

November 9, 2017

Mike Bratcher & Crystal Weaver NMOCD District 2 811 S. First St Artesia, NM 88210

Re: Work Plan

XTO – Poker Lake Unit 078 & 139

NMOCD Reference #'s: 2RP-3980 & 2RP-3503

Mr. Mike Bratcher & Ms. Crystal Weaver:

RXSoil, Inc. is pleased to submit the work plan summarizing the on-site soil remediation of produced water impacted and crude oil distressed soil at the Poker Lake Unit ("PLU") 078 and 139 sites located in Eddy County, New Mexico. Restoration and remediation work plan follow in the attached report.

Sincerely,

Stan Mickle Vice President of Operations RXSoil, Inc. (210) 997-7645 Zach Robbins
Technical and Engineering Analyst
RXSoil, Inc.
(210) 400-7645

Table of Contents

I.	Introduction	3
II.	Regulatory Guidelines	3
III.	Delineation Plan	4
IV.	Soil Remediation Work Plan	4
Figures	s	
1.	Vicinity Map	6
2.	Water Table Map	7
3.	Initial Delineation	
4.	Soil Movement	9
Append	dix	
A.	C-141, Release Notification and Corrective Action Document	
	1. PLU 078	
	2. PLU 139	11
B.	Water Column/Average Depth to Water	
C.	Initial Delineation Lab Data	

I. Introduction

On behalf of XTO Energy, RXSoil, Inc. has prepared this work plan that describes the assessment and action plan for remediation of the following sites:

PLU 078 (32.194685, -103.828119), API No. 30-015-27536 PLU 139 (32.19998, -103.83173), API No. 30-015-29847

PLU 078 is located in Unit Letter "A", Section 25, Township 24S, Range 30E (see *Figure 1* for Vicinity Map). The Release Notification and Corrective Action document (C-141, *Appendix A.1*), approved November 9, 2016, indicates a power failure on November 3 caused an overflow of the battery. It was reported that 2525 barrels of produced water and 130 barrels of oil were released, and 2080 barrels of produced water and 130 barrels of oil were recovered during the initial response.

PLU 139 is located in Unit Letter "J", Section 24, Township 24S, Range 30E. The C-141 (Appendix A.2), approved January 15, 2016, indicates a freeze on January 12 caused a split in a flowline. It was reported that 33 barrels of produced water and 118 barrels of oil were released, and that 5 barrels of produced water and 90 barrels of oil were recovered during the initial response.

II. Regulatory Guidelines

Information was unavailable for depth to ground water in the New Mexico Water Rights Reporting System for Sections 24 and 25, Township 24 South, Range 30 East. The search was extended for adjacent sections, in which the closest data point was found (*Appendix B*). This point, which is located about 7,000 feet west of the two sites (*Figure 2*), shows depth to ground water of 400 feet. An Eddy County Depth to Ground Water map (dated February 2005) signifies depths between 350 and 375 feet. This is evidence that the depth to ground water is greater than 100 feet, scoring 0 for that section.

The site is also greater than 1,000 feet from all water sources and any surface water. *Figure 2* also includes a 1000-foot radius from both sites. The ranking score for this site's threat to public health, ground water and environmental therefore is 0.

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal	Less than 50 feet	20 points	
high water elevation of groundwater)	50 feet to 99 feet	10 points	
	>100 feet	0 points	Х
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water	Yes	20 points	
source; or less than 1000 feet from all other water	No	0 points	Х
sources)			
5			
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers,	Less than 200 feet	20 points	
streams, creeks, irrigation canals and ditches)	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	Х
RANKING SCORE (TOTAL POINTS)			0

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). The Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl benzene, and total xylenes (BTEX), 5000 ppm total petroleum hydrocarbons (TPH) and 600 ppm chlorides.

Post-remediation discrete confirmation samples will be taken and properly packaged, preserved and transported to a third-party laboratory by chain of custody, and analyzed for BTEX (Method 8260 or 8021), TPH (Method 8015 extended range) and chlorides (Method 4500 or 300). The results will be included in the closure report along with chain of custody and quality control.

III. Delineation Plan

Five initial delineation samples from November 10, 2016 were tested for BTEX, TPH, and chlorides. The sample plot, along with an outline of expected contaminated area, is shown in *Figure 2* with corresponding lab data attached as *Appendix C*.

Primary samples will be taken on the south and west sides of the flare. Results of this will determine whether a replacement flare will need to be moved in order for RXSoil to remediate that material or if the replacement can be placed in the original location.

