# ENVIRONMENTAL PLUS, INC.

2100 Ave 'O' P.O. Box 1558 Eunice, NM 88231 Bboone.epi@gmail.com Office: (575) 394-3481 Fax: (575) 394-2601



# Site Characterization and Work Plan

Cameron Oil & Gas Langlie Mattix 4 Federal 1 Lea County, New Mexico Unit Letter "L" Section 4, Township 23 South, Range 37 East Latitude 32.330700° North, Longitude -103.174028° West

Prepared For:

Cameron Oil & Gas P.O. Box 1455 Roswell, NM. 88202-1455

Prepared By:

Environmental Plus, Inc. 2100 Ave 'O' Eunice, NM 88231

# October 2017

Brandon Boone Project Manager



The following *Site Characterization and Work Plan* serves as a condensed update on field activities undertaken and proposed actions for the afore referenced Site.

# **Background:**

The site is located in Unit Letter L, Section 4, Township 23 South, Range 37 East, approximately six miles south of Eunice, in Lea County, New Mexico. Cameron Oil & Gas owns the property.

The release site is located on the caliche pad on an active disposal well; latitude 32.330700° North, longitude -103.174028° West. Area Map, Site Location Map, and Sample/Site Map are included as Figure 1, Figure 2, respectively. The Initial NMOCD Form C-141 is included as Attachment IV.

# **NMOCD Site Classification:**

A search for water wells was completed utilizing the New Mexico Office of the State Engineer's (NMOSE) website. There is one well located in the area surrounding the release site (reference *Table 1*). Also, no wells (domestic, agriculture or public) and no bodies of surface water exist within a 1,000-foot radius of the release site (reference *Figure 2*). The USGS database located no wells within the surrounding area. The NMOSE database indicates average water depth is approximately 60 feet below ground surface (bgs) within a 1000-meter radius (reference *Attachment II*). However, as this is too great a distance to accurately determine depth to water for this location as the closest documented well is 209 meters away, the OSE website was used to determine water to be over 100 ft. bgs.

Utilizing this information, the NMOCD guidelines indicate the Langlie Mattix 4 Fed 1 release site to have a ranking score of zero. Based on this score, the NMOCD Recommended Remedial Action Levels (RRALs) for delineation at this Site were determined as follows: Benzene – 10 mg/Kg, BTEX – 50 mg/Kg, TPH – 5,000 mg/Kg, and Chloride – 600 mg/Kg.

The visually stained area totals an area of approximately 1,263 square feet. The area is caliche approximately two feet thick on the pad.

## **Delineation Progress:**

On September 14, 2017 to September 18, 2017 EPI personnel mobilized on site to collect soil samples to determine the vertical extent of contamination. A total of forty soil samples were collected from six sample locations; SP1 – SP8. Refusal was met at 23 ft. bgs at sample point 2. Two soil samples from each sample location were sent to Cardinal Labs in Hobbs, New Mexico, for testing. Laboratory analytical results indicate Chlorides above NMOCD RRALs (reference *Figure 3* and *Table 2*).

Portions of select soil samples were field tested for organic vapors and chloride concentrations. Soil samples collected for field testing of organic vapors were placed in self-sealing polyethylene



bags and allowed to equilibrate to ~70° F. Field testing of organic vapors utilized a Mini-Rae<sup>TM</sup> Photoionization Detector (PID) equipped with a 10.6 electron-volt (eV) calibrated for benzene response. Chloride concentrations were determined via use of a LaMotte Chloride Kit (Titration Method).

Soil samples designated for laboratory analyses were collected into laboratory provided glass containers, labeled and inserted into self-sealing polyethylene bags, placed in a cooler, chilled and transported to an independent laboratory for quantification of contaminant concentrations under Chain-of-Custody protocol.

# **Proposed Actions:**

Based on field testing and laboratory analytical data, removal of 1 ft. of material from inside of berm. At the conclusions of excavation activities, the excavation will be backfilled with select caliche to finish grade. All further actions wish to be deferred to abandonment of the battery and surface equipment be removed.

