eTECH
Environmental & Safety Solutions, Inc.

Electronic Correspondence

December 12, 2017

Ms. Olivia Wu
Environmental Specialist
State of New Mexico
Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240
Olivia.wu@state.nm.us

Re: Assessment, Delineation & Corrective Report
Stakeholder Midstream – Pipeline Release
Average Depth to Groundwater: 72 Feet (State Eng Office)
Lea County, NM
Latitude: 33.111800, Longitude: -103.080704
RP#: 1RP-4931

Dear Ms. Wu:

Etech Environmental & Safety Solutions, Inc. (Etech) was been contracted by Stakeholder Midstream (Stakeholder) to provide environmental services including mitigation on the Stakeholder pipeline release RP#: 1RP-4931. As a part of the move towards completion of mitigation, Etech has performed an assessment of the site and due to mitigating circumstances moved immediately to corrective action. The details of the project are presented below.

Assessment

Background

The release occurred at the site on January 5, 2018. The source of the release was due to a penetration by a utility pole installation contactor to the top of a buried 6 inch poly pipeline. The pipeline was used for the transportation of crude oil to the Stakeholder Midstream Terminal in Yoakum County, Texas. Stakeholder immediately notified personnel and the line was shut in. A vacuum truck was immediately dispatched to the site to remove any available fee liquids on the surface soils as well as used to remove crude oil in the pipeline. According to the C-141 submitted by others, the total release was estimated at 15 barrels with 12 recovered resulting in a net loss of 3 barrels.

Inspection & Corrective Action

Upon arrival, the site resided very close to a drilling rig and pad that was in the process of completion. The impacted area measured approximately 60 feet long and ranged from 11 to 18 feet wide. An excavation of the pipeline was in progress to make repairs to the line. The excavation for repairs of the pipeline was approximately 10' long. Though the top of the line was 5 feet below ground surface (bgs), the excavation was a total depth of 8 feet bgs. This was required to install the equipment used for repairing the line which had placed under the line. As repair operations progressed, it became obvious that equipment was going to have to move through the impacted area to access the trench.

Consequently it was decided to excavate the impacted area. As excavation started, it was noted the visible impacted soils extended vertically 4-6 inches. The excavation contractor was instructed to excavate the impacted soil area to 1 foot bgs and stage the material away from traffic onto plastic.

The surface soils are described as a brown sandy loam. In the area where the excavation was made for repairs, rock was encountered at 5 feet bgs extending to the bottom of the excavation at 8 feet bgs.

The shallow portion of the excavation was divided into three sections plus an area for the release point. Samples were collected from the center and the north and south sidewalls of each section of the shallow portion of the excavation. Since there was additional activities being conducted in the deeper portion of the excavation (referred to as the release point), a cursory grab sample was collected at 8 feet from the bottom of this section. An annotated aerial image has been prepared showing the release areas and the sampling points and is provided in Attachment A.

The samples were sent to Permian Basin Environmental Laboratories (PBEL) in Midland, Texas. Samples were analyzed for Total Petroleum Hydrocarbons, (TPH) by method 8015 modified, Chlorides by Standard Methods, and Benzene, Toluene, Ethylbenzene and M & P Xylenes (BTEX) by Gas Chromatography. The results of analyses are as follows:

Summary of Delineation Sampling Analytical Results From 01/05/18 Sampling Event
Total Petroleum Hydrocarbons - [TPH (mg/kg)] & Chlorides (mg/kg)

Sample #	Depth (ft)	Date	TPH C6-C12	TPH >C12-C28	TPH >C28-C35	Total TPH	Chlorides
****Release Point**	8	1/5/18	841	3380	622	**4850**	159
East End Center	1	1/5/18	1100	3770	718	**5590**	36.8
Center	1	1/5/18	ND	121	ND	121	ND
West End Center	1	1/5/18	ND	68.8	ND	68.8	ND
W Wall N Side	1	1/5/18	107	1030	189	**1330**	5.70
W Wall S Side	1	1/5/18	28.2	99.8	ND	128	ND
E Wall, S Side	1	1/5/18	339	1600	277	**2210**	14.2
E Wall N Side	1	1/5/18	ND	71.2	ND	71.2	51.7

Summary of Delineation Sampling Analytical Results From 01/05/18 Sampling Event
BTEX (mg/kg)

Sample #	Depth (ft)	Date	Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)
**Release Point	8	1/5/18	0.342	3.11	8.27	2.91	1.68
East End Center	1	1/5/18	1.86	14.5	36.2	13.5	7.37
Center	1	1/5/18	ND	0.0836	0.101	0.0462	ND
West End Center	1	1/5/18	ND	0.0687	0.160	0.0617	0.0261
W Wall N Side	1	1/5/18	0.0499	0.240	0.700	0.243	0.107
W Wall S Side	1	1/5/18	0.0609	0.132	0.448	0.168	0.0937
E Wall, S Side	1	1/5/18	0.165	2.05	7.80	2.87	1.71
E Wall N Side	1	1/5/18	ND	0.109	0.395	0.125	0.100

* ND = Non-Detect
Bold Red = TPH Above Regulatory Threshold Levels of 500 mg/kg
** Sample was believed to be contaminated due to sloughing and had not been fully cleaned.

The analytical results indicated the majority of the impacted soil in the shallow area had been excavated, but additional excavation was needed for the center, the north wall of the west section and the south wall of the east section. Also, the release point excavation needed to be sampled as well after it had been cleaned out. Upon arrival at the site on January 15th, it was noted that the majority of the release point excavation and the entire excavation in the shallow excavation had been filled with water. However, no sheen or other visible indications of hydrocarbons were observed. The source of the water was from completion operations being conducted on a nearby drilling pad located 300 feet to the north. The person in charge of the equipment was contacted and made arrangements to remove the water. Also a sample of the water was collected and sent to PBEL. The results of the analysis found chlorides in the water to be 96.3 mg/L.

On January 25th it was determined the site had dried out sufficiently to excavate the sidewall areas and to sample the release point excavation. At the same time, 60 cubic yards of soil were transported to Sundance for disposal. This was done to reduce the potential of the soil being washed onto the site if rainfall occurred. Also, the amount to be transported was exactly three truckloads. Upon arrival on January 26th, the release point excavation was observed to had been backfilled with sediment due to the off-site release of water and had to be cleaned out. Upon completion of this and excavation of the center, SE & NE side walls, samples were collected and sent to PBEL to be analyzed for PH, BTEX and Chlorides. The results are as follows:

Summary of Analytical Results From 01/26/18 Sampling Event
Total Petroleum Hydrocarbons - [TPH (mg/kg)] & Chlorides (mg/kg)

Sample #	Depth (ft)	Date	TPH C6-C12	TPH >C12-C28	TPH >C28-C35	Total TPH	Chlorides
Release Point NW	1	1/26/18	ND	ND	ND	ND	13.8
Release Point NW	3	1/26/18	ND	ND	ND	ND	1.95
Release Point NW	5	1/26/18	ND	ND	ND	ND	332
Release Point NW	7	1/26/18	ND	ND	ND	ND	456
Release Point SW	1	1/26/18	ND	ND	ND	ND	56.7
Release Point SW	3	1/26/18	ND	ND	ND	ND	ND
Release Point SW	5	1/26/18	ND	ND	ND	ND	14.8
Release Point SW	7	1/26/18	ND	ND	ND	ND	119
Release Point Bot	8	1/26/18	ND	ND	ND	ND	11.6
East End Center	1.5	1/26/18	ND	ND	ND	ND	ND
W Wall N Side	1.5	1/26/18	501	1220	206	**1920**	19.4
E Wall, S Side	1	1/26/18	ND	ND	ND	ND	ND

* ND = Non-Detect
Release Point NW = North Wall, Release Point SW = South Wall
Bold Red = TPH Above Regulatory Threshold Levels of 500 mg/kg

Summary of Analytical Results for BTEX (mg/kg)
From 01/26/18 Sampling Event

Sample #	Depth (ft)	Date	Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)
Release Point NW	1	1/26/18	ND	ND	ND	ND	ND
Release Point NW	3	1/26/18	ND	ND	ND	ND	ND
Release Point NW	5	1/26/18	ND	ND	ND	ND	ND
Release Point NW	7	1/26/18	ND	ND	ND	ND	ND
Release Point SW	1	1/26/18	ND	ND	ND	ND	ND

Summary of Analytical Results for BTEX (mg/kg) From 01/26/18 Sampling Event							
Sample #	**Depth (ft)**	**Date**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylene (p/m)**	**Xylene (o)**
Release Point SW	3	1/26/18	ND	ND	ND	ND	ND
Release Point SW	5	1/26/18	ND	ND	ND	ND	ND
Release Point SW	7	1/26/18	ND	ND	ND	ND	ND
Release Point Bot	8	1/26/18	ND	ND	ND	ND	ND
East End Center	1.5	1/26/18	ND	ND	ND	ND	ND
W Wall N Side	1.5	1/26/18	0.583	0.315	1.74	0.740	0.493
E Wall, S Side	1	1/26/18	ND	ND	ND	ND	ND

* ND = Non-Detect
Release Point NW = North Wall, Release Point SW = South Wall

The results of the analyses indicated the west section north side wall was still elevated. On February 6th this area was excavated an additional two feet north and resampled and sent PBEL to be analyzed for TPH, BTEX, and Chlorides. The results are as follows:

Summary of Analytical Results From 2/6/18 Sampling Event Total Petroleum Hydrocarbons - [TPH (mg/kg)] & Chlorides (mg/kg)							
Sample #	**Depth (ft)**	**Date**	**TPH C6-C12**	**TPH >C12-C28**	**TPH >C28-C35**	**Total TPH**	**Chlorides**
W Wall N Side	1.5	2/6/18	ND	ND	ND	ND	ND

Summary of Analytical Results for BTEX (mg/kg) From 28/6/18 Sampling Event							
Sample #	**Depth (ft)**	**Date**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylene (p/m)**	**Xylene (o)**
W Wall N Side	1.5	1/26/18	ND	ND	ND	ND	ND

Conclusion

Based upon all of the data, even though the normal process of assessment and delineation was not practicable for this site, the activities performed did indicate that the release was successfully mitigated and is now awaiting backfill pending approval from NMOCD.

