

Holly Energy Partners

Pump Colgate Osage Lease

Work Plan

Section 34, Township 19S, Range 29E

Eddy County, New Mexico

2RP-4947

October 3, 2018



Prepared for:

**Holly Energy Partners
1602 W. Main
Artesia, NM 88210**

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510**

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I. Company Contacts

Representative	Company	Telephone	E-mail
Melanie Nolan	Holly Energy Partners	214-605-8303	Melanie.nolan@hollyenergy.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Holly Energy Partners (HEP) to assess a spill area at the Pump at the Colgate Osage Lease, concerning a fifteen (15) bbl. crude oil release. This site is situated in Eddy County, Section 34, Township 19S, and Range 29E.

According to the C-141: HEP technicians discovered that an HEP pump was leaking in the vicinity due to the packing going bad in the pump. Approximately fifteen (15) bbls of crude oil was released.

III. Surface and Ground Water

Research of the New Mexico Office of the State Engineer records indicates the average depth to groundwater for the area to be 146' bgs.

IV. Characterization

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). Based on the ranking criteria presented below, the applicable Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethyl benzene, and total xylenes (BTEX), and 5,000 ppm Total Petroleum Hydrocarbons (TPH). Characterization of vertical extent of chloride concentration to a level of 250 mg/kg (PPM) is also required.

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	
	>100 feet	0 points	x
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	X
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	X
RANKING SCORE (TOTAL POINTS)			0

V. Work Performed

On September 21, 2018, SESI personnel was onsite at the HEP Colgate Osage Lease release to obtain confirmation soil samples. HEP personnel had excavated contaminated soils to a depth of four feet in preparation of the confirmation sampling. SESI personnel obtained two bottom soil samples and one sample a piece from the North, South, East and West walls. The excavation and sample points were mapped using the Juno 3B. Site photos were taken of the excavation along with aerial photos using the drone. The sample points were mapped using the Juno 3B. The samples were properly packaged, preserved and transported to Cardinal Laboratories of Hobbs, NM by chain of custody, and analyzed for TPH(total petroleum hydrocarbons)(Method 8015M), BTEX, and Chlorides(Method 4500). The results are presented in the table below:

Soil Sample Results: Cardinal Laboratories 9-27-18								
SAMPLE ID	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX	TPH GRO	TPH DRO	TPH EXT DRO
SP-1 Bottom 4ft	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	651	128
SP-2 Bottom 4ft	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	595	62.3
SP-3 North Wall	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	101	13.0
SP-4South Wall	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
SP-5 West Wall	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0
SP-6 East Wall	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0

Soil Sample Results: Cardinal Laboratories 9-27-18	
SAMPLE ID	Chlorides
SP-1 Bottom 4ft	80.0
SP-2 Bottom 4ft	64.0
SP-3 North Wall	16.0
SP-4South Wall	64.0
SP-5 West Wall	<16.0
SP-6 East Wall	80.0

VI. Request for Closure

Due to all sampling results indicating that the excavation removed all contaminated soil in excess of 5000 ppm, HEP requests that upon closure approval the excavation will be backfilled with similar material, returned to grade and reseeded in the spring of 2019. Upon completion of all approved remediation activity, all necessary closure documentation related to this incident will be submitted to Holly Energy Partners and the appropriate regulatory agencies.

VII. Figures & Appendices

Figure 1 - Vicinity Map
Figure 2 - Site Plan
Appendix A – C-141
Appendix B – Groundwater
Appendix C – Analytical Results
Appendix D – Photo Documentation

Figure 1

Site Map

Holly Colgate Osage Lease

Sample Points Map 9-21-18

Legend

- Feature 1
- Proposed Borehole 1
- SP

SP 3 North Wall

SP2 Bottom 4ft

SP 6 East Wall

SP 5 West Wall

Proposed Borehole 1

SP 1 Bottom 4ft

SP 4 South Wall

19S 29E

Google Earth

©2018 Google

100 ft



Appendix A

C-141

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Holly Energy Partners	Contact	Melanie Nolan
Address	1602 W Main	Telephone No.	214-605-8303
Facility Name	Pump Colgate Osage Lease	Facility Type	pump
Surface Owner	BLM	Mineral Owner	
		API No.	

LOCATION OF RELEASE

Unit Letter	Section 34	Township 19S	Range 29E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
-------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude 32.618708 Longitude -104.061213 NAD83

NATURE OF RELEASE

Type of Release	Crude	Volume of Release	15 barrels	Volume Recovered	0
Source of Release	Pump	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	8/21/18 1202 MST
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	BLM was notified. Both verbal and email notifications were made.		
By Whom?	Melanie Nolan	Date and Hour:	08/21/18 at 3.00 pm MST		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume.	Impacting the Watercourse.		

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.*

HEP technicians discovered that an HEP pump was leaking in the vicinity of the Colgate Osage Lease. The leak was due to the packing going bad in the pump. Approximately 15 barrels were released.

Describe Area Affected and Cleanup Action Taken.*

The area affected runs from the pump out in a circular pattern that narrows as it proceeds further out approximately 150ft with soil penetration ranging from 4" to 2' where oil pooled. Crews have started excavating contaminated soil.