RXSoil will conduct vertical delineation of impacted soil by drilling bore holes throughout the impacted regions. Five bore holes will be spaced out and drilled throughout the contaminated area at PLU 078 while two bore holes will be drilled for PLU 139. Approximate placement of the bore holes for PLU 078 along with the predicted contamination outline can be seen in *Figure 3*. Bore holes for PLU 139 will be near the center of both contaminated areas. Per the NMOCD, at least ten vertical feet of soil with contaminant concentrations at or below thresholds will be shown.

RXSoil will contract out a geophysical electroconductivity survey to have for a guide throughout excavation. Two Geonics Electromagnetic Meters will be used to investigate contamination levels from the surface to a depth of five feet and eighteen feet. Data will be confirmed by comparing it to results from bore hole samples.

Horizontal delineation will be conducted during excavation. This process, driven by data, will use results from the electroconductivity survey to lay out an initial excavation area. Based on test results from side wall screenings throughout excavation, a gradient of contamination levels will be used to determine any required further horizontal excavation. A full delineation report will be included as support in the closure report.

IV. Soil Remediation Work Plan

RXSoil's core process of on-site remediation will be used to address the contamination. This work plan assumes that contamination levels will be above threshold to a depth of at least four feet and a 30 mil polyliner will be placed at the subsurface. This will be supported by the delineation report mentioned above.

RXSoil will supervise the excavation of affected soils with approval from area utilities owners via One-Call. RXSoil will continuously guide the excavation activities by collecting soil bottom and sidewall samples for field screenings and third-party confirmation tests.

Impacted material from PLU 139 will be excavated and replaced with clean material from an area adjacent to PLU 078. This process can be seen in *Figure 4*. This will expedite the closure process for PLU 139 as well as allow more efficient treatment of all soil.

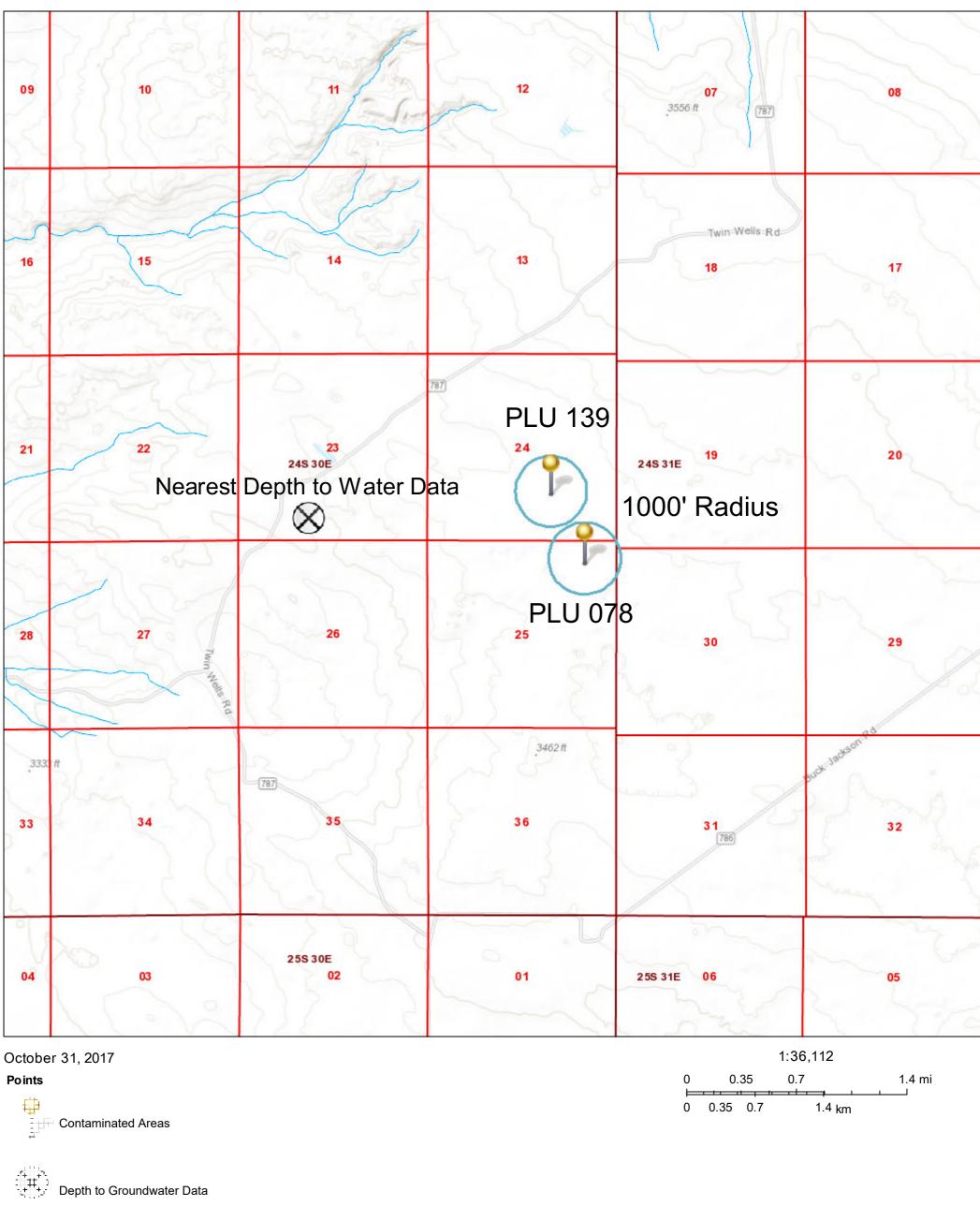
RXSoil will create engineered treatment cells using the excavated area at PLU 078. The impacted soil from both PLU 078 and PLU 139 will be placed back into these containment cells and a proprietary delivery system will be installed to apply RXSoil chemicals for remediation of the soil. No harmful or hazardous chemicals are used in the RXSoil Process, as previously approved by the NMOCD.