Backfill soil will be free of deleterious material or rocks or large clumps. Backfilling will continue until the excavation is closed.

## **Revegetation Plan:**

As the area in question is a tank battery on an active lease pad, no seeding will be required.

# **Noxious Weed Management Plan:**

In an effort to prevent the spread of noxious weeds such as African Rue, Siberian Elm, Jointed Goatgrass, Russian Olive, Camelthorn, Saltcedar, Starthistle varieties, Hoary Cress and Russian Knapweed, the area will be confirmed to be clear of any noxious weeds. If any are located they will be removed by hand and the area treated with an appropriate herbicide. After a period of three months the area will be examined for noxious weed growth and re-treated if any growth has occurred.

Following completion of NMOCD and NMSLO approved Proposed Actions, EPI will provide a detailed *Final Closure Report* to Vanguard, NMOCD, and NMSLO personnel. Vanguard and EPI personnel would welcome an opportunity to briefly discuss the *Work Plan* at your earliest convenience.

Should you have any questions or concerns please feel free to contact me at (575) 390-7865 or via e-mail bboone.emp@gmail.com or Mr. David Sweeney at (575)420-1108.All official communication should be addressed to:

Mr. David Sweeney Cameron Oil & Gas PO Box 1455 Roswell, NM. 88202-1455



Sincerely,

ENVIRONMENTAL PLUS, INC.

Brandon Boone Environmental Consultant

- cc: Olivia Yu, Environmental Specialist NMOCD District 1, Hobbs, NM David Sweeney-Cameron Oil & Gas File
- Encl.: Figure 1 Area Map Figure 2 – Sample/Site Map Table 1 – Well Data Table 2 – Summary of Soil Sample Field Testing and Laboratory Analytical Results Attachment I – Photographs Attachment II – NMOSE Average Depth to Groundwater, USGS Well Sites Attachment III – Laboratory Analytical Results Attachment IV – Copy of Initial NMOCD Form C-141

**FIGURES** 

# Figure 1

Cameron Oil & Gas Langlie Mattix 4 Fed 1 UL "L", Sec 4, 23S-37E N 32.330700 W -103.174028 Elevation 3,328 AMSL Legend

Langlie Mattix 4 Fed 1

N

4000 ft

2-10

Red Raiders-En

Langlie Mattix 4 Fed 1

Google Earth

© 2017 Google



# **TABLES**

## TABLE 1

## Well Data

Vanguard - Karlsbad Corral SWD 2

Ref#	Well Number	Use	Diversion <sup>A</sup>	Owner	q6 4	q1 6	q4	Sec	Twsp	Rng	Easting	Northing	Distance <sup>B</sup>	Date Measured	Surface Elevation <sup>C</sup>	Depth to Water (ft bgs)
1	CP00816	PRO	0	Texaco Exploration and Production			3	4	23S	37E	672043	3578457	209		3,328	( )
2	CP00372	NOT	0	Mrs. George Weir		4	4					3578249			3,328	
3	CP00762	PRO	0	Texaco		1	1					3577854			3,328	100
4	CP00389	PLS	3	Ross L Robinson	3	1	1	8	23S	37E	671723	3579362	816		3,328	
5	CP00373	PDL	3	Mrs. George Weir	0	2	2	8	23S	37E	671449	3577847	820		3,328	
6	CP00371	PLS	3	Mrs. George Weir		1	4	5	23S	37E	671035	3578644	828		3,328	

ew Mexico Office of the State Engineer websites e feet per annum  $^{B}$  = In meti**des**vation interpolated from Google Earth based on referenced location.