Supportive documentation for the assessment is provided as follows:

Annotated Aerial Image ..... Attachment A
Groundwater Data ..... Attachment B
Laboratory Analytical Data ..... Attachment C
Copies of Disposal Tickets ..... Attachment D
Photograph Log ..... Attachment E

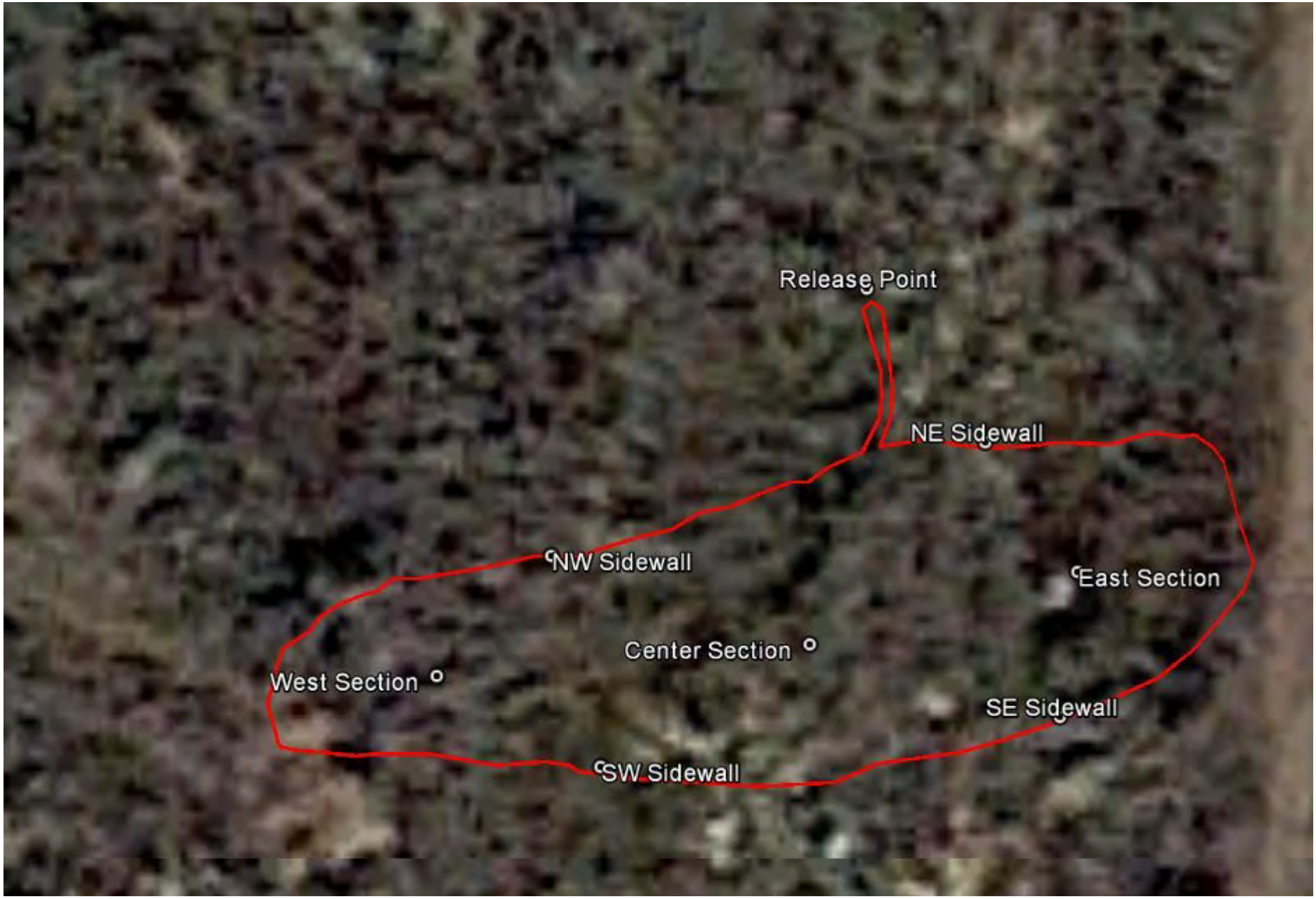
Thank you for your assistance on this matter. Should you have any questions, require additional information, or have any additional stipulations for this site, me at (432) 631-3757 (cell) or via email at fred@etechenv.com.

Respectfully:

Fred Holmes
Senior Project Manager

Attachment A

Annotated Aerial Image


Release Point
NE Sidewall
NW Sidewall
East Section
Center Section
West Section
SE Sidewall
SW Sidewall

Attachment B
Groundwater Data

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 00803 POD3		L	LE	3	2	4	10	14S	38E	679188	3665806*	283	195		
L 00803 POD3	R	L	LE	3	2	4	10	14S	38E	679188	3665806*	283	195		
L 00749 POD2		L	LE	1	4	2	10	14S	38E	679180	3666408*	362	180		
L 00749 POD2	R	L	LE	1	4	2	10	14S	38E	679180	3666408*	362	180		
L 03218	R	L	LE	3	3	3	11	14S	38E	679597	3665411*	838	100	84	16
L 03218 POD2		L	LE	3	3	3	11	14S	38E	679636	3665438	843	230	100	130
L 00719 POD3		L	LE			1	10	14S	38E	678276	3666488*	899	211	70	141
L 00719 POD3	R	L	LE			1	10	14S	38E	678276	3666488*	899	211	70	141
L 00765		L	LE	1	1	1	14	14S	38E	679605	3665209*	1008	152	58	94
L 01364		L	LE	1	1	3	10	14S	38E	677982	3665984*	1090	85	50	35
L 11322		L	LE	1	1	3	10	14S	38E	677982	3665984	1090	240		
L 00521		L	LE	2	2	2	09	14S	38E	677764	3666781*	1489	145		
L 00521	R	L	LE	2	2	2	09	14S	38E	677764	3666781*	1489	145		
L 00521 S		L	LE	3	2	2	09	14S	38E	677564	3666581*	1591	165		
L 00521 S	R	L	LE	3	2	2	09	14S	38E	677564	3666581*	1591	165		

Average Depth to Water: **72 feet**

Minimum Depth: **50 feet**

Maximum Depth: **100 feet**

Record Count: 15

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 679069.35 Northing (Y): 3666063 Radius: 1650

***UTM location was derived from PLSS - see Help**

Attachment C
Laboratory Analytical Data

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

Analytical Report

Prepared for:

Fred Holmes

E Tech Environmental & Safety Solutions, Inc.

13000 West County Road 100

Odessa, TX 79765

Project: Stakeholder Midstream

Project Number: 9021

Location: CR 138, NM

Lab Order Number: 8A09008

NELAP/TCEQ # T104704516-16-7

Report Date: 01/11/18

E Tech Environmental & Safety Solutions, Inc.
13000 West County Road 100
Odessa TX, 79765

Project: Stakeholder Midstream
Project Number: 9021
Project Manager: Fred Holmes

Fax: (432) 563-2213

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East Middle 1'	8A09008-01	Soil	01/05/18 15:30	01-09-2018 10:00
Center Middle 1'	8A09008-02	Soil	01/05/18 15:35	01-09-2018 10:00
West Middle 1'	8A09008-03	Soil	01/05/18 15:39	01-09-2018 10:00
Wall, West End North Side 1'	8A09008-04	Soil	01/05/18 15:43	01-09-2018 10:00
Wall, West End South Side 1'	8A09008-05	Soil	01/05/18 15:47	01-09-2018 10:00
Wall, East End South Side 1'	8A09008-06	Soil	01/05/18 15:53	01-09-2018 10:00
Wall, East End North Side 1'	8A09008-07	Soil	01/05/18 15:56	01-09-2018 10:00
Release Point 8'	8A09008-08	Soil	01/05/18 17:30	01-09-2018 10:00

PBELAB staff was advised by the client on 01/10/18 to add Chlorides to all samples and move the analysis to a rush turn around time.

East Middle 1'

8A09008-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	**1.86**	0.0581	mg/kg dry	50	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**14.5**	0.116	mg/kg dry	50	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**36.2**	0.116	mg/kg dry	100	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**13.5**	0.116	mg/kg dry	50	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**7.37**	0.0581	mg/kg dry	50	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*91.8 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**36.8**	1.16	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**1100**	291	mg/kg dry	10	P8A0913	01/09/18	01/09/18	TPH 8015M	
>C12-C28	**3770**	291	mg/kg dry	10	P8A0913	01/09/18	01/09/18	TPH 8015M	
>C28-C35	**718**	291	mg/kg dry	10	P8A0913	01/09/18	01/09/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*129 %*	*70-130*		*P8A0913*	*01/09/18*	*01/09/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*114 %*	*70-130*		*P8A0913*	*01/09/18*	*01/09/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**5590**	291	mg/kg dry	10	[CALC]	01/09/18	01/09/18	calc	

Center Middle 1'

8A09008-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.0222	mg/kg dry	20	P8A1005	01/10/18	01/11/18	EPA 8021B	
Toluene	**0.0836**	0.0444	mg/kg dry	20	P8A1005	01/10/18	01/11/18	EPA 8021B	
Ethylbenzene	**0.101**	0.0222	mg/kg dry	20	P8A1005	01/10/18	01/11/18	EPA 8021B	
Xylene (p/m)	**0.0462**	0.0444	mg/kg dry	20	P8A1005	01/10/18	01/11/18	EPA 8021B	
Xylene (o)	ND	0.0222	mg/kg dry	20	P8A1005	01/10/18	01/11/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*81.3 %*	*75-125*		*P8A1005*	*01/10/18*	*01/11/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*75-125*		*P8A1005*	*01/10/18*	*01/11/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.11	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P8A0913	01/09/18	01/09/18	TPH 8015M	
>C12-C28	**121**	27.8	mg/kg dry	1	P8A0913	01/09/18	01/09/18	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P8A0913	01/09/18	01/09/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.9 %*	*70-130*		*P8A0913*	*01/09/18*	*01/09/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*104 %*	*70-130*		*P8A0913*	*01/09/18*	*01/09/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**121**	27.8	mg/kg dry	1	[CALC]	01/09/18	01/09/18	calc	

West Middle 1'

8A09008-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**0.0687**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**0.160**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**0.0617**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**0.0261**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*114 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*105 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.09	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**68.8**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*107 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**68.8**	27.2	mg/kg dry	1	[CALC]	01/09/18	01/10/18	calc	

Wall, West End North Side 1'