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

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Vikrant Chavan	Approved by Environmental Specialist:		
Title: Environmental Specialist III	Approval Date:	Expiration Date:	
E-mail Address: Vikrant.Chavan@hollyenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8/22/18	Phone: 214-954-6682		

* Attach Additional Sheets If Necessary

Appendix B

Groundwater



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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00626 POD1	CP	ED		2	3	1	03	19S	29E	587360	3617575	286	247	39
CP 00626 POD2	CP	ED		3	2	1	03	19S	29E	587660	3617880	240	195	45
CP 00646	CP	ED		1	1	4	07	19S	29E	583155	3615551	199	150	49
CP 00681	CP	ED		1	1	3	34	19S	29E	587230	3609127*			
CP 00703 POD1	CP	ED		4	1	36		19S	29E	591050	3609382	225	115	110
CP 00739 POD1	CP	ED		3	4	4	35	19S	29E	590068	3608622	200	110	90
CP 00741	CP	ED		1	3	2	34	19S	29E	588030	3609533*	230	60	170
CP 00820 POD1	CP	LE		2	4	13		19S	29E	591713	3613870*	120		
CP 00821 POD1	CP	LE		4	4	25		19S	29E	591743	3610248*	120		

Average Depth to Water: **146 feet**

Minimum Depth: **60 feet**

Maximum Depth: **247 feet**

Record Count: 9

PLSS Search:

Township: 19S

Range: 29E

*UTM location was derived from PLSS - see Help

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

Appendix C

Analytical Results

September 27, 2018

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: HEP-18-017

Enclosed are the results of analyses for samples received by the laboratory on 09/21/18 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

 Received: 09/21/2018
 Reported: 09/27/2018
 Project Name: HEP-18-017
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 09/21/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-1 BOTTOM 4' (H802682-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTEX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	651	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	128	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 94.2 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 09/21/2018
Reported: 09/27/2018
Project Name: HEP-18-017
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/21/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-2 BOTTOM 4' (H802682-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTEX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	595	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	62.3	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 80.4 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

 Received: 09/21/2018
 Reported: 09/27/2018
 Project Name: HEP-18-017
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 09/21/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-3 NORTH WALL (H802682-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTEX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	101	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	13.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 83.0 % 41-142

Surrogate: 1-Chlorooctadecane 86.0 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Fax To: (575) 393-4388

Received: 09/21/2018
Reported: 09/27/2018
Project Name: HEP-18-017
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/21/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-4 SOUTH WALL (H802682-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTEX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 81.2 % 41-142

Surrogate: 1-Chlorooctadecane 79.8 % 37.6-147

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Fax To: (575) 393-4388

Received: 09/21/2018
Reported: 09/27/2018
Project Name: HEP-18-017
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/21/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-5 WEST WALL (H802682-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTEX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 95.4 % 41-142

Surrogate: 1-Chlorooctadecane 93.0 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 09/21/2018
Reported: 09/27/2018
Project Name: HEP-18-017
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/21/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-6 EAST WALL (H802682-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2018	ND	1.82	90.8	2.00	2.77	
Toluene*	<0.050	0.050	09/25/2018	ND	1.99	99.4	2.00	2.46	
Ethylbenzene*	<0.050	0.050	09/25/2018	ND	2.15	107	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/25/2018	ND	6.20	103	6.00	0.969	
Total BTX	<0.300	0.300	09/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/25/2018	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	196	97.9	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/24/2018	ND	187	93.6	200	2.84	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 91.5 % 41-142

Surrogate: 1-Chlorooctadecane 87.0 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Safety and Environmental Solutions Project Manager: Bob Allen Address: 703 East Clinton, PO Box 1613 City: Hobbs State: NM Zip: 88240 Phone #: 575 397-0510 Fax #: 575 393-4388 Project #: HEP-18-017 Project Owner: Project Name: Project Location: Sampler Name: FOR LAB USE ONLY		P.O. #: Company: Same Attn: Address: City: State: Zip: Phone #: Fax #:	
Lab I.D. Sample I.D.		MATRIX PRESERV. SAMPLING	
(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		DATE TIME	
1 SP-1 Patton 4F 5 1 09/21 0845 2 SP-2 Patton 4F 5 1 3 SP-3 Patton 4F 5 1 4 SP-4 Patton 4F 5 1 5 SP-5 West wall 5 1 6 SP-6 East wall 5 1		TPH (8015 COT) BTEX Chlorides (4500)	

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Relinquished By: <i>[Signature]</i>	Date: 09/21/18	Received By: <i>[Signature]</i>	Date: 09/21/18
Relinquished By: <i>[Signature]</i>	Date: 09/21/18	Received By: <i>[Signature]</i>	Date: 09/21/18

Delivered By: (Circle One) ☒ UPS ☐ Bus ☐ Other: 1.22c/#97

Sample Condition: Cool ☒ Intact ☐ Yes ☐ No ☐ Yes ☐ No

Checked By: *[Signature]*

REMARKS:

Appendix D

Site Photos

Holly Energy Partners
Pump Colgate Osage Lease
Drone Photos-9/21/2018