Approximately 85% of the water used throughout the RXSoil Process will be collected as effluent then transferred to XTO for a secondary industrial use.

Final soil samples will then be collected and tested at the end of treatment to confirm impacted soil has been remediated to required chloride, TPH and BTEX levels directed by NMOCD standards, as specified in **Section II**.



Figure 2 - Water Map

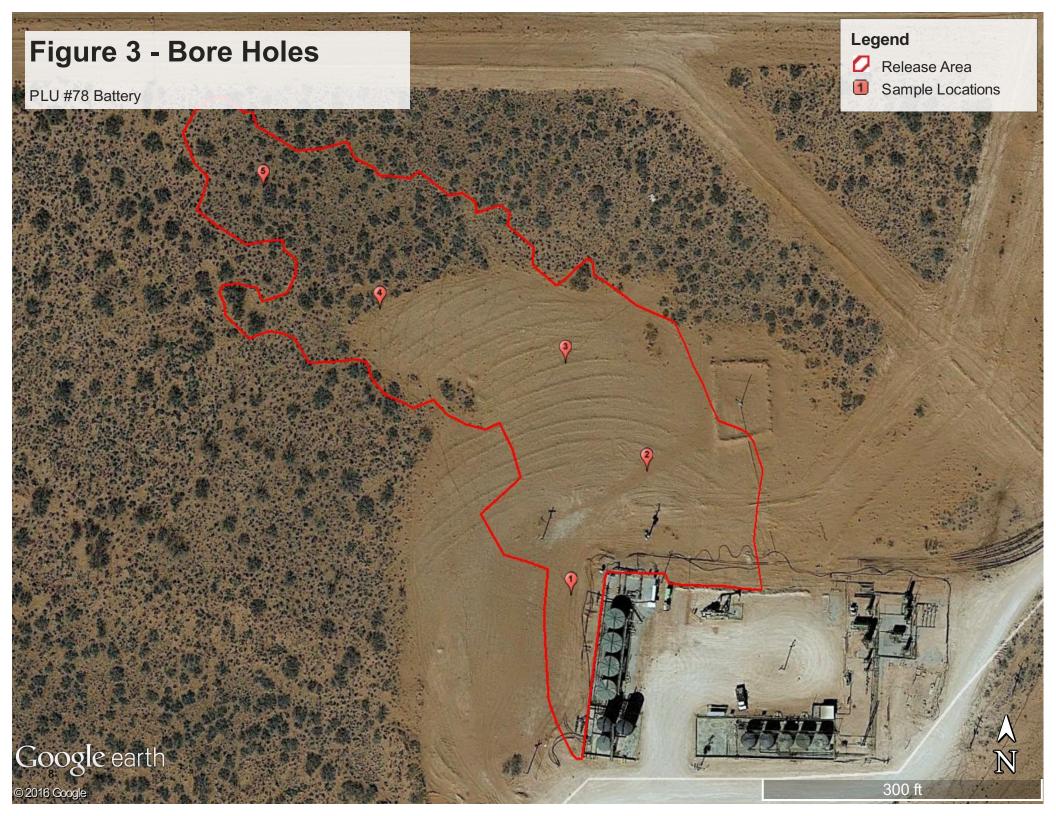


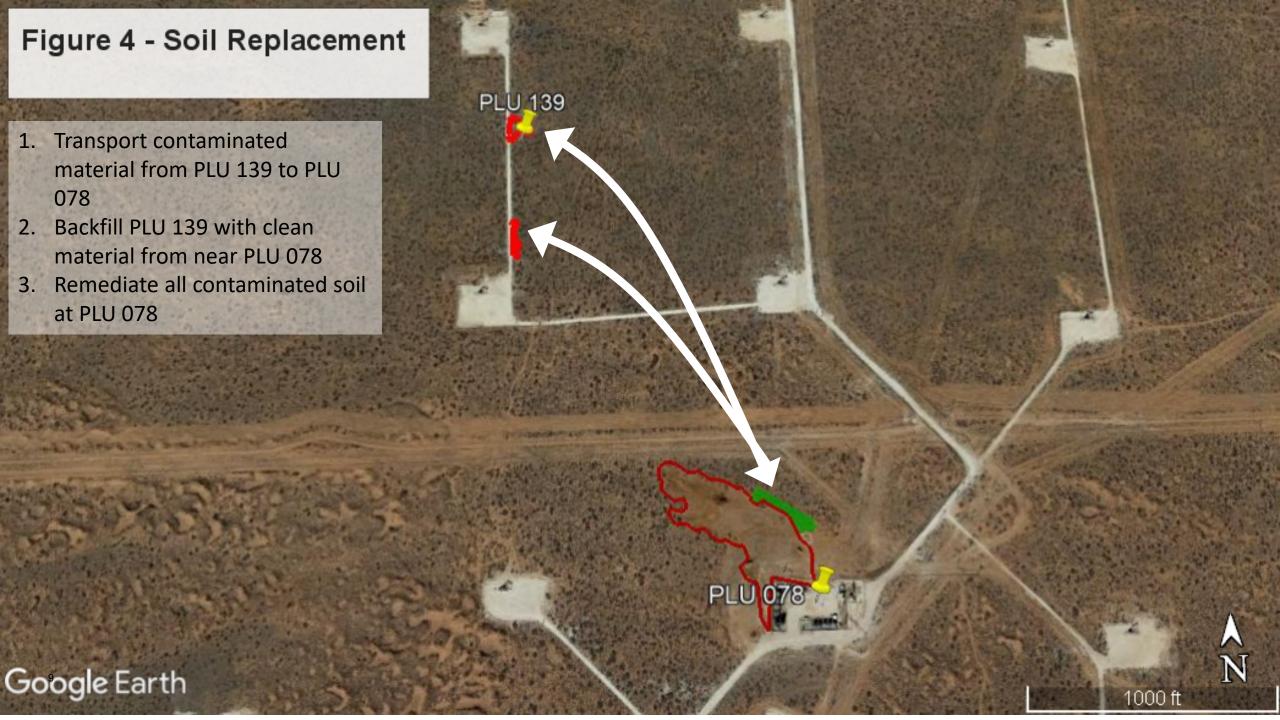
Areas

PLSS Townships
PLSS First Division
OSE Streams

NM Probable Playas

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community





NM OIL CONSERVATION

ARTESIA DISTRICT

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

State of New Mexico **Energy Minerals and Natural Resources**

NOV 08 2016

Form C-141 Revised August 8, 2011

1625 N. French Dr., Hobbs, NM 88240

<u>District II</u>
811 S. First St., Artesia, NM 88210

<u>District III</u>
1000 Rio Brazos Road, Aztec, NM 87410

<u>District IV</u>
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Leave to appropriate District Office in RECessor trace with 19.15.29 NMAC.

