.2	80 - 120		
Silver		0.04192	0.00500	0.05	0	83.8	80 - 120		
LCS	Sample ID:	LCS-154895		Units:	mg/L	Ana	alysis Date:	27-Jun-2020	13:58
Client ID:		Rı	in ID: ICPN	/IS04_364038	SeqNo: 5	639473	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual

0.05

0

89.6

80 - 120

0.04478

0.00500

QC BATCH REPORT

Client:	Permian Basin Environmental Lab, LP
Project:	OF23003
WorkOrder:	HS20061240

Batch ID: 154	4895(0)	Instru	ment: IC	CPMS04	Me	ethod: T	CLP META	LS BY SW602	20A
MS	Sample ID:	HS20061170-01MS		Units:	mg/L	Ana	lysis Date:	27-Jun-2020	13:27
Client ID:		Run	ID: ICPMS	604_364038	SeqNo: 5	639460	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Arsenic		0.4935	0.0500	0.5	0.00202	98.3	80 - 120		
Barium		0.89	0.200	0.5	0.4042	97.2	80 - 120		
Cadmium		0.4633	0.0500	0.5	0.00073	92.5	80 - 120		
Chromium		0.4601	0.0500	0.5	-0.00041	92.1	80 - 120		
Lead		0.4469	0.0500	0.5	0.00362	88.7	80 - 120		
Selenium		0.4919	0.0500	0.5	0.00191	98.0	80 - 120		
Silver		0.4311	0.0500	0.5	0.00025	86.2	80 - 120		
MSD	Sample ID:	HS20061170-01MSD	1	Units:	mg/L	Ana	lysis Date:	27-Jun-2020	13:29
Client ID:		Run	ID: ICPMS	S04_364038	SeqNo: 5	639461	PrepDate:	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Arsenic		0.5027	0.0500	0.5	0.00202	100	80 - 120	0.4935	1.85 20
Barium		0.9238	0.200	0.5	0.4042	104	80 - 120	0.89	3.73 20
Cadmium		0.4779	0.0500	0.5	0.00073	95.4	80 - 120	0.4633	3.11 20
Chromium		0.48	0.0500	0.5	-0.00041	96.1	80 - 120	0.4601	4.23 20
Lead		0.4697	0.0500	0.5	0.00362	93.2	80 - 120	0.4469	4.97 20
Selenium		0.5124	0.0500	0.5	0.00191	102	80 - 120	0.4919	4.09 20
Silver		0.4494	0.0500	0.5	0.00025	89.8	80 - 120	0.4311	4.17 20
PDS	Sample ID:	HS20061170-01PDS		Units.	mg/L	Ana	Ilvsis Date:	27-Jun-2020	13:31

PDS	Sample ID:	HS200611/0-01PD	5	Units:	mg/L	Ana	alysis Date: 2	27-Jun-2020	13:31
Client ID:		Ru	n ID: ICPM	S04_364038	SeqNo: 5	639462	PrepDate: 2	26-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Arsenic		1.049	0.0500	1	0.00202	105	75 - 125		
Barium		1.471	0.200	1	0.4042	107	75 - 125		
Cadmium		1.001	0.0500	1	0.00073	100	75 - 125		
Chromium		0.975	0.0500	1	-0.00041	97.5	75 - 125		
Lead		0.9887	0.0500	1	0.00362	98.5	75 - 125		
Selenium		1.033	0.0500	1	0.00191	103	75 - 125		
Silver		1.003	0.0500	1	0.00025	100	75 - 125		

QC BATCH REPORT

Client:	Permian Basin Environmental Lab, LP
Project:	OF23003
WorkOrder:	HS20061240

Batch ID:	154895(0)	Instru	iment:	ICPMS04	М	ethod: 1		S BY SW602	0A		
SD	Sample ID:	HS20061170-01SD		Units:	mg/L	Ana	alysis Date: 2	27-Jun-2020	13:25		
Client ID:		Rur	ID: ICPN	/IS04_364038	SeqNo: 5	5639459	PrepDate: 2	26-Jun-2020	DF	=∶5	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Q	ual
Arsenic		ND	0.250					0.00202		0 10	
Barium		0.3854	1.00					0.4042		0 10	
Cadmium		ND	0.250					0.00073		0 10	
Chromium		ND	0.250					-0.00041		0 10	
Lead		ND	0.250					0.00362		0 10	
Selenium		ND	0.250					0.00191		0 10	
Silver		ND	0.250					0.00025		0 10	