8A09008-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	**0.0499**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**0.240**	0.0449	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**0.700**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**0.243**	0.0449	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**0.107**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*86.4 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*109 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**5.70**	1.12	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**107**	28.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**1030**	28.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	**189**	28.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*122 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*126 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**1330**	28.1	mg/kg dry	1	[CALC]	01/09/18	01/10/18	calc	

Wall, West End South Side 1'

8A09008-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	**0.0609**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**0.132**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**0.448**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**0.168**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**0.0937**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*105 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*83.6 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.09	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**28.2**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**99.8**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*118 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*119 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**128**	27.2	mg/kg dry	1	[CALC]	01/09/18	01/10/18	calc	

Wall, East End South Side 1'

8A09008-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	**0.165**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**2.05**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**7.80**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**2.87**	0.0435	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**1.71**	0.0217	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*116 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*85.5 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**14.2**	1.09	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**339**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**1600**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	**277**	27.2	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*127 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*123 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2210**	27.2	mg/kg dry	1	[CALC]	01/09/18	01/10/18	calc	

Wall, East End North Side 1'

8A09008-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.0233	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**0.109**	0.0465	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**0.395**	0.0233	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**0.125**	0.0465	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**0.100**	0.0233	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*80.2 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*85.6 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**51.7**	1.16	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**71.2**	29.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*108 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**71.2**	29.1	mg/kg dry	1	[CALC]	01/09/18	01/10/18	calc	

Release Point 8'

8A09008-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	**0.342**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Toluene	**3.11**	0.0449	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Ethylbenzene	**8.27**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (p/m)	**2.91**	0.0449	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Xylene (o)	**1.68**	0.0225	mg/kg dry	20	P8A1005	01/10/18	01/10/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*67.6 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*75-125*		*P8A1005*	*01/10/18*	*01/10/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**159**	1.12	mg/kg dry	1	P8A1007	01/10/18	01/11/18	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P8A1001	01/10/18	01/10/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**841**	140	mg/kg dry	5	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C12-C28	**3380**	140	mg/kg dry	5	P8A0913	01/09/18	01/10/18	TPH 8015M	
>C28-C35	**622**	140	mg/kg dry	5	P8A0913	01/09/18	01/10/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*122 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*122 %*	*70-130*		*P8A0913*	*01/09/18*	*01/10/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**4850**	140	mg/kg dry	5	[CALC]	01/09/18	01/10/18	calc	

Organics by GC - 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 P8A1005 - General Preparation (GC)										
Blank (P8A1005-BLK1)				Prepared & Analyzed: 01/10/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.0673*		*"*	*0.0600*		*112*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0577*		*"*	*0.0600*		*96.2*	*75-125*			
LCS (P8A1005-BS1)				Prepared & Analyzed: 01/10/18						
Benzene	0.0888	0.00100	mg/kg wet	0.100		88.8	70-130			
Toluene	0.0975	0.00200	"	0.100		97.5	70-130			
Ethylbenzene	0.113	0.00100	"	0.100		113	70-130			
Xylene (p/m)	0.208	0.00200	"				70-130			
Xylene (o)	0.104	0.00100	"				70-130			
Surrogate: 1,4-Difluorobenzene	*0.0557*		*"*	*0.0600*		*92.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0597*		*"*	*0.0600*		*99.6*	*75-125*			
LCS Dup (P8A1005-BSD1)				Prepared & Analyzed: 01/10/18						
Benzene	0.0925	0.00100	mg/kg wet	0.100		92.5	70-130	4.11	20	
Toluene	0.101	0.00200	"	0.100		101	70-130	3.59	20	
Ethylbenzene	0.116	0.00100	"	0.100		116	70-130	2.64	20	
Xylene (p/m)	0.217	0.00200	"				70-130		20	
Xylene (o)	0.106	0.00100	"				70-130		20	
Surrogate: 4-Bromofluorobenzene	*0.0657*		*"*	*0.0600*		*110*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0528*		*"*	*0.0600*		*88.0*	*75-125*			
Calibration Blank (P8A1005-CCB1)				Prepared & Analyzed: 01/10/18						
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.0708*		*"*	*0.0600*		*118*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0567*		*"*	*0.0600*		*94.4*	*75-125*			

Organics by GC - 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 P8A1005 - General Preparation (GC)										
Calibration Check (P8A1005-CCV1)				Prepared & Analyzed: 01/10/18						
Benzene	0.109	0.00100	mg/kg wet	0.100		109	80-120			
Toluene	0.118	0.00200	"	0.100		118	80-120			
Ethylbenzene	0.116	0.00100	"	0.100		116	80-120			
Xylene (p/m)	0.214	0.00200	"	0.200		107	80-120			
Xylene (o)	0.109	0.00100	"	0.100		109	80-120			
Surrogate: 1,4-Difluorobenzene	*0.0566*		*"*	*0.0600*		*94.4*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0703*		*"*	*0.0600*		*117*	*75-125*			
Calibration Check (P8A1005-CCV2)				Prepared & Analyzed: 01/10/18						
Benzene	0.109	0.00100	mg/kg wet	0.100		109	80-120			
Toluene	0.114	0.00200	"	0.100		114	80-120			
Ethylbenzene	0.115	0.00100	"	0.100		115	80-120			
Xylene (p/m)	0.209	0.00200	"	0.200		105	80-120			
Xylene (o)	0.114	0.00100	"	0.100		114	80-120			
Surrogate: 1,4-Difluorobenzene	*0.0634*		*"*	*0.0600*		*106*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0700*		*"*	*0.0600*		*117*	*75-125*			
Matrix Spike (P8A1005-MS1)		**Source: 8A09008-02**		Prepared: 01/10/18 Analyzed: 01/11/18						
Benzene	0.115	0.0222	mg/kg dry	0.111	ND	104	80-120			
Toluene	0.120	0.0444	"	0.111	0.0836	33.0	80-120			QM-05
Ethylbenzene	0.136	0.0222	"	0.111	0.101	31.8	80-120			QM-05
Xylene (p/m)	0.237	0.0444	"		0.0462		80-120			
Xylene (o)	0.101	0.0222	"		ND		80-120			
Surrogate: 1,4-Difluorobenzene	*0.0606*		*"*	*0.0667*		*90.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0732*		*"*	*0.0667*		*110*	*75-125*			
Matrix Spike Dup (P8A1005-MSD1)		**Source: 8A09008-02**		Prepared: 01/10/18 Analyzed: 01/11/18						
Benzene	0.0973	0.0222	mg/kg dry	0.111	ND	87.6	80-120	16.9	20	
Toluene	0.129	0.0444	"	0.111	0.0836	40.8	80-120	21.1	20	QM-05
Ethylbenzene	0.131	0.0222	"	0.111	0.101	27.0	80-120	16.3	20	QM-05
Xylene (p/m)	0.259	0.0444	"		0.0462		80-120		20	
Xylene (o)	0.104	0.0222	"		ND		80-120		20	
Surrogate: 4-Bromofluorobenzene	*0.0748*		*"*	*0.0667*		*112*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0601*		*"*	*0.0667*		*90.2*	*75-125*			

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 P8A1001 - * DEFAULT PREP *****										
Blank (P8A1001-BLK1)				Prepared & Analyzed: 01/10/18						
% Moisture	ND	0.1	%							
Duplicate (P8A1001-DUP1)		**Source: 8A09009-01**		Prepared & Analyzed: 01/10/18						
% Moisture	41.0	0.1	%		40.0			2.47	20	
Batch P8A1007 - * DEFAULT PREP *****										
Blank (P8A1007-BLK1)				Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8A1007-BS1)				Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	389	1.00	mg/kg wet	400		97.3	80-120			
LCS Dup (P8A1007-BSD1)				Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	413	1.00	mg/kg wet	400		103	80-120	6.05	20	
Duplicate (P8A1007-DUP1)		**Source: 8A09008-01**		Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	41.9	1.16	mg/kg dry		36.8			12.9	20	
Duplicate (P8A1007-DUP2)		**Source: 8A05003-07**		Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	8060	27.5	mg/kg dry		8000			0.791	20	
Matrix Spike (P8A1007-MS1)		**Source: 8A09008-01**		Prepared: 01/10/18 Analyzed: 01/11/18						
Chloride	1280	1.16	mg/kg dry	1160	36.8	107	80-120			

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 P8A0913 - General Preparation (GC)										
Blank (P8A0913-BLK1)				Prepared & Analyzed: 01/09/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*65.0*		*"*	*50.0*		*130*	*70-130*			
LCS (P8A0913-BS1)				Prepared & Analyzed: 01/09/18						
C6-C12	876	25.0	mg/kg wet	1000		87.6	75-125			
>C12-C28	983	25.0	"	1000		98.3	75-125			
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*61.5*		*"*	*50.0*		*123*	*70-130*			
LCS Dup (P8A0913-BSD1)				Prepared & Analyzed: 01/09/18						
C6-C12	919	25.0	mg/kg wet	1000		91.9	75-125	4.77	20	
>C12-C28	999	25.0	"	1000		99.9	75-125	1.62	20	
Surrogate: 1-Chlorooctane	*115*		*"*	*100*		*115*	*70-130*			
Surrogate: o-Terphenyl	*62.6*		*"*	*50.0*		*125*	*70-130*			
Calibration Blank (P8A0913-CCB1)				Prepared & Analyzed: 01/09/18						
C6-C12	11.5		mg/kg wet							
>C12-C28	22.7		"							
Surrogate: 1-Chlorooctane	*121*		*"*	*100*		*121*	*70-130*			
Surrogate: o-Terphenyl	*63.1*		*"*	*50.0*		*126*	*70-130*			
Calibration Blank (P8A0913-CCB2)				Prepared: 01/09/18 Analyzed: 01/10/18						
C6-C12	13.3		mg/kg wet							
>C12-C28	22.8		"							
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*64.7*		*"*	*50.0*		*129*	*70-130*			