1 Livestock watering

V, 4=SE; quarters are smallest to biggest

d on the NM iwaters website

3 wells not shown in Figure 2

Monitoring Well or development of Natural Resource = Industrial 172-12-1 Domestic Oil Production

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Vanguard
Langlie Mattix 4 Fed 1

						Dangi	le Mattix 4	i i cu i						
Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	EXT DRO >C28-C36 (mg/Kg)	Chloride (mg/Kg)
	Surface	In-Situ	14-Sep-17	75.6	400						173	26500	6450	432
	1	In-Situ	14-Sep-17	518.0	880									
	2	In-Situ	14-Sep-17	675.0	960									
	3	In-Situ	14-Sep-17	465.0	1,280									
	4	In-Situ	14-Sep-17	70.5	880									
SP1	5	In-Situ	14-Sep-17	285.0	1,280									
	6	In-Situ	14-Sep-17	343.0	800									
	14	In-Situ	15-Sep-17	0.0	1,680									
	18	In-Situ	15-Sep-17	0.0	1,680									
	26	In-Situ	15-Sep-17	0.0	1,280									
	34	In-Situ	15-Sep-17	0.0	1,840							14.1	39.1	464
	Surface	In-Situ	14-Sep-17	0.0	320							2150.0	919.0	240
	2	In-Situ	14-Sep-17	0.0	480									
	3	In-Situ	14-Sep-17	0.0	1,200									
	4	In-Situ	14-Sep-17	0.0	800									
	5	In-Situ	14-Sep-17	0.0	1,280									
SP2	6	In-Situ	14-Sep-17	0.0	3,200									
512	7	In-Situ	14-Sep-17	0.0	2,000									
	8	In-Situ	14-Sep-17	0.0	2,960									

							TABLE 2							
				Summary	of Soil San	nple Field	Festing and	d Laboratory A	Analytical	Results				
							Vanguard							
I <del></del>			1	-		Langl	ie Mattix 4	Fed 1						
Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	EXT DRO >C28-C36 (mg/Kg)	Chloride (mg/Kg)
	12	In-Situ	18-Sep-17	242.0	2,080									
	16	In-Situ	18-Sep-17	256.0	1,600									
	18	In-Situ	18-Sep-17	136.0	1,280									
	23	In-Situ	18-Sep-17	75.2	1,200								13.5	1,180

TADLES

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Vanguard
Langlie Mattix 4 Fed 1

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	EXT DRO >C28-C36 (mg/Kg)	Chloride (mg/Kg)
SP3	Surface	In-Situ	14-Sep-17	0.0	80									48
515	1	In-Situ	14-Sep-17	0.0	80									<16.0
SP4	Surface	In-Situ	14-Sep-17	0.0	80									96
514	1	In-Situ	14-Sep-17	0.0	80									<16.0
SP5	Surface	In-Situ	14-Sep-17	0.0	80									352
515	1	In-Situ	14-Sep-17	0.0	160									160
SP6	Surface	In-Situ	14-Sep-17	0.0	80									16
510	1	In-Situ	14-Sep-17	0.0	80									32

TABLE 2 Summary of Soil Sample Field Testing and Laboratory Analytical Results Vanguard Langlie Mattix 4 Fed 1

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	EXT DRO >C28-C36 (mg/Kg)	Chloride (mg/Kg)
SP7	Surface	In-Situ	18-Sep-17	0.0	80									64
SF /	1	In-Situ	18-Sep-17	0.0	80									<16.0
SP8	Surface	In-Situ	18-Sep-17	0.0	80									<16.0
51.9	1	In-Situ	18-Sep-17	0.0	80									64
NMOCD		ended Reme Levels	dial Action	100		10				50			5,000	600

--- = Not Analyzed **Bold** values are in excess of NMOCD Recommended Remedial Action Levels

Shaded values indicates soil has been excavated

# ATTACHMENTS

# ATTACHMENT I

Photographs



Photograph #1- Lease sign



Photograph #2- Release area



Photograph #3- Release area



Photograph #4- Release area



Photograph #4- Release Area



Photograph #5- Entrance to location

# ATTACHMENT II

NMOSE Average Depth to Groundwater



# New Mexico Office of the State Engineer Active & Inactive Points of Diversion

(with Well Drill Dates & Depths)