Client: Project: WorkOrc	OF2	mian Basin Env 23003 20061240	rironmental	Lab, LP				QC BA	TCH REPOR
Batch ID:	154976 (0)	In	strument:	HG03	м	ethod: 1		URY BY SW7	470A
MBLK	Sample ID:	MBLKT1-154976		Units:	mg/L	Ana	alysis Date:	29-Jun-2020	15:10
Client ID:			Run ID: HG	03_364143	SeqNo: 5	641849	PrepDate:	29-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Mercury		ND	0.000200						
MBLK	Sample ID:	MBLK-154976		Units:	mg/L	Ana	alysis Date:	29-Jun-2020	15:01
Client ID:			Run ID: HG	03_364143	SeqNo: 5	641844	PrepDate:	29-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Mercury		ND	0.000200						
LCS	Sample ID:	LCS-154976		Units:	mg/L	Ana	alysis Date:	29-Jun-2020	15:03
Client ID:			Run ID: HG	03_364143	SeqNo: 5	5641845	PrepDate:	29-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Mercury		0.00509	0.000200	0.005	0	102	80 - 120		
MS	Sample ID:	HS20061186-01	N S	Units:	mg/L	Ana	alysis Date:	29-Jun-2020	15:07
Client ID:			Run ID: HG	03_364143	SeqNo:	641847	PrepDate:	29-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Mercury		0.00525	0.000200	0.005	-0.000002	105	75 - 125		
MSD	Sample ID:	HS20061186-01	ISD	Units:	mg/L	Ana	alysis Date:	29-Jun-2020	15:08
Client ID:			Run ID: HG	03_364143	SeqNo: 5	5641848	PrepDate:	29-Jun-2020	DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Mercury		0.00535	0.000200	0.005	-0.000002	107	75 - 125	0.00525	1.89 20

QC BATCH REPORT

ALS Houston, US

Client:	Permian Basin Environmental Lab, LP
Project:	OF23003
WorkOrder:	HS20061240

Batch ID: 15483	0(0)	Inst	rument:	VOA6	М	ethod: 1		TILES	
MBLK	Sample ID:	MBLK-154830		Units:	ug/L	Ana	alysis Date:	30-Jun-2020	02:26
Client ID:		R	un ID: VO	A6_364208	SeqNo: 5	5643784	PrepDate:	26-Jun-2020	DF: 20
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Benzene		ND	100						
Surr: 1,2-Dichloroe	thane-d4	787.5	100	1000	0	78.8	70 - 130		
Surr: 4-Bromofluor	obenzene	952.9	100	1000	0	95.3	82 - 115		
Surr: Dibromofluor	omethane	847	100	1000	0	84.7	73 - 126		
Surr: Toluene-d8		1115	100	1000	0	112	81 - 120		
LCS	Sample ID:	VLCSW-154830		Units:	ug/L	Ana	alysis Date:	29-Jun-2020	23:38
Client ID:		R	un ID: VO	A6_364208	SeqNo: 5	5643780	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Benzene		19.73	5.0	20	0	98.6	74 - 120		
Surr: 1,2-Dichloroe	thane-d4	48.87	5.0	50	0	97.7	70 - 130		
Surr: 4-Bromofluor	obenzene	48.19	5.0	50	0	96.4	82 - 115		
Surr: Dibromofluor	omethane	50.51	5.0	50	0	101	73 - 126		
Surr: Toluene-d8		49.56	5.0	50	0	99.1	81 - 120		
MS	Sample ID:	HS20061208-28M	S	Units:	ug/L	Ana	alysis Date:	30-Jun-2020	01:38
Client ID:		R	un ID: VO	A6_364208	SeqNo: 5	643783	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Benzene		20.08	5.0	20	0	100	70 - 127		
Surr: 1,2-Dichloroe	thane-d4	38.78	5.0	50	0	77.6	70 - 126		

The following samples were analyzed in this batch: HS20061240-01

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

48.07

42.84

55.28

5.0

5.0

5.0

50

50

50

0

0

0

96.1

85.7

111

82 - 124

77 - 123

82 - 127

Client:	Permian Basin Environmental Lab, LP	
Project:	OF23003	QC BATCH REPORT
WorkOrder:	HS20061240	