			Rele	ase Notifica	ation	and Co	rrective A	ction		
nABI	16314	135420)			OPERA?	TOR	\boxtimes	Initia	l Report
Name of Co	mpany: B	OPCO, L.P.	34	0131		Contact: Bra	adley Blevins			
				ad, N.M. 88220			No. 575-887-7 32			
Facility Nan	ne: Poker	Lake Unit 7	8		<u> </u>	acility Typ	e: Exploration a	ind Produc	tion	
Surface Own	ner: Feder	al		Mineral O	wner:		···········	A	API No.	. 30-015-27536
				LOCA	TION	OF REI	LEASE			
Unit Letter A	Section 25	Township 24S	Range 30E	Feet from the 660	North/	South Line	Feet from the 660	East/West	t Line	County Eddy
		1	<u> </u>	Latitude: 32.	194685	Longitud	e: 103.828119	<u></u> _		
				NAT	URE (OF REL	EASE			·
Type of Relea	ase: Crude	Oil/ Produced	Water	<u></u>		Volume of				ecovered:
						2525 barre				Recovered
Source of Rel	laggar					130 barrels				s Oil recovered Hour of Discovery
	at the batte		W system	anks to overflow,	filling	11-3-16 @	Iour of Occurrence 12:32am			7:00am
Was Immedia						If YES, To	Whom?			
		Ø	Yes [No Not Re	quired	Mike Brate	her, Heather Patt	erson, Jim A	Amos vi	a email
By Whom? B							Iour: 11-3-16@			
Was a Watero	course Read		Yes ⊠	No		if YES, Vo	olume Impacting t	the Waterco	urse.	
If a Watercou						<u> </u>				
	was notific The fluid	ed of a release filled the con	e that occu tainment a	rred at the PLU 78 nd overflowed to the						sing water system tanks to fill ation and recovered 2210
	ks were ca	lled to the loc	ation and			m the contain	nment and ground	surface con	mbined.	An initial response crew was
regulations al public health should their o	I operators or the envi operations h nment. In a	are required to ronment. The nave failed to addition, NMO	to report and acceptant adequately OCD accep	nd/or file certain re ce of a C-141 repore investigate and re	lease no it by the mediate	otifications a NMOCD m contamination	nd perform correct parked as "Final R dion that pose a thruste the operator of	tive actions eport" does eat to groun responsibili	for rele not reli nd water ity for co	uant to NMOCD rules and eases which may endanger eve the operator of liability , surface water, human health ompliance with any other
Signature:	Bu	lley	Bl.	•			OIL CON Signed By Environmental S		/ /	DIVISION
Printed Name	e: Bradley l	Blevins				Approved by	Environmental S	pecialist.		
Title: Assista	nt Remedia	ation Foreman	1			Approval Da	te: [Q]]	(O Exp	oiration 1	Date: N/A
E-mail Addre	ess: bblevin	s@basspet.co	om			Conditions o	f Approval:			Attached X
Date:	-8-/			: 432-214-3704						1,
Attach Addi	tional She	eis II Neces	sary			•				2RP-3980

<u>District I</u> 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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141 Revised August 8, 2011

JAN 1 5 2016 Submit I Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

	Release Notification and Corrective Action											
NAB1601931572	OPERATOR Initial Report Final Re											
Name of Company: BOPCO, L.P.	Contact: Bradley Blevins											
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329											
Facility Name: PLU 139	Facility Type: Exploration and Production											
Surface Owner: Federal Mineral Own	er: Federal API No. 3001529847											
	ON OF RELEASE											
Unit Letter Section Township Range Feet from the N J 24 24S 30E 1980	orth/South Line Feet from the East/West Line County Eddy											
Latitude: 32.1	9998 Longitude: 103.83173											
NATU	RE OF RELEASE											
Type of Release: Crude Oil and Produced Water	Volume of Release: 118 barrels oil and 33 barrels PW Volume Recovered: 90 barrels oil and barrels PW											
Source of Release: Failed flowline	Date and Hour of Occurrence: Date and Hour of Discovery: 1-12-16 @ 11:00am 1-12-16 @ 12:08pm											
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Requ	If YES, To Whom?											
By Whom? Bradley Blevins	Date and Hour: 1-12-16 @ 2:45pm via email											
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.											
☐ Yes ☒ No												
If a Watercourse was Impacted, Describe Fully.*												
Describe Cause of Problem and Remedial Action Taken.*												
Describe Cause of Problem and Remedian Action Taken.												
The PLU 139 well was pickled and the flowline was flushed with free	h water, due to low lying areas of the flowline the fresh water settled and froze											
causing flowline to split. A check valve at the battery header also fail flowline.	ed causing fluid to flow back down the flowline and was released out the failed											
Describe Area Affected and Cleanup Action Taken.*												
V	Neverte of all and 5 harmely of sundered viotes. A recompose grow is calculated to											
remove the saturated surface material and haul to an approved dispos	barrels of oil and 5 barrels of produced water. A response crew is scheduled to it.											
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 public health or the environment. The acceptance of a C-141 report h	se notifications and perform corrective actions for releases which may endanger y the NMOCD marked as "Final Report" does not relieve the operator of liability											
should their operations have failed to adequately investigate and rem	diate contamination that pose a threat to ground water, surface water, human health											
	ort does not relieve the operator of responsibility for compliance with any other											
federal, state, or local laws and/or regulations.	OIL CONSERVATION DIVISION											
	JIE CONSERVATION DIVISION											
Signature: Bradley Blevins												
Printed Name: Bradley Blevins	Approved by Environmental Specialist:											
Title: Assistant Remediation Foreman	Approval Date: 115/10 Expiration Date: NA											
E-mail Address: bblevins@basspet.com	Gondition of Approva											
Date: 1-15-16 Phone: 432-214-3704	TO SERVICE REMEDIATION PROPOSAL NO											
* Attach Additional Sheets If Necessary												
	2RP-3503											