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 P8A0913 - General Preparation (GC)										
Calibration Check (P8A0913-CCV1)				Prepared & Analyzed: 01/09/18						
C6-C12	915	25.0	mg/kg wet	1000		91.5	85-115			
>C12-C28	991	25.0	"	1000		99.1	85-115			
Surrogate: 1-Chlorooctane	*128*		*"*	*100*		*128*	*70-130*			
Surrogate: o-Terphenyl	*57.1*		*"*	*50.0*		*114*	*70-130*			
Calibration Check (P8A0913-CCV2)				Prepared: 01/09/18 Analyzed: 01/10/18						
C6-C12	932	25.0	mg/kg wet	1000		93.2	85-115			
>C12-C28	978	25.0	"	1000		97.8	85-115			
Surrogate: 1-Chlorooctane	*126*		*"*	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*56.5*		*"*	*50.0*		*113*	*70-130*			
Calibration Check (P8A0913-CCV3)				Prepared: 01/09/18 Analyzed: 01/10/18						
C6-C12	994	25.0	mg/kg wet	1000		99.4	85-115			
>C12-C28	1070	25.0	"	1000		107	85-115			
Surrogate: 1-Chlorooctane	*126*		*"*	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*61.2*		*"*	*50.0*		*122*	*70-130*			
Matrix Spike (P8A0913-MS1)		**Source: 8A09007-02**		Prepared: 01/09/18 Analyzed: 01/10/18						
C6-C12	912	25.3	mg/kg dry	1010	11.6	89.1	75-125			
>C12-C28	1010	25.3	"	1010	9.74	98.9	75-125			
Surrogate: 1-Chlorooctane	*127*		*"*	*101*		*126*	*70-130*			
Surrogate: o-Terphenyl	*63.8*		*"*	*50.5*		*126*	*70-130*			
Matrix Spike Dup (P8A0913-MSD1)		**Source: 8A09007-02**		Prepared: 01/09/18 Analyzed: 01/10/18						
C6-C12	920	25.3	mg/kg dry	1010	11.6	89.9	75-125	0.942	20	
>C12-C28	1030	25.3	"	1010	9.74	101	75-125	2.13	20	
Surrogate: 1-Chlorooctane	*128*		*"*	*101*		*127*	*70-130*			
Surrogate: o-Terphenyl	*62.7*		*"*	*50.5*		*124*	*70-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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: Brent Barron Date: 1/11/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland, Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Stakeholder Midstream
Project #: 9021 Project Loc: CR 138, N
Area: PO#:

Project Manager: Wally McNeil / Fred Holmes
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: 13000 West County Road 100
City/State/Zip: Odessa, Texas 79765
Phone: 432-563-2200 Fax: 432-563-2213
Sampler Signature: Wally McNeil
email: fred @etechenv.com

Report Format: STANDARD: ☒ TRRP: ☐ NPDES: ☐

(lab use only)
ORDER #: 8A09008

Analyze For:
TCLP: ☐ ☐ ☐ ☐
TOTAL: ☐ ☐ ☐ ☐

66

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.D.R.M.	Chlorides			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
01	East Middle		1Ft.	1-5-18	1530	1	☑	☐	☐	☐	☐	☐	☐	☐	Soil	☑	☐	☒	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☒	☑
02	Center Middle				1535	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
03	West Middle				1539	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
04	Wall, West End North Side				1543	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
05	Wall, West End South Side				1547	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
06	Wall, East End South Side				1553	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
07	Wall, East End North Side				1556	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
08	Release Point		8Ft		1730	1	☑	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐
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Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Wally McNeil	1/8/18	10:00AM	M Estrup	01/09/18	8:55
M Estrup	01/09/18	8:55	Sara	1-9-18	10:30

Laboratory Comments:
Sample Containers Intact? [✓ Y] N
VOCs Free of Headspace? Y N
Custody seals on container(s) [✓ Y] N
Custody seals on cooler(s) Y N
Sample Hand Delivered [✓ Y] N
Sar by Sampler/Client Rep. ? [✓ Y] N
Sar by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 2.0 °C
4

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

Analytical Report

Prepared for:

Fred Holmes

E Tech Environmental & Safety Solutions, Inc.

13000 West County Road 100

Odessa, TX 79765

Project: Stakeholder Midstream

Project Number: 9021

Location: Pollos Hermanos

Lab Order Number: 8A17011

NELAP/TCEQ # T104704516-16-7

Report Date: 01/18/18

E Tech Environmental & Safety Solutions, Inc.
13000 West County Road 100
Odessa TX, 79765

Project: Stakeholder Midstream
Project Number: 9021
Project Manager: Fred Holmes

Fax: (432) 563-2213

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1	8A17011-01	Water	01/15/18 10:30	01-17-2018 13:30

1

8A17011-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**96.3**	5.00	mg/L	10	P8A1708	01/17/18	01/18/18	EPA 300.0	

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 P8A1708 - * DEFAULT PREP *****										
Blank (P8A1708-BLK1)				Prepared: 01/17/18 Analyzed: 01/18/18						
Chloride	ND	0.500	mg/L							
LCS (P8A1708-BS1)				Prepared: 01/17/18 Analyzed: 01/18/18						
Chloride	39.1	0.500	mg/L	40.0		97.8	85-115			
LCS Dup (P8A1708-BSD1)				Prepared: 01/17/18 Analyzed: 01/18/18						
Chloride	39.1	0.500	mg/L	40.0		97.8	85-115	0.00	20	
Duplicate (P8A1708-DUP1)		**Source: 8A17011-01**		Prepared: 01/17/18 Analyzed: 01/18/18						
Chloride	98.7	5.00	mg/L		96.3			2.39	20	
Matrix Spike (P8A1708-MS1)		**Source: 8A17011-01**		Prepared: 01/17/18 Analyzed: 01/18/18						
Chloride	198	5.00	mg/L	100	96.3	101	80-120			

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 1/18/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB Permian Basin Environmental Lab, LP
1400 Rankin Hwy Midland, Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Page 6 of 6

Project Manager: Fred Holmes
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: 13000 West County Road 100
City/State/Zip: Odessa, Texas 79765
Phone: 432-563-2200 Fax: 432-563-2213
Sampler Signature:
email: Fred@etechenv.com

Project Name: Stakeholder Midstream
Project #: 9021 Project Loc: Pollos Hermanos
Area: PO#:

Report Format STANDARD: ☒ TRRP: ☐ NPDES: ☐

(lab use only)
ORDER #: 8A17011

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-PotableSpecify Other
1	1			1/15/18	1030	1	☑	☐	☐	☐	☐	☐	☐	☐			
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Analyze For:

LAB # (lab use only)	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT(Pre-Schedule) [✓ 24], 48, 72 hrs	STANDARD TAT
TCLP:					☐	☐	☐	☐							
TOTAL :					☐	☐	☐	☐							
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Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Wally McNeil	11/15/18	1410	M Estrup	11/17/18	850
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
M Estrup	11/17/18	850		11-17-18	1330

Laboratory Comments:
Sample Containers Intact? [✓ Y] N
VOCs Free of Headspace? [✓ Y] N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered [✓ Y] N
Sar by Sampler/Client Rep. ? Y N
Sar by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 1.6 +0.4 °C

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

Analytical Report

Prepared for:

Fred Holmes

E Tech Environmental & Safety Solutions, Inc.

13000 West County Road 100

Odessa, TX 79765

Project: Stakeholder Midstream

Project Number: 9021

Location: CR 138, NM

Lab Order Number: 8A31015

NELAP/TCEQ # T104704516-17-8

Report Date: 02/05/18

E Tech Environmental & Safety Solutions, Inc.
13000 West County Road 100
Odessa TX, 79765

Project: Stakeholder Midstream
Project Number: 9021
Project Manager: Fred Holmes

Fax: (432) 563-2213

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East End Center 1.5'	8A31015-01	Soil	01/26/18 09:05	01-31-2018 11:42
West Wall North Side 1.5'	8A31015-02	Soil	01/26/18 09:20	01-31-2018 11:42
East Wall South Side 1.5'	8A31015-03	Soil	01/26/18 09:30	01-31-2018 11:42
Release Point (Bottom) 8'	8A31015-04	Soil	01/26/18 09:45	01-31-2018 11:42
Release Point N. Wall 1'	8A31015-05	Soil	01/26/18 10:00	01-31-2018 11:42
Release Point N. Wall 3'	8A31015-06	Soil	01/26/18 10:08	01-31-2018 11:42
Release Point N. Wall 5'	8A31015-07	Soil	01/26/18 10:15	01-31-2018 11:42
Release Point N. Wall 7'	8A31015-08	Soil	01/26/18 10:20	01-31-2018 11:42
Release Point S. Wall 1'	8A31015-09	Soil	01/26/18 10:33	01-31-2018 11:42
Release Point S. Wall 3'	8A31015-10	Soil	01/26/18 10:39	01-31-2018 11:42
Release Point S. Wall 5'	8A31015-11	Soil	01/26/18 10:45	01-31-2018 11:42
Release Point S. Wall 7'	8A31015-12	Soil	01/26/18 10:50	01-31-2018 11:42

East End Center 1.5'

8A31015-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P8A3115	01/31/18	02/01/18	EPA 8021B	
Toluene	ND	0.0115	mg/kg dry	1	P8A3115	01/31/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00575	mg/kg dry	1	P8A3115	01/31/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0230	mg/kg dry	1	P8A3115	01/31/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0115	mg/kg dry	1	P8A3115	01/31/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*162 %*	*75-125*		*P8A3115*	*01/31/18*	*02/01/18*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*124 %*	*75-125*		*P8A3115*	*01/31/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.15	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*116 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

West Wall North Side 1.5'

8A31015-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	**0.0583**	0.0217	mg/kg dry	20	P8A3115	01/31/18	02/01/18	EPA 8021B	
Toluene	**0.315**	0.217	mg/kg dry	20	P8A3115	01/31/18	02/01/18	EPA 8021B	
Ethylbenzene	**1.74**	0.109	mg/kg dry	20	P8A3115	01/31/18	02/01/18	EPA 8021B	
Xylene (p/m)	**0.740**	0.435	mg/kg dry	20	P8A3115	01/31/18	02/01/18	EPA 8021B	
Xylene (o)	**0.493**	0.217	mg/kg dry	20	P8A3115	01/31/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*87.3 %*	*75-125*		*P8A3115*	*01/31/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*102 %*	*75-125*		*P8A3115*	*01/31/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**19.4**	1.09	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**501**	136	mg/kg dry	5	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	**1220**	136	mg/kg dry	5	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	**206**	136	mg/kg dry	5	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.0 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.4 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**1920**	136	mg/kg dry	5	[CALC]	02/01/18	02/01/18	calc	

East Wall South Side 1.5'

8A31015-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00575	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0230	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*94.4 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*127 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	*S-GC*
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.15	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.2 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.4 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