Batch ID: I	R364047(0)	Instrumer	nt:	WetChem_HS	I	Method:	FLASH POIN CUP ASTM D		LAND OPE	N
DUP	Sample ID:	HS20061329-01DUP		Units: °l	F	Ar	nalysis Date:	26-Jun-2020	17:30	
Client ID:		Run ID:	w	etChem_HS_364047	' SeqNo:	5639326	PrepDate:		DF: 1	
Analyte		Result	PG	L SPK Val	SPK Ret Value	f %REC	Control Limit		RP %RPD Lim	-
Flash Point		> 212	50	.0				0	0 3	80
The following	samples were analyze	ed in this batch: HS2006124	0-01							

Client:	Permian Basin Environmental Lab, LP	
Project:	OF23003	QC BATCH REPORT
WorkOrder:	HS20061240	

Batch ID: R3642	268(0)	Instrum	ent:	WetChem_HS	M	ethod:	REACTIVE S	ULFIDE	
MBLK	Sample ID:	MBLK-R364268		Units:	mg/Kg	An	alysis Date:	30-Jun-2020	16:10
Client ID:		Run IE	D: WetC	hem_HS_3642	68 SeqNo: 5	644930	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Reactive Sulfide		ND	100						
LCS	Sample ID:	LCS-R364268		Units:	mg/Kg	An	alysis Date:	30-Jun-2020	16:10
Client ID:		Run ID): WetC	Chem_HS_3642	68 SeqNo: 5	644929	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Reactive Sulfide		64	100	100	0	64.0	20 - 120		
MS	Sample ID:	HS20061209-01MS		Units:	mg/Kg	An	alysis Date:	30-Jun-2020	16:10
Client ID:		Run IE): WetC	Chem_HS_3642	68 SeqNo: 5	644931	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qua
Reactive Sulfide		64	100	100	0	64.0	20 - 120		
The following sampl	les were analyze	ed in this batch: HS200612	40-01						

Client:	Permian Basin Environmental Lab, LP	
Project:	OF23003	QC BATCH REPORT
WorkOrder:	HS20061240	

Batch ID: R3642	270(0)	Instrume	ent:	UV-2450	M	ethod: F	REACTIVE C	YANIDE	
MBLK	Sample ID:	MBLK-R364270		Units:	mg/Kg	Ana	alysis Date:	30-Jun-2020	16:00
Client ID:		Run ID	: UV-2	450_364270	SeqNo: 5	644943	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Reactive Cyanide		ND	100						
LCS	Sample ID:	LCS-R364270		Units:	mg/Kg	Ana	alysis Date:	30-Jun-2020	16:00
Client ID:		Run ID	: UV-2	450_364270	SeqNo: 5	5644942	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Reactive Cyanide		0.61	100	10	0	6.10	5 - 100		
MS	Sample ID:	HS20061209-01MS		Units:	mg/Kg	Ana	alysis Date:	30-Jun-2020	16:00
Client ID:		Run ID	: UV-2	450_364270	SeqNo: 5	5644944	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Reactive Cyanide		0.6	100	10	0	6.00	5 - 100		
The following sample	es were analyze	ed in this batch: HS2006124	40-01						

Client:	Permian Basin Environmental Lab, LP	
Project:	OF23003	QC BATCH REPORT
WorkOrder:	HS20061240	

DUP	Sample ID:	HS20061240-01DUP		Units:	pH Units	Ana	alysis Date:	01-Jul-2020	13:37
Client ID:	OF23003-1	Run	ID: WetC	hem_HS_3643	26 SeqNo:	5646453	PrepDate:		DF: 1
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit		RPD %RPD Limit Qu
pН		7.85	0.100					7.89	0.508 10
Temp Deg	С @рН	23.6	0					23.8	0.844 10