		(acre ft per a	nnu	m)	and no longer serves this C=the file is closed)			=NW 2=NE mallest to I		D83 UTM in	meters)			(in f	eet)
WR File Nbr	Sub basin	Use Diversio	n (	Cnty POD Number	Code Grant		qqq 64164S	ec Tws R	ng X	Y	Distance	Start Date	Finish Date	•	Depth Water
<u>CP 00816</u>	CP	PRO	0	LE <u>CP 00816</u>			3 (	04 23S 37	7E 672043	3578457*	209 🌍	09/03/1993	09/04/1993	250	
CP 00372	СР	NOT	0	LE <u>CP 00372 POD1</u>		Shallow	44	05 23S 37	7E 671442	3578249*	518 🌍	)			
<u>CP 00762</u>	СР	PRO	0	LE <u>CP 00762</u>		Shallow	110	09 23S 37	7E 671849	3577854*	703 🌍	05/01/1991	05/09/1991	185	100
<u>CP 00389</u>	СР	PLS	3	LE <u>CP 00389 POD1</u>		Shallow	3110	04 23S 37	7E 671723	3579362*	816 🌍	)		100	
<u>CP 00373</u>	СР	PDL	3	LE <u>CP 00373 POD1</u>		Shallow	22	08 23S 37	7E 671449	3577847*	820 🌍	)		150	
CP 00371	СР	PLS	3	LE <u>CP 00371 POD1</u>		Shallow	14	05 23S 37	7E 671035	3578644*	828 🌍	)			

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 671858.9

Northing (Y): 3578557.23

Radius: 1000

Sorted by: Distance

### \*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.



# New Mexico Office of the State Engineer Active & Inactive Points of Diversion

(with Ownership Information)

						(R=POD has been repla and no longer serves th		rters ar	e 1=N	IW 2=I	NE 3=SW	4=SE)		
		(acre ft per a	annum)			C=the file is closed)	(qua	rters ar	e sma	allest t	o largest)	(NAD83	UTM in meters)	
	Sub							qqq	I					
WR File Nbr	basir	n Use Diversio	on Owner	Count	y POD Number	Code Grant	Source	6416 4	Sec	Tws	Rng	Х	Y	Distance
<u>CP 00816</u>	CP	PRO	0 TEXACO EXPLORATION & PROD. INC	LE	<u>CP 00816</u>			3	04	23S	37E	672043	3578457* 🌍	209
CP 00372	CP	NOT	0 MRS. GEORGE WEIR	LE	CP 00372 POD1		Shallow	44	05	23S	37E	671442	3578249* 🌍	518
CP 00762	СР	PRO	0 TEXACO	LE	CP 00762		Shallow	1 1	09	23S	37E	671849	3577854* 🌍	703
CP 00389	СР	PLS	3 ROSS L. ROBINSON	LE	CP 00389 POD1		Shallow	311	04	23S	37E	671723	3579362* 🧧	816
CP 00373	CP	PDL	3 MRS. GEORGE WEIR	LE	CP 00373 POD1		Shallow	2 2	08	23S	37E	671449	3577847* 🌍	820
<u>CP 00371</u>	CP	PLS	3 MRS GEORGE WEIR	LE	CP 00371 POD1		Shallow	14	05	23S	37E	671035	3578644* 🍯	828

### Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 671858.9

Northing (Y): 3578557.23

Radius: 1000

Sorted by: Distance

### \*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.

**USGS Well Sites** 



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 661858.9

Northing (Y): 3578557.23

Radius: 1000

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.

ATTACHMENT III Laboratory Analytical Results



September 29, 2017

Daniel Dominguez Environmental Plus, Inc. P.O. Box 1558 Eunice, NM 88231

RE: LANGLIE MATTIX 4 FED 1

Enclosed are the results of analyses for samples received by the laboratory on 09/22/17 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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. Keine