Release Point (Bottom) 8'

8A31015-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00575	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0230	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*73.9 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	*S-GC*
Surrogate: 4-Bromofluorobenzene		*99.7 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**11.6**	1.15	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	**70.4**	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.5 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.6 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**70.4**	28.7	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

Release Point N. Wall 1'

8A31015-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0106	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00532	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0213	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0106	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*119 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*84.4 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**13.8**	1.06	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.6	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*81.6 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*87.4 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

Release Point N. Wall 3'

8A31015-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00116	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0116	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00581	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0233	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0116	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*116 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*85.0 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1.95**	1.16	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.1	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.5 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.8 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

Release Point N. Wall 5'

8A31015-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00549	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0220	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*114 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.5 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**332**	5.49	mg/kg dry	5	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/01/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*81.9 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*87.7 %*	*70-130*		*P8B0105*	*02/01/18*	*02/01/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	02/01/18	02/01/18	calc	

Release Point N. Wall 7'

8A31015-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00112	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0112	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00562	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0225	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0112	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.1 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*123 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**456**	1.12	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.1	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*84.2 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*91.4 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	02/01/18	02/02/18	calc	

Release Point S. Wall 1'

8A31015-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00575	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0230	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*100 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*116 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**56.7**	1.15	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*80.9 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*87.3 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	02/01/18	02/02/18	calc	

Release Point S. Wall 3'

8A31015-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0111	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00556	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0222	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0111	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*92.8 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*115 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.11	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*82.9 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*90.0 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	02/01/18	02/02/18	calc	

Release Point S. Wall 5'

8A31015-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00549	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0220	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0110	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*113 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*92.7 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**14.8**	1.10	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.8 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*94.9 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	02/01/18	02/02/18	calc	

Release Point S. Wall 7'

8A31015-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Toluene	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Ethylbenzene	ND	0.00575	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (p/m)	ND	0.0230	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Xylene (o)	ND	0.0115	mg/kg dry	1	P8B0202	02/01/18	02/01/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*120 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*87.0 %*	*75-125*		*P8B0202*	*02/01/18*	*02/01/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**119**	1.15	mg/kg dry	1	P8B0110	02/01/18	02/03/18	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P8B0501	02/05/18	02/05/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P8B0105	02/01/18	02/02/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.6 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*99.9 %*	*70-130*		*P8B0105*	*02/01/18*	*02/02/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	02/01/18	02/02/18	calc	

Organics by GC - 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 P8A3115 - General Preparation (GC)										
Blank (P8A3115-BLK1)				Prepared & Analyzed: 01/31/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 1,4-Difluorobenzene	*0.0547*		*"*	*0.0600*		*91.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0753*		*"*	*0.0600*		*125*	*75-125*			
LCS (P8A3115-BS1)				Prepared & Analyzed: 01/31/18						
Benzene	0.0911	0.00100	mg/kg wet	0.100		91.1	70-130			
Toluene	0.0980	0.0100	"	0.100		98.0	70-130			
Ethylbenzene	0.116	0.00500	"	0.100		116	70-130			
Xylene (p/m)	0.209	0.0200	"				70-130			
Xylene (o)	0.103	0.0100	"				70-130			
Surrogate: 4-Bromofluorobenzene	*0.0580*		*"*	*0.0600*		*96.6*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0534*		*"*	*0.0600*		*89.0*	*75-125*			
LCS Dup (P8A3115-BSD1)				Prepared & Analyzed: 01/31/18						
Benzene	0.106	0.00100	mg/kg wet	0.100		106	70-130	15.2	20	
Toluene	0.114	0.0100	"	0.100		114	70-130	15.3	20	
Ethylbenzene	0.114	0.00500	"	0.100		114	70-130	1.86	20	
Xylene (p/m)	0.216	0.0200	"				70-130		20	
Xylene (o)	0.114	0.0100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	*0.0615*		*"*	*0.0600*		*102*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0674*		*"*	*0.0600*		*112*	*75-125*			
Duplicate (P8A3115-DUP1)		**Source: 8A31002-10**		Prepared: 01/31/18 Analyzed: 02/01/18						
Benzene	ND	0.0206	mg/kg dry		ND				20	
Toluene	0.375	0.206	"		0.334			11.3	20	
Ethylbenzene	1.04	0.103	"		0.890			15.3	20	
Xylene (p/m)	3.37	0.412	"		2.95			13.3	20	
Xylene (o)	1.84	0.206	"		1.75			5.38	20	
Surrogate: 4-Bromofluorobenzene	*0.0438*		*"*	*0.0619*		*70.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0453*		*"*	*0.0619*		*73.2*	*75-125*			

Organics by GC - 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 P8B0202 - General Preparation (GC)										
Blank (P8B0202-BLK1)				Prepared & Analyzed: 02/01/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 4-Bromofluorobenzene	*0.0685*		*"*	*0.0600*		*114*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0507*		*"*	*0.0600*		*84.5*	*75-125*			
LCS (P8B0202-BS1)				Prepared & Analyzed: 02/01/18						
Benzene	0.111	0.00100	mg/kg wet	0.100		111	70-130			
Toluene	0.119	0.0100	"	0.100		119	70-130			
Ethylbenzene	0.115	0.00500	"	0.100		115	70-130			
Xylene (p/m)	0.217	0.0200	"				70-130			
Xylene (o)	0.119	0.0100	"				70-130			
Surrogate: 4-Bromofluorobenzene	*0.0729*		*"*	*0.0600*		*121*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0634*		*"*	*0.0600*		*106*	*75-125*			
LCS Dup (P8B0202-BSD1)				Prepared & Analyzed: 02/01/18						
Benzene	0.107	0.00100	mg/kg wet	0.100		107	70-130	3.39	20	
Toluene	0.119	0.0100	"	0.100		119	70-130	0.337	20	
Ethylbenzene	0.115	0.00500	"	0.100		115	70-130	0.260	20	
Xylene (p/m)	0.220	0.0200	"				70-130		20	
Xylene (o)	0.115	0.0100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	*0.0616*		*"*	*0.0600*		*103*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0706*		*"*	*0.0600*		*118*	*75-125*			

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 P8B0110 - * DEFAULT PREP *****										
Blank (P8B0110-BLK1)				Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8B0110-BS1)				Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	404	1.00	mg/kg wet	400		101	80-120			
LCS Dup (P8B0110-BSD1)				Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	395	1.00	mg/kg wet	400		98.8	80-120	2.13	20	
Duplicate (P8B0110-DUP1)		**Source: 8A31012-17**		Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	1790	25.5	mg/kg dry		1710			4.46	20	
Duplicate (P8B0110-DUP2)		**Source: 8A31015-03**		Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	ND	1.15	mg/kg dry		ND				20	
Matrix Spike (P8B0110-MS1)		**Source: 8A31012-17**		Prepared: 02/01/18 Analyzed: 02/03/18						
Chloride	3790	25.5	mg/kg dry	2040	1710	102	80-120			
Batch P8B0501 - * DEFAULT PREP *****										
Blank (P8B0501-BLK1)				Prepared & Analyzed: 02/05/18						
% Moisture	ND	0.1	%							
Duplicate (P8B0501-DUP1)		**Source: 8A31012-03**		Prepared & Analyzed: 02/05/18						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P8B0501-DUP2)		**Source: 8A31015-04**		Prepared & Analyzed: 02/05/18						
% Moisture	15.0	0.1	%		13.0			14.3	20	

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 P8B0501 - * DEFAULT PREP *****										
Duplicate (P8B0501-DUP3)		**Source: 8A31019-09**		Prepared & Analyzed: 02/05/18						
% Moisture	5.0	0.1	%		1.0			133	20	
Duplicate (P8B0501-DUP4)		**Source: 8A31024-02**		Prepared & Analyzed: 02/05/18						
% Moisture	13.0	0.1	%		15.0			14.3	20	
Duplicate (P8B0501-DUP5)		**Source: 8A31024-24**		Prepared & Analyzed: 02/05/18						
% Moisture	12.0	0.1	%		12.0			0.00	20	
Duplicate (P8B0501-DUP6)		**Source: 8B02003-01**		Prepared & Analyzed: 02/05/18						
% Moisture	19.0	0.1	%		14.0			30.3	20	

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 P8B0105 - General Preparation (GC)										
Blank (P8B0105-BLK1)				Prepared & Analyzed: 02/01/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*64.6*		*"*	*50.0*		*129*	*70-130*			
LCS (P8B0105-BS1)				Prepared & Analyzed: 02/01/18						
C6-C12	884	25.0	mg/kg wet	1000		88.4	75-125			
>C12-C28	942	25.0	"	1000		94.2	75-125			
Surrogate: 1-Chlorooctane	*109*		*"*	*100*		*109*	*70-130*			
Surrogate: o-Terphenyl	*59.2*		*"*	*50.0*		*118*	*70-130*			
LCS Dup (P8B0105-BSD1)				Prepared & Analyzed: 02/01/18						
C6-C12	826	25.0	mg/kg wet	1000		82.6	75-125	6.78	20	
>C12-C28	926	25.0	"	1000		92.6	75-125	1.66	20	
Surrogate: 1-Chlorooctane	*129*		*"*	*100*		*129*	*70-130*			
Surrogate: o-Terphenyl	*59.0*		*"*	*50.0*		*118*	*70-130*			
Calibration Blank (P8B0105-CCB1)				Prepared & Analyzed: 02/01/18						
C6-C12	18.7		mg/kg wet							
>C12-C28	22.2		"							
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*61.9*		*"*	*50.0*		*124*	*70-130*			
Calibration Blank (P8B0105-CCB2)				Prepared: 02/01/18 Analyzed: 02/02/18						
C6-C12	20.7		mg/kg wet							
>C12-C28	11.1		"							
Surrogate: 1-Chlorooctane	*115*		*"*	*100*		*115*	*70-130*			
Surrogate: o-Terphenyl	*64.9*		*"*	*50.0*		*130*	*70-130*			