Received by OCD: 11/5/2020 10:51:25 AM

Date: 01-Jul-20

ALS Houston, I	e	Date: 01-Jul-20
Client: Project: WorkOrder:	Permian Basin Environmental Lab, LP OF23003 HS20061240	QUALIFIERS, ACRONYMS, UNITS
Qualifier	Description	
*	Value exceeds Regulatory Limit	
а	Not accredited	
В	Analyte detected in the associated Method Blank above the Reporting Limit	
E	Value above quantitation range	
Н	Analyzed outside of Holding Time	
J	Analyte detected below quantitation limit	
Μ	Manually integrated, see raw data for justification	
n	Not offered for accreditation	
ND	Not Detected at the Reporting Limit	
0	Sample amount is > 4 times amount spiked	
Р	Dual Column results percent difference > 40%	
R	RPD above laboratory control limit	
S	Spike Recovery outside laboratory control limits	
U	Analyzed but not detected above the MDL/SDL	
Acronym	Description	
DCS	Detectability Check Study	
DUP	Method Duplicate	
LCS	Laboratory Control Sample	
LCSD	Laboratory Control Sample Duplicate	
MBLK	Method Blank	
MDL	Method Detection Limit	
MQL	Method Quantitation Limit	
MS	Matrix Spike	
MSD	Matrix Spike Duplicate	
PDS	Post Digestion Spike	
PQL	Practical Quantitaion Limit	
SD	Serial Dilution	
SDL	Sample Detection Limit	
TRRP	Texas Risk Reduction Program	
Unit Reported	Description	
Date mg/L	Milligrams per Liter	

ALS Houston, US

Date: 01-Jul-20

CERTIFICATIONS, ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	20-030-0	26-Mar-2021
Dept of Defense	ANAB L2231 V009	22-Dec-2021
Illinois	2000322020-4	09-May-2021
Kansas	E-10352 2019-2020	31-Jul-2020
North Carolina	624-2020	31-Dec-2020
Oklahoma	2019-141	31-Aug-2020
Texas	T104704231-20-26	30-Apr-2021

ALS Houston, US

Date: 01-Jul-20

	HS20061240 Permian Basin Lab			Time Received: ved by:	Sample Receipt Checklist 25-Jun-2020 09:00 <u>Nilesh D. Ranchod</u>
Completed By:	/S/ Paresh M. Giga	25-Jun-2020 14:03	Reviewed by: /S/	Andy C. Neir	25-Jun-2020 22:21
	eSignature	Date/Time		eSignature	Date/Time
Matrices:	Soil		Carrier name:	<u>FedEx</u>	
Custody seals in Custody seals in VOA/TX1005/T2 Chain of custody Chain of custody Samplers name Chain of custody Samples in prop Sample containe Sufficient sampl All samples rece	y signed when relinquished and present on COC? y agrees with sample labels? per container/bottle?	ed vials? received?	Yes Ves Ves Ves Ves Ves Ves Ves Ves Ves V	No	Not Present Not Present Not Present Not Present 1 Page(s) COC IDs:None
	Thermometer(s):		3.8C U/C		IR25
Cooler(s)/Kit(s): Date/Time same	ble(s) sent to storage:		Red 6/25/2020 14:10		
Water - VOA via	als have zero headspace? eptable upon receipt?		Yes Yes Yes	No No No	No VOA vials submitted N/A N/A N/A
Client Contacted	d:	Date Contacted:		Person Cor	ntacted:
Contacted By:		Regarding:			
Comments:					
Corrective Actio	n:				