Celey D. Keene Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 1 (SURFACE) (H702597-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.100	0.100	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.100	0.100	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.300	0.300	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.600	0.600	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 72-148	}						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	09/27/2017	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	173	100	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	26500	100	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	6450	100	09/25/2017	ND					
Surrogate: 1-Chlorooctane	121 9	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	904 9	% 34.7-15	7						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/15/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 1 (34') (H702597-02)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	124 9	% 72-148	2						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	09/27/2017	ND	400	100	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	14.1	10.0	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	39.1	10.0	09/25/2017	ND					
Surrogate: 1-Chlorooctane	74.2	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	76.2	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 2 (SURFACE) (H702597-03)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	0.087	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 72-148	}						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/27/2017	ND	400	100	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	2150	50.0	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	919	50.0	09/25/2017	ND					
Surrogate: 1-Chlorooctane	93.1	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	139	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 2 (23') (H702597-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 72-148	2						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	09/27/2017	ND	416	104	400	3.92	QM-07
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	<10.0	10.0	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	13.5	10.0	09/25/2017	ND					
Surrogate: 1-Chlorooctane	82.0	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	88.0	% 34.7-15	7						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 3 (SURFACE) (H702597-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	<10.0	10.0	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	<10.0	10.0	09/25/2017	ND					
Surrogate: 1-Chlorooctane	83.0	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	82.4	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 3 (1') (H702597-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/25/2017	ND	181	90.6	200	1.81	
DRO >C10-C28	<10.0	10.0	09/25/2017	ND	198	99.0	200	1.73	
EXT DRO >C28-C36	<10.0	10.0	09/25/2017	ND					
Surrogate: 1-Chlorooctane	78.5	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	80.6	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 4 (SURFACE) (H702597-07)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 72-148	}						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	73.9	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	70.6	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 4 (1') (H702597-08)

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	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 72-148							
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/27/2017	ND	416	104	400	3.92	
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	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	81.8 % 28.3-16		4						
Surrogate: 1-Chlorooctadecane	81.1	% 34.7-15	7						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

#### Sample ID: SP 5 (SURFACE) (H702597-09)

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	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 72-148	2						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	09/27/2017	ND	416	104	400	3.92	
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	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	72.3 % 28.3-16		4						
Surrogate: 1-Chlorooctadecane	73.5	% 34.7-15	7						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 5 (1') (H702597-10)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 72-148							
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	78.9	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	80.1	% 34.7-15	7						

## Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 6 (SURFACE) (H702597-11)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 72-148	2						
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	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	85.6	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	87.5	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/14/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 6 (1') (H702597-12)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	zed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	82.3	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	86.3	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 7 (SURFACE) (H702597-13)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 72-148	2						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	83.9	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	86.7	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 7 (1') (H702597-14)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 72-148							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	80.8	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	85.0	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 8 (SURFACE) (H702597-15)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 72-148	}						
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	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	75.2	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	79.0	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: SP 8 (1') (H702597-16)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	2.02	101	2.00		
Toluene*	<0.050	0.050	09/28/2017	ND	1.86	92.9	2.00		
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.89	94.3	2.00		
Total Xylenes*	<0.150	0.150	09/28/2017	ND	5.72	95.3	6.00		
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 72-148	,						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	81.2	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	84.6	% 34.7-15	7						

## Cardinal Laboratories

## \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Environmental Plus, Inc. Daniel Dominguez P.O. Box 1558 Eunice NM, 88231 Fax To: (505) 394-2601

Received:	09/22/2017	Sampling Date:	09/18/2017
Reported:	09/29/2017	Sampling Type:	Soil
Project Name:	LANGLIE MATTIX 4 FED 1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CAMERON -UL-I SEC. 4, T23S, R37E		

## Sample ID: BACKGROUND (1') (H702597-17)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/28/2017	ND	1.78	88.9	2.00	1.68	
Toluene*	<0.050	0.050	09/28/2017	ND	1.61	80.7	2.00	2.06	
Ethylbenzene*	<0.050	0.050	09/28/2017	ND	1.63	81.3	2.00	0.562	
Total Xylenes*	<0.150	0.150	09/28/2017	ND	4.94	82.3	6.00	0.354	
Total BTEX	<0.300	0.300	09/28/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 72-148							
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/27/2017	ND	416	104	400	3.92	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/27/2017	ND	224	112	200	1.88	
DRO >C10-C28	<10.0	10.0	09/27/2017	ND	230	115	200	0.344	
EXT DRO >C28-C36	<10.0	10.0	09/27/2017	ND					
Surrogate: 1-Chlorooctane	82.8	% 28.3-16-	4						
Surrogate: 1-Chlorooctadecane	83.7	% 34.7-15	7						

## Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

#### **Cardinal Laboratories**

## \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose shall be instrumed by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 19 of 21

1		0	5	6	ac	23		2	hea	25 gome	2	-		. Olieched by	.5	Z	S	No #	& Inta	Cool	Yes No	cteep. S. ose	Certe
													1	PAR			(lab staff	By: (Ial	ANNED E	Received	Time 3: 40		Raiinquished by
	.com	sweeney@cameronoil.con & bboone.epi@gmail.com	pi@g	ey@c	bboo	& ds	com	mail.	luezepi@g	E-mail results to: ddominguezepi@gmail.com & dsweeney@cameronoil.com NOTES: & bboone.epi@gmail.com	E-mail res	NO			-	Ъ			ived E	Received E	3 7		Sampler Relinquished:
		-	-			×	×	×	11:40	14-Sep-17		×	F	H	H	×			-	- 0		SP5 (1')	10 \$
+	+	+	+			×	×	×	11:33			×	$\vdash$	$\vdash$	$\vdash$	×			-	G		SP5 (Surface)	<b>S</b> 6
t	t	+	+			×	×	×	11:27	14-Sep-17		×	$\vdash$	$\vdash$	-	×			-	G		8 SP4 (1')	S 8
+	t	+	+	1		×	×	×	11:24	14-Sep-17		×	$\vdash$	$\vdash$	$\vdash$	×			-	G		SP4 (Surface)	2 S
	+	+	-			×	×	×	11:16	14-Sep-17		×		$\vdash$		×			1	G		SP3 (1')	S 9
	+	+	+			×	×	×	11:00	14-Sep-17		×		$\vdash$	-	×			-	G		SP3 (Surface)	5 S
-	t	+	+	-		×	×	×	13:30	18-Sep-17		×		$\vdash$	$\vdash$	×			-	G		SP2 (23')	4 S
t	t	+	+			×	×	×	8:36	14-Sep-17		×	F	$\vdash$	-	×			-	ດ		SP2 (Surface)	3 8
T	t	+	┝	-		×	×	×	13:15	15-Sep-17		×	t	$\vdash$	-	×			-	G		SP1 (34')	2 8
	t	╀	+	╞		×	×	×	7:58	14-Sep-17		×	t	t	+	×			-	ດ		SP1 (Surface)	1 S
		OTHER >>> PAH	TCLP	pH	SULFATES (SO4")	CHLORIDES (CI')	TPH 8015M Ext.	BTEX 8021B	TIME	DATE	OTHER	ICE/COOL		OTHER:	CRUDE OIL SLUDGE	SOIL	WASTEWATER	GROUND WATER	# CONTAINERS	(G)RAB OR (C)OMP.		SAMPLE I.D.	LAB I.D.
		_	_		_				IG	SAMPLING	RV.	PRESERV.	PF		XI	MATRIX	2						
		-								Eunice, NM 88231	NN	nice	Ε.								ckett	Dustin Crockett	EPI Sampler Name
	_	-	_	_						P O Box 1558		Dan		A							, 1233, R	UL-1 Sec. 4, 1233, R3/E	ocation
-		_		_	_						5									1	tix 4 Fed	Langlie Mattix 4 Fed 1	Facility Name
		_		_																1	& Gas	Cameron Oil &	Client Company
	_		_	_	_						T			~			L		1601	94-2	31 / 575-3	575-394-3481 / 575-394-2601	EPI Phone#/Fax#
		_	_	_	_														31	882:	/ Mexico I	Eunice New Mexico 88231	City, State, Zip
		_	_	_	_																558	P.O. BOX 1558	Mailing Address
		-	-	_	_												L				inguez	er Daniel Dominguez	EPI Project Manager
	S.	ANALYSIS REQUEST	- 2	ISIS IS	P	A				0	Bill To								ľ	Inc.	S		Company Name
												1	00	ININ	ince,	r. U. BOX 1330, Eunice, Min 00231			0			EUNICE, NM 00231 FAX: (575) 394-2601	2100 Avenue U, Eunice, NM 00231 (575) 394-3481 FAX: (575) 394-26
	nal	Cardinal	2	R	TAR							54	000	NNA			20	A	0	2			
5	dy	Chain of Custody Form	5	1 of	lair	2															Inc.	Environmental Plus.	nvironm
-																							
of 2	Page 1 of 2	ס																					