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 P8B0105 - General Preparation (GC)										
Calibration Check (P8B0105-CCV1)				Prepared & Analyzed: 02/01/18						
C6-C12	471	25.0	mg/kg wet	500		94.2	85-115			
>C12-C28	478	25.0	"	500		95.6	85-115			
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*58.9*		*"*	*50.0*		*118*	*70-130*			
Calibration Check (P8B0105-CCV2)				Prepared: 02/01/18 Analyzed: 02/02/18						
C6-C12	490	25.0	mg/kg wet	500		98.1	85-115			
>C12-C28	520	25.0	"	500		104	85-115			
Surrogate: 1-Chlorooctane	*122*		*"*	*100*		*122*	*70-130*			
Surrogate: o-Terphenyl	*61.4*		*"*	*50.0*		*123*	*70-130*			
Calibration Check (P8B0105-CCV3)				Prepared: 02/01/18 Analyzed: 02/02/18						
C6-C12	515	25.0	mg/kg wet	500		103	85-115			
>C12-C28	524	25.0	"	500		105	85-115			
Surrogate: 1-Chlorooctane	*126*		*"*	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*63.2*		*"*	*50.0*		*126*	*70-130*			
Matrix Spike (P8B0105-MS1)		**Source: 8A31014-02**		Prepared: 02/01/18 Analyzed: 02/02/18						
C6-C12	932	26.6	mg/kg dry	1060	15.6	86.2	75-125			
>C12-C28	1080	26.6	"	1060	ND	101	75-125			
Surrogate: 1-Chlorooctane	*129*		*"*	*106*		*121*	*70-130*			
Surrogate: o-Terphenyl	*53.3*		*"*	*53.2*		*100*	*70-130*			
Matrix Spike Dup (P8B0105-MSD1)		**Source: 8A31014-02**		Prepared: 02/01/18 Analyzed: 02/02/18						
C6-C12	916	26.6	mg/kg dry	1060	15.6	84.6	75-125	1.82	20	
>C12-C28	1070	26.6	"	1060	ND	100	75-125	1.08	20	
Surrogate: 1-Chlorooctane	*128*		*"*	*106*		*120*	*70-130*			
Surrogate: o-Terphenyl	*52.1*		*"*	*53.2*		*98.0*	*70-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 2/5/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland, Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Stakeholder Midstream
Project #: 9021 Project Loc: CR 138, N
Area: PO#:

Project Manager: SEAN CARTER
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Mailing Address: P.O Box 62228
City/State/Zip: Odessa, Texas 79765
Phone: 432-563-2200 Fax: 432-563-2213
Sampler Signature: Wally Mc Neil
email: ~~sean~~ fred@etechenv.com

Report Format: STANDARD:☒ TRRP:☐ NPDES:☐

Analyze For: TCLP: ☐ ☐ ☐ ☐ TOTAL: ☐ ☐ ☐ ☐

FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-PotableSpecify Other)	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT(Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
East End Center		1.5'	1-26-18	0905		☐	☐	☐	☐	☐	☐	☐	☐	So. 1	☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
West Wall North Side		1.5'		0920		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
East Wall South Side		1.5'		0930		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
Release Point (Bottom)		8'		0945		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
Realase Point N. Wall 1'		1'		1000		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 3'		3'		1008		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 5'		5'		1015		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 7'		7'		1020		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
Release Point S. Wall 1'		1'		1033		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 3'		3'		1039		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 5'		5'		1045		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " " 7'		7'		1050		☐	☐	☐	☐	☐	☐	☐	☐		☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☐	☐
" " " "						☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Wally Mc Neil	1/26/18	1400	M Estrup	1-31-18	857
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: M Estrup	Date 1-31-18	Time 857	Received by:	Date 1/31/18	Time 940

Laboratory Comments:

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

Temperature Upon Receipt: 20 °C

C1

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

Analytical Report

Prepared for:

Fred Holmes

E Tech Environmental & Safety Solutions, Inc.

13000 West County Road 100

Odessa, TX 79765

Project: Stakeholder Midstream

Project Number: 9021

Location: Pollos Hermanos

Lab Order Number: 8B07001

NELAP/TCEQ # T104704516-17-8

Report Date: 02/08/18

E Tech Environmental & Safety Solutions, Inc.
13000 West County Road 100
Odessa TX, 79765

Project: Stakeholder Midstream
Project Number: 9021
Project Manager: Fred Holmes

Fax: (432) 563-2213

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
West End North Side 1.5'	8B07001-01	Soil	02/06/18 10:10	02-06-2018 17:00

West End North Side 1.5'

8B07001-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00119	mg/kg dry	1	P8B0705	02/07/18	02/08/18	EPA 8021B	
Toluene	ND	0.0119	mg/kg dry	1	P8B0705	02/07/18	02/08/18	EPA 8021B	
Ethylbenzene	ND	0.00595	mg/kg dry	1	P8B0705	02/07/18	02/08/18	EPA 8021B	
Xylene (p/m)	ND	0.0238	mg/kg dry	1	P8B0705	02/07/18	02/08/18	EPA 8021B	
Xylene (o)	ND	0.0119	mg/kg dry	1	P8B0705	02/07/18	02/08/18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*115 %*	*75-125*		*P8B0705*	*02/07/18*	*02/08/18*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*85.9 %*	*75-125*		*P8B0705*	*02/07/18*	*02/08/18*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.19	mg/kg dry	1	P8B0708	02/07/18	02/08/18	EPA 300.0	
% Moisture	**16.0**	0.1	%	1	P8B0803	02/08/18	02/08/18	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.8	mg/kg dry	1	P8B0701	02/07/18	02/07/18	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P8B0701	02/07/18	02/07/18	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P8B0701	02/07/18	02/07/18	TPH 8015M	
Surrogate: 1-Chlorooctane		*76.6 %*	*70-130*		*P8B0701*	*02/07/18*	*02/07/18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*78.8 %*	*70-130*		*P8B0701*	*02/07/18*	*02/07/18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	02/07/18	02/07/18	calc	

Organics by GC - 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 P8B0705 - General Preparation (GC)										
Blank (P8B0705-BLK1)				Prepared: 02/07/18 Analyzed: 02/08/18						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.0100	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.0200	"							
Xylene (o)	ND	0.0100	"							
Surrogate: 1,4-Difluorobenzene	*0.0504*		*"*	*0.0600*		*84.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0600*		*"*	*0.0600*		*99.9*	*75-125*			
LCS (P8B0705-BS1)				Prepared & Analyzed: 02/07/18						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	70-130			
Toluene	0.120	0.0100	"	0.100		120	70-130			
Ethylbenzene	0.112	0.00500	"	0.100		112	70-130			
Xylene (p/m)	0.216	0.0200	"				70-130			
Xylene (o)	0.120	0.0100	"				70-130			
Surrogate: 1,4-Difluorobenzene	*0.0608*		*"*	*0.0600*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0713*		*"*	*0.0600*		*119*	*75-125*			
LCS Dup (P8B0705-BSD1)				Prepared: 02/07/18 Analyzed: 02/08/18						
Benzene	0.0989	0.00100	mg/kg wet	0.100		98.9	70-130	10.3	20	
Toluene	0.105	0.0100	"	0.100		105	70-130	12.9	20	
Ethylbenzene	0.117	0.00500	"	0.100		117	70-130	4.23	20	
Xylene (p/m)	0.215	0.0200	"				70-130		20	
Xylene (o)	0.102	0.0100	"				70-130		20	
Surrogate: 1,4-Difluorobenzene	*0.0667*		*"*	*0.0600*		*111*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0754*		*"*	*0.0600*		*126*	*75-125*			*S-GC*
Calibration Blank (P8B0705-CCB1)				Prepared & Analyzed: 02/07/18						
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.0716*		*"*	*0.0600*		*119*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0512*		*"*	*0.0600*		*85.3*	*75-125*			

Organics by GC - 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 P8B0705 - General Preparation (GC)										
Calibration Check (P8B0705-CCV1)				Prepared & Analyzed: 02/07/18						
Benzene	0.106	0.00100	mg/kg wet	0.100		106	80-120			
Toluene	0.117	0.0100	"	0.100		117	80-120			
Ethylbenzene	0.112	0.00500	"	0.100		112	80-120			
Xylene (p/m)	0.219	0.0200	"	0.200		109	80-120			
Xylene (o)	0.118	0.0100	"	0.100		118	80-120			
Surrogate: 4-Bromofluorobenzene	*0.0663*		*"*	*0.0600*		*111*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.0627*		*"*	*0.0600*		*105*	*75-125*			

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 P8B0708 - * DEFAULT PREP *****										
Blank (P8B0708-BLK1)				Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	ND	1.00	mg/kg wet							
LCS (P8B0708-BS1)				Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	441	1.00	mg/kg wet	400		110	80-120			
LCS Dup (P8B0708-BSD1)				Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	420	1.00	mg/kg wet	400		105	80-120	4.89	20	
Duplicate (P8B0708-DUP1)		**Source: 8B07001-01**		Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	ND	1.19	mg/kg dry		ND				20	
Duplicate (P8B0708-DUP2)		**Source: 8B07002-10**		Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	ND	1.01	mg/kg dry		107				20	
Matrix Spike (P8B0708-MS1)		**Source: 8B07001-01**		Prepared: 02/07/18 Analyzed: 02/08/18						
Chloride	1160	1.19	mg/kg dry	1190	ND	97.8	80-120			
Batch P8B0803 - * DEFAULT PREP *****										
Blank (P8B0803-BLK1)				Prepared & Analyzed: 02/08/18						
% Moisture	ND	0.1	%							
Duplicate (P8B0803-DUP1)		**Source: 8B07003-03**		Prepared & Analyzed: 02/08/18						
% Moisture	14.0	0.1	%		6.0			80.0	20	
Duplicate (P8B0803-DUP2)		**Source: 8B07006-04**		Prepared & Analyzed: 02/08/18						
% Moisture	9.0	0.1	%		8.0			11.8	20	

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 P8B0803 - * DEFAULT PREP *****										
Duplicate (P8B0803-DUP3)		**Source: 8B07005-17**		Prepared & Analyzed: 02/08/18						
% Moisture	14.0	0.1	%		15.0			6.90	20	
Duplicate (P8B0803-DUP4)		**Source: 8B07005-18**		Prepared & Analyzed: 02/08/18						
% Moisture	16.0	0.1	%		14.0			13.3	20	
Duplicate (P8B0803-DUP5)		**Source: 8B07007-02**		Prepared & Analyzed: 02/08/18						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P8B0803-DUP6)		**Source: 8B07020-01**		Prepared & Analyzed: 02/08/18						
% Moisture	3.0	0.1	%		6.0			66.7	20	