	Project Manager:	Brent Barro				ECORD AND		Pei 14	rmia 00 F	an B Ranl	asin I kin HI Fexas	WY	,		ital L	ab, L	.P	Due					F	BEL	AB_	SUE		C_V	2			
	Company Name	PBEL					HS2											Pro	yect	(Na	me: -			SOR	00	NIF	RAC	<u> </u>				
	Company Address:		n HWV			Permia	in Basin E O	nvi F23	ron 8003	nme	ental	l Li	ab,	LΡ					Pro	ojec	t#:_											
	City/State/Zip:	Midland Tex																P	roje	ct L	oc:_	<u></u>									······································	
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(lab use	only)																				T	1	T	Ar	alyz	e Fo	or:				┦	Sector Sector
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(Alab use only)	and the second second states and the second s	ELD CODE F23003-1		Beginning Depth	Ending Depth	6/17/2029	Time Sampjed	Field Filtered	🔁 Total #. of Containers	(HNO _{3 26} res 1	HC: 2x 40mL VOA	Histor Annual Berrary	NaCH /ZNAC 250 Foly 1	Natowa Kuone Poly 500mL 250mL	Glass Ambar 1000 500 mL	DW=D5thing Water SL-Sludge	 GW = Groundwater S=Scil/Solid 	N ²² «Non-Potable Specify Other	X	3062 PCB ONLY	K METALS, TCLP RCRA 8 BY ICPMS/7			BCD -405.1	5270C PAH LL	8260B COMPLETE LIST	8270C SVOC TCLP		Ha Ha	24 HOUR RUSH	Sector Carlos Contractor Contract
Special	Instructions:	The second seco second second n an an an an an an an an an an an an a	analin ila	I.,		1.2. w ^{2. w} * * * * . * . · · · · . _{* . * . · . _{* . * . * . * . * . * . * . * . * .}}				an sea stara			al.			3	e e) ory C						<u> </u>			.	
Relinquis E Relinquis Relinquis	Irent Barron hed by:		Date 2420 Date	16:00		Received by:	6 6	ານ ບິ	1		Ri				4	D Da 2- 2- Da	ate S-7	20	$\mathcal{O}_{\mathcal{I}}$	ne 1e	VOC Custe Custe Samp b b	s Fr ls of ody ody ble H y Sa y Co bera ivec		Hea taine on c on c Deliv r/Clie ?	dspa (a) onta oci- oci- ror oc ont R UF	ace? ainer r(s) 1 ep. ? S seipt: °C	, DHI		Y Y Y Y Y Y		N N N N N N	

Released to Imaging: 4/16/2021 10:19:32 AM

RIGHT SOLUTIONS | RIGHT PARTNER

Page 132 of 138



APPENDIX E FIELD SCREENING DELINEATION

XTO Perla Vode Page 135 of 138 6/17/20 Plains 32.613367, -103.496006 GPS TRTime Jeff - over sight / collect 0830 andre Somples contractor QT Loct time + 13 13' × 30' subtract equipment 000000 V deese SU-NH N. 2-3 55-4 5 21 42 10' \$ SW-F 10 SW-W SW-S 45 241 15 CS-13 . 11-SW-L LACT Time +10 1 C5-1 6 duy 1223 C5-2 1225 C5-11 1350 05-3 1230 65-12 1355 2 9 65-4 1235 (5-13 1458 cs-5 12-97 SW-LACT 1510 65-6 12.40 1425 SW-N 12.42 65-7 SW-S 1440 1338 65-8 SW-E 1443 SW-W 1440 65-9 13 43 65-10 1348 1515 whith

/2020 10:51:25		7/20	PP-20	62	
	Tim	FID	Chlard	~	
- CS-1 6"	1223	89.1	640		
_ CS-26"	1225	60.1	452		
- CS-3 6"	1230	46.1	572	/	
-65-4 6"	1235	25.3	600	/	
_CS-56"	12.37	31,5	580		
- (5-6 6"	1240	65.6	564		
- CS-7 6"	1242	41.3	337.2	-	
- (5-86"	1338	22.3	400		
<u>CS-96</u> "	1343	21,5	389	/	
-CS-10 6"	1348	25.6.	351.2	_(
_CS-11 6	1350	7.8	366		
CS-12 6"	1355	28,2	353,2		
(5-13 2'	1458	120.0	173.6		
SH-S	1440	10	540	/	
SU.E	1443	12.3	1212	6	
SH-W	1446	21.5	1094	-	
SW-N	1425	14.2	2500)
SW-LACT	1510	248.0	188.8		
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District I 1625 N. French Dr., Hobbs, NM 88240

District II

District IV

Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

District III 1000 Rio Brazos Rd., Aztec, NM 87410 COMMENTS

Action 11085

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

COMMENTS											
Operator:				OGRID:		Action Number:	Action Type:				
	PLAINS MARKETING L.P.	333 Clay St, Ste 1600	Houston, TX77002		34053	11085	C-141				
Created By		Comment				Comment Date					
chensley		DTW established by POD L 14552				04/16/2021					

District I 1625 N. French Dr., Hobbs, NM 88240

District II

District IV

Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

District III 1000 Rio Brazos Rd., Aztec, NM 87410 CONDITIONS

Action 11085

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

CONDITIONS OF APPROVAL

Operat	or:				OGRID:	Action Number:	Action Type:		
	PLAINS MARKETING L.P.	333 Clay St, Ste 1600	Houston, TX77002		34053	11085	C-141		
OCD Reviewer									
chensley					None				