1 by: 5.	Sampler Relinquished:		20	19	18	17 Bac	16 SP8 (1')	15 SP8	14 SP7 (1")		12 SP6 (1')	11 SP6	HOLHSH	LAB I.D.		EPI Sampler Name	Project Reference	Location	Facility Name	Client Company	EPI Phone#/Fax#	City, State, Zip	Mailing Address	EPI Project Manager	Company Name	(575) 394-3481 FAX:		Environmen	
3 a Sample Cool & Intact	Date 9-19-17 Time 6:00 am					17 Background (1')	(1')	SP8 (Surface)	(1')	SP7 (Surface)	(1')	SP6 (Surface)		SAMPLE I.D.		Dustin Crockett		UL- I Sec. 4, T23S, R37E	Langlie Mattix 4 Fed 1	Cameron Oil & Gas	575-394-3481 / 575-394-2601	Eunice New Mexico 88231	P.O. BOX 1558	Daniel Dominguez	Environmental Plus,	FAX: (575) 394-2601	ce, NM 88231	<b>Environmental Plus, Inc.</b>	
le Coo			F	t	t	G	6	G	G	G	G	G	•	G)RAB OR (C)OMP				37E	1		94-	882			Inc		P.0	l. K	
ol & In	ReceiveerB		F	T	t	-	-	-	-	-	-	-	. #	CONTAINERS				[""			260	3			Ľ		P.O. Box 1558, Eunice, NM 88231		
	< NXX	2	Г	T	Г	Γ	Г	Γ				Γ	4	GROUND WATER							[-					L	DX 1		
1	(lab st		F	T	Г	Г	Г	Г				Γ	Ī	WASTEWATER											L	1	558		
TX	3K		E	T	T	×	×	×	×	×	×	×	< 5	SOIL	MATRIX	Γ											E	1	
2	1		F	Г	Г	Г	Г	Г	Γ			Γ	1	CRUDE OIL	RIX											Ŀ	Inic	•	
Checked By			F	T	T	Т	Г	Γ	Γ			Γ	1	SLUDGE													e, N		
dBy			F	T	T	Т	Г	T	Γ	Γ		Γ	-	OTHER:				Att		1							M		
R			Г	Г	Т	Т	Т	Τ	Γ		Γ	Γ	Ţ	ACID/BASE	R	Eun		1:0			r	h				١.	023	2	
	N	1	Г	Т	Т	×	<   >	< ×	×	×	×	>	<	CE/COOL	PRESERV.	lice	0.	ani		1			L		0		1		
7	TES:		Г	Т	T	T	Т	Τ	Г	Γ		Τ	ŀ	OTHER	2	Z	Sox	elD					1						
hear	E-mail resurs to: quomin NOTES:					18-Sep-17	10-0ep-17	18-Sep-17	18-Sep-17	18-Sep-17	14-Sep-1/	14-000-11	14_Con_17	DATE	SAMPLING	Eunice, NM 88231	P.U. BOX 1998	Attn: Daniel Dominguez					Į		c				
	to: ddominguezepi@yinair.com & bboone.epi@gmail.com					0:00	0.00	7:49	70:02	6:40	CO:7L	11.00	11-50	TIME	NG.	5													
la la	9	hail	Γ	Ι	Ι	>	<>	< >	<>	< >	< >	<>	×	BTEX 8021B	_	_	_	_	_				_	_	-1				
6	G	Ś.	Γ	Γ	Ι	>	<>	< >	< >	< >	< >	<)>	×	TPH 8015M Ext.	_	_	_	_	_		_		_	_	-1				
s	c	& de	Γ	Τ	T	>	< >	< >	<>	< >	<>	< >	×	CHLORIDES (CI')	_	_	_		_			_	_	_		AN		5	2
3	bbo	WPP	Γ	Τ	T	T	Ι	Ι	Γ			Ι		SULFATES (SO4 <sup>=</sup> )			_									AL		TAR	
-	one	Diver	Г	T	T	Τ	T	T	Ι	Γ	Γ	Ι		рН		_	_	_			_		_	_		SIS/		RO	
1	epi@	cam	T	T	Τ	Τ	T	T	T		Ι	Ι		TCLP					_	_	_		_	_		R		C	5
2	& bboone.epi@gmail.com	eron	Г	T	T	T	T	T	Τ	Ι	Ι	Ι		OTHER >>>						_	_	_		_		ANALYSIS REQUEST		TAR Cardinal	1
	ail.co	oil.co	T	T	T	T	T			Ι	Ι	Ι		PAH				_	_		_					ES		od	1
	ä	m	T	T		T	T	Τ	T	T	Ι	Ι											_	_				- Yr	1
				T	T	T		T	T	T	T				_				_	_		_		_				00	1
			T	T		T	T	T	T	Т	Τ	T																13 21 of	\$