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 P8B0701 - General Preparation (GC)										
Blank (P8B0701-BLK1)				Prepared & Analyzed: 02/07/18						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*80.0*		*"*	*100*		*80.0*	*70-130*			
Surrogate: o-Terphenyl	*40.3*		*"*	*50.0*		*80.6*	*70-130*			
LCS (P8B0701-BS1)				Prepared & Analyzed: 02/07/18						
C6-C12	888	25.0	mg/kg wet	1000		88.8	75-125			
>C12-C28	929	25.0	"	1000		92.9	75-125			
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*50.5*		*"*	*50.0*		*101*	*70-130*			
LCS Dup (P8B0701-BSD1)				Prepared & Analyzed: 02/07/18						
C6-C12	894	25.0	mg/kg wet	1000		89.4	75-125	0.619	20	
>C12-C28	930	25.0	"	1000		93.0	75-125	0.0839	20	
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*50.7*		*"*	*50.0*		*101*	*70-130*			
Calibration Blank (P8B0701-CCB1)				Prepared & Analyzed: 02/07/18						
C6-C12	11.0		mg/kg wet							
>C12-C28	11.9		"							
Surrogate: 1-Chlorooctane	*107*		*"*	*100*		*107*	*70-130*			
Surrogate: o-Terphenyl	*54.7*		*"*	*50.0*		*109*	*70-130*			
Calibration Blank (P8B0701-CCB2)				Prepared & Analyzed: 02/07/18						
C6-C12	6.71		mg/kg wet							
>C12-C28	15.1		"							
Surrogate: 1-Chlorooctane	*91.0*		*"*	*100*		*91.0*	*70-130*			
Surrogate: o-Terphenyl	*46.2*		*"*	*50.0*		*92.5*	*70-130*			

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 P8B0701 - General Preparation (GC)										
Calibration Check (P8B0701-CCV1)				Prepared & Analyzed: 02/07/18						
C6-C12	519	25.0	mg/kg wet	500		104	85-115			
>C12-C28	569	25.0	"	500		114	85-115			
Surrogate: 1-Chlorooctane	*125*		*"*	*100*		*125*	*70-130*			
Surrogate: o-Terphenyl	*56.5*		*"*	*50.0*		*113*	*70-130*			
Calibration Check (P8B0701-CCV2)				Prepared & Analyzed: 02/07/18						
C6-C12	462	25.0	mg/kg wet	500		92.4	85-115			
>C12-C28	496	25.0	"	500		99.2	85-115			
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*53.6*		*"*	*50.0*		*107*	*70-130*			
Calibration Check (P8B0701-CCV3)				Prepared & Analyzed: 02/07/18						
C6-C12	547	25.0	mg/kg wet	500		109	85-115			
>C12-C28	565	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	*129*		*"*	*100*		*129*	*70-130*			
Surrogate: o-Terphenyl	*58.2*		*"*	*50.0*		*116*	*70-130*			
Matrix Spike (P8B0701-MS1)		**Source: 8B07002-19**		Prepared & Analyzed: 02/07/18						
C6-C12	1010	25.0	mg/kg dry	1000	10.6	99.8	75-125			
>C12-C28	1040	25.0	"	1000	ND	104	75-125			
Surrogate: 1-Chlorooctane	*128*		*"*	*100*		*128*	*70-130*			
Surrogate: o-Terphenyl	*49.3*		*"*	*50.0*		*98.7*	*70-130*			
Matrix Spike Dup (P8B0701-MSD1)		**Source: 8B07002-19**		Prepared & Analyzed: 02/07/18						
C6-C12	1040	25.0	mg/kg dry	1000	10.6	103	75-125	2.76	20	
>C12-C28	1040	25.0	"	1000	ND	104	75-125	0.286	20	
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*56.3*		*"*	*50.0*		*113*	*70-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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: Brent Barron Date: 2/8/2018

Brent Barron, Laboratory Director/Technical Director

PBELAB **Permian Basin Environmental Lab, LP**
1400 Rankin Hwy Midland, Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: ~~SEAN CARTER~~ Fred Holmes
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Mailing Address: P.O Box 62228
City/State/Zip: Odessa, Texas 79765
Phone: 432-563-2200 Fax: 432-563-2213
Sampler Signature: Wally McNeil
email: ~~sean~~ fred@etechenv.com

Project Name: Stakeholder Midstream
Project #: 9021 Project Loc: Pollos Hermanos
Area: PO#:

Report Format: STANDARD: ☒ TRRP: ☐ NPDES: ☐

Analyze For: TCLP: ☐ (Metals) ☐ (Volatiles) ☐ (Semi volatiles) ☐ (BTEX); TOTAL: ☐ (Metals) ☐ (Volatiles) ☐ (Semi volatiles) ☐ (BTEX)

		Preservation & # of Containers														Matrix	Analyze For													
	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2D_3$	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 [✓ 8015M] 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX [✓ 8021B]/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT(Pre-Schedule) [✓ 24], 48, 72 hrs	STANDARD TAT
[redacted]	01 West End North side	[illegible]	1.5'	1/6/18	1010	1	☑	☐	☐	☐	☐	☐	☐	☐	Soil	☑	☐	☐	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	☑	☐
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Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Wally McNeil	2/6/18	12:30		2/6/18	4:30
Relinquished by:	2/6/18	1700	Received by:		
Relinquished by:			Received by:	2/6/18	1700

Laboratory Comments:
Sample Containers Intact? [✓ Y] N
VOCs Free of Headspace? [✓ Y] N
Custody seals on container(s) [✓ Y] N
Custody seals on cooler(s) [✓ Y] N
Sample Hand Delivered [✓ Y] N
Sar by Sampler/Client Rep. ? [✓ Y] N
Sar by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 2.0 +e4 °C

Attachment D
Disposal Tickets

SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 446021

LEASE OPERATOR/SHIPPER/COMPANY: [illegible]

LEASE NAME: [illegible]

TRANSPORTER COMPANY: [illegible] | **TIME** [illegible] AM/PM

DATE: [illegible] **VEHICLE NO:** [illegible] **GENERATOR COMPANY MAN'S NAME:** [illegible]

CHARGE TO: [illegible] | **RIG NAME AND NUMBER** [illegible]

8158

TYPE OF MATERIAL

[ ] Production Water	[ ] Drilling Fluids	[ ] Rinsate
[ ] Tank Bottoms	[✓] Contaminated Soil	[ ] Jet Out
[ ] Solids	[ ] BS&W Content:	[ ] Call Out

Description: C112

RRC or API # **C-133#**

VOLUME OF MATERIAL [ ] BBLS. _____ : [✓] YARD 20 : [ ] _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY *that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: Esteban H
(SIGNATURE)

FACILITY REPRESENTATIVE: [signature]
(SIGNATURE)

White - Sundance Canary - Sundance Acct #1 Pink - Transporter

SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 446022

LEASE OPERATOR/SHIPPER/COMPANY: Stetthulder midstream

LEASE NAME: Pelico Furnishes Low Stater

TRANSPORTER COMPANY: Dave's Trucking | **TIME** 10:31 AM/PM

DATE: 1-29-18 **VEHICLE NO:** 5-17 | **GENERATOR COMPANY MAN'S NAME:** Cindy Lewis

CHARGE TO: Dave's Trucking | **RIG NAME AND NUMBER** 17-6137

x 150

TYPE OF MATERIAL

[ ] Production Water	[ ] Drilling Fluids	[ ] Rinsate
[ ] Tank Bottoms	[X] Contaminated Soil	[ ] Jet Out
[ ] Solids	[ ] BS&W Content:	[ ] Call Out

Description: LNR

RRC or API # | **C-133#** 1 Jan

VOLUME OF MATERIAL [ ] **BBLS.** _____ : [X] **YARD** 70 : [ ] _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY *that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: _____
(SIGNATURE)

FACILITY REPRESENTATIVE: _____
(SIGNATURE)

White - Sundance | Canary - Sundance Acct #1 | Pink - Transporter

SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 446020

LEASE OPERATOR/SHIPPER/COMPANY: Silverbow Midstream

LEASE NAME: Lilas Thermals Line Strike

TRANSPORTER COMPANY: Dawson Lind | **TIME** 10:00 AM/PM

DATE: 1-24-18 **VEHICLE NO:** 4 **GENERATOR COMPANY MAN'S NAME:** Lindsay Allen

CHARGE TO: Dawson Lind | **RIG NAME AND NUMBER** B.D. 1377 6457

0155

TYPE OF MATERIAL

[ ] Production Water	[ ] Drilling Fluids	[ ] Rinsate
[ ] Tank Bottoms	[✓] Contaminated Soil	[ ] Jet Out
[ ] Solids	[ ] BS&W Content:	[ ] Call Out

Description: LAP

RRC or API # C-133# nn

VOLUME OF MATERIAL [ ] BBLS. _____ : [✓] YARD 20 : [ ] _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY *that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: Oscar Aguirre
(SIGNATURE)

FACILITY REPRESENTATIVE: [signature]
(SIGNATURE)

White - Sundance Canary - Sundance Acct #1 Pink - Transporter

Dirt Construction/Environmental Services

Diversified Field Services, Inc.

Work Ticket 26981

Job #	
Date	1/29/18
Purchase Order	
Work Order #	
Ordered By	Chris Craycroft
RRC#/COM#	

315 S. Leech
P.O. Box 5966
Hobbs, NM 88240
Phone: 575-397-6437
Fax: 575-393-2981

Start	6	AM	PM
End		AM	PM

Company: Stakeholder Midstream
Lease: Pollos Hermanos Line Strike
AFE #:
Paykey:
County: Lea
Description of Work: Furnish labor + equip. to haul off 60 yards of contaminated material to Sundance.

Sundance PO → #8158

LABOR					EQUIPMENT				PICKUP			
	Employee	Hours	Rate	Amount	Unit #	Hours	Rate	Amount	Unit #	Hours	Rate	Amount
Foreman												
General Laborer												
General Laborer												
General Laborer												
General Laborer												
General Laborer												
Project Manager												
Site Supervisor												
Environmental Tech.												
Environmental Tech.												
Project Scientist												
Project Specialist												
Administrative												
Loader Operator												
Backhoe Operator												
Backhoe Operator												
Dozer Operator												
Dozer Operator												
Blade Operator												
Roller Operator												
Excavator Operator												
Tractor Operator												
Bbls												
Water Truck												
Water Truck												
Transport												
Haul Truck												
Trailer												

	Yd Size					Unit #
Hauling	20	MHL Trucking	6			8
Hauling	20	MHL Trucking	6			9
Hauling	20	MHL Trucking	6			249
Hauling						
Hauling						
Hauling						
Hauling						
Hauling						
Hauling						
Hauling						

Materials	Qty.	Rate	Amount
Caliche			
Base Course			
Sand			
Water			
Chloride Screens			
Disposal Sundance	60		

Labor	
Equipment	
Hauling	
Materials	
Fuel Surcharge	
Mileage	
Sub Total	
Tax	
Total	

Customer Signature _____

Attachment E
Photograph Log

Photo No: **1.**	
Direction Taken: East	
Description: Spill on the soil between County Rd 138 and the well pad.	

Photo No: **2.**	
Direction Taken: Southeast	
Description: Spill looking predominantly east.	

Photo No: **3.**	
Direction Taken: West	
Description: West end of the spill looking east.	

Photo No: **4.**	
Direction Taken: Southeast	
Description: Portion of the poly pipe that was struck.	

Photo No: **5.**	
Direction Taken: Northwest	
Description: Excavated dirt for access to repair pipe.	

Photo No: **6.**	
Direction Taken: Northwest	
Description: Close-up of the dirt excavated from line strike area.	

Photo No: **7.**	
Direction Taken: Southeast	
Description: Clean dirt excavated to access pipe to make repairs.	

Photo No: **8.**	
Direction Taken: Southwest	
Description: Spill area where contaminated soil is being removed.	

Photo No: **9.**	
Direction Taken: Northeast	
Description: Spill area that is in the process of being excavated.	

Photo No: **10.**	
Direction Taken: Southeast	
Description: Stage area for contaminated soil.	

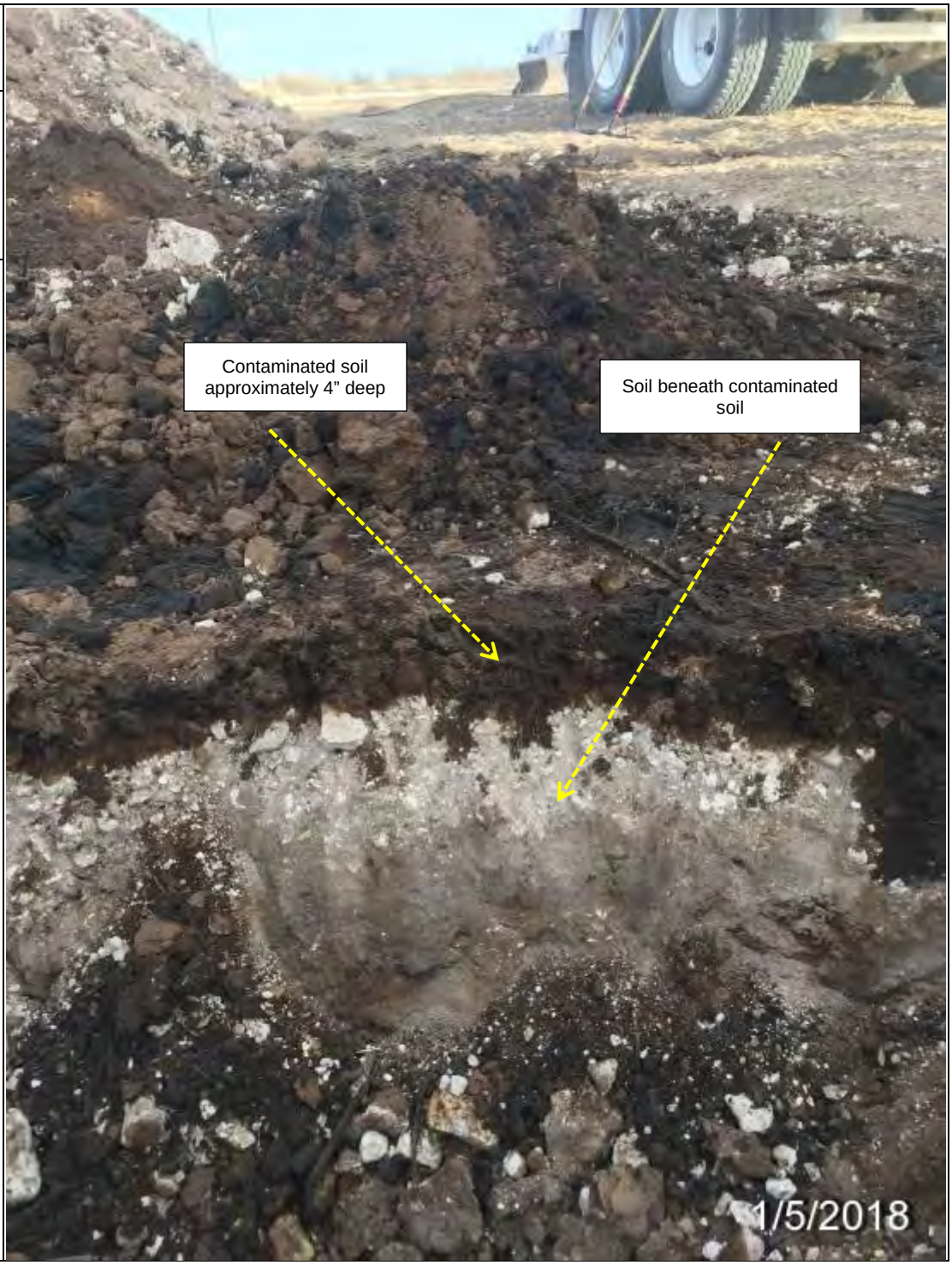
Photo No: **11.**	
Direction Taken: East	
Description: Cross section of spill area.	

Photo No: **12.**	
Direction Taken: South	
Description: Vacuum hose inside pipeline.	

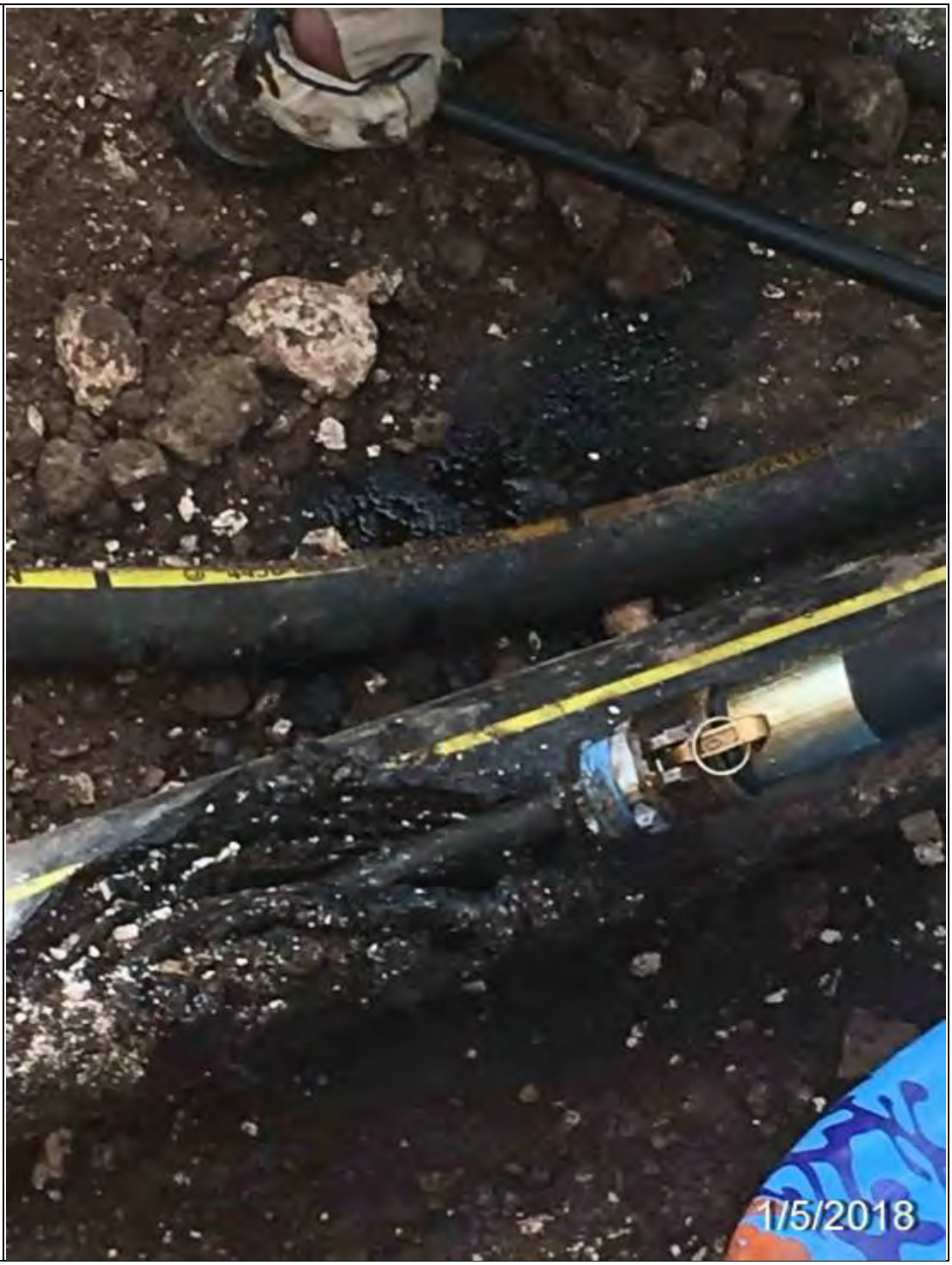
Photo No: **13.**	
Direction Taken: South	
Description: Close up of previous photo.	

Photo No:
14.

Direction Taken:
North

Description:
Machine used to weld pipe back together.

Photo No: **15.**	
Direction Taken: Southwest	
Description: Worker cutting pipe to make splice.	

Photo No: **16.**	
Direction Taken: Southwest	
Description: Pipe being spliced.	

Photo No: **17.**	
Direction Taken: Northeast	
Description: Area of shallow excavation after the intrusion of freshwater.	

Photo No: **18.**	
Direction Taken: North	
Description: Area of the pipeline repair and release point following excavation for clearance.	

Photo No: **19.**	
Direction Taken: East	
Description: Over view of final excavation taken February 14, 2018. Note: Soil pile in the background is clean fill from backhauls waiting for placement after approval.	