Page 2 of 2

Page 21 of 2

# ATTACHMENT IV Copy of Initial NMOCD Form C-141

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

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

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

Release Notificatio	n and Co		ction /	
	OPERAT		_/	ial Report 📋 Final Rep
Name of Company Cameron Oil & Gas, Inc.	Contact Day		<u> </u>	
Address PO Box 1455 Roswell, NM 88202-1455			08 575-627-328	24
Facility Name Langlie Mattix 4 Federal 1		e Tank Battery		דנ
Surface Owner BLM Mineral Owner	BLM		APING	o. 30-025-32743
LOCATIO	N OF REL	FASE		
	/South Line	Feet from the	East/West Line	Country
L 4 23S 37E 1650 Sou		660	West	County Lea
Latitude	ongitude		NAD83	
NATURE	OF RELE	ASE		
Type of Release Oil & Water		Release 11 BBL	S Volume F	Recovered 0
Source of Release	Date and Ho	our of Occurrence		Hour of Discovery
Was Immediate Notice Given?	If YES, To Y		Date and	TIOU OF DISCOVERY
3y Whom?	Date and Ho	1/20/17		
Was a Watercourse Reached?	If YES. Volu	ame Impacting th	e Watercourse	
🗌 Yes 🗹 No		and any any arring th	ie matereourse.	
f a Watercourse was Impacted, Describe Fully.*				
	RECE	IVED		
			1.24 am A	un 44 0047
	(Dy Oni	na ruat a	5.21 am, A	ug 11, 2017
Describe Area Affected and Cleanup Action Taken.* 11 BBLS of fluid s round heater treater. A vacuum truck picked up 3 BBLS of fluid, the area hereby certify that the information given above is true and complete to the egulations all operators are required to report and/or file certain release nu ublic health or the environment. The acceptance of a C-141 report by the hould their operations have failed to adequately investigate and remediate r the environment. In addition, NMOCD acceptance of a C-141 report de ederal, state, or local laws and/or regulations.	twas 300 sq fee the best of my kn otifications and NMOCD mark	t. A backhoe cle nowledge and un perform correcti ted as "Final Reg that pose a threa he operator of re	aned the area and l derstand that pursu ve actions for relea port" does not relie	hauled 3 yards to Sundance. Juant to NMOCD rules and ases which may endanger twe the operator of liability surface water, human health mpliance with any other
ignature: A guid Dullening	pproved by Pa		10	M
inted Name: David Sweeney		vironmental Spe		U
tle: Operation Manager	pproval Date:	8/11/2017	Expiration Da	ate:
mail Address: dsweeney@cameronoil.com	conditions of Ap	oproval:		Attached
ate: 8/1/17 Phone:575-420-1108 575-627-3284	see attac	hed directi	ve	
	RP-4784	nOY172	22334178	pOY1722334576