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

(quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest)

(In feet)

POD

		Sub-		Q	Q	Q							W	ater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DepthWellDepthW	ater Col	umn
<u>C 02110</u>			ED		4	3	23	24S	30E	608036	3562950*	600	400	200
<u>C 02780</u>			ED	2	3	2	23	24S	30E	608535	3563857*	505		
<u>C 02781</u>			ED	4	3	2	23	24S	30E	608535	3563657*	624		
<u>C 02782</u>			ED	4	3	2	23	24S	30E	608535	3563657*	808		

Average Depth to Water:

(NAD83 UTM in meters)

400 feet

Minimum Depth:

400 feet

Maximum Depth:

400 feet

Record Count: 4

PLSS Search:

Section(s): 23

Township: 24S

Range: 30E

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.

11/8/17 9:42 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

^{*}UTM location was derived from PLSS - see Help



November 16, 2016

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: PLU #78

Enclosed are the results of analyses for samples received by the laboratory on 11/10/16 15:44.

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 www.tceq.texas.gov/field/ga/lab accred certif.html.

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)

Celey D. Keine

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



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

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 1 (1') (H602534-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/12/2016	ND	2.25	113	2.00	0.370	
Toluene*	<0.050	0.050	11/12/2016	ND	2.28	114	2.00	0.780	
Ethylbenzene*	<0.050	0.050	11/12/2016	ND	2.20	110	2.00	0.669	
Total Xylenes*	<0.150	0.150	11/12/2016	ND	6.65	111	6.00	0.572	
Total BTEX	<0.300	0.300	11/12/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	11/14/2016	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	89.9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	92.2	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 1 (2') (H602534-02)

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	11/12/2016	ND	2.25	113	2.00	0.370	
Toluene*	< 0.050	0.050	11/12/2016	ND	2.28	114	2.00	0.780	
Ethylbenzene*	<0.050	0.050	11/12/2016	ND	2.20	110	2.00	0.669	
Total Xylenes*	<0.150	0.150	11/12/2016	ND	6.65	111	6.00	0.572	
Total BTEX	<0.300	0.300	11/12/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 %	6 73.6-14	0						
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	11/14/2016	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	111 %	6 35-147							
Surrogate: 1-Chlorooctadecane	108 9	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 2 (1') (H602534-03)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	73.6-14	0						
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	11/14/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	96.9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	98.4	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 3 (1') (H602534-04)

BTEX 8021B	mg/	'kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 73.6-14	0						
Chloride, SM4500CI-B	mg/kg		Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	11/14/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	94.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	98.7	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 3 (4') (H602534-05)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	% 73.6-14	0						
Chloride, SM4500CI-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	11/14/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	101 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	101 9	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 4 (1') (H602534-06)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	< 0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	< 0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 %	6 73.6-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	11/14/2016	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	93.0 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	97.2	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 4 (6') (H602534-07)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	73.6-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	11/15/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	96.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	99.1	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name:PLU #78Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi HensonProject Location:UL- A SEC. 25, T24S, R30E

Sample ID: SP 5 (1') (H602534-08)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12800	16.0	11/15/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	77.5	% 35-147	,						
Surrogate: 1-Chlorooctadecane	81.0	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

Fax To: (505) 394-2601

Received: 11/10/2016 Sampling Date: 11/04/2016

Reported: 11/16/2016 Sampling Type: Soil

Project Name: PLU #78 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: UL- A SEC. 25, T24S, R30E

Sample ID: SP 5 (8') (H602534-09)

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	11/14/2016	ND	2.44	122	2.00	1.20	
Toluene*	<0.050	0.050	11/14/2016	ND	2.50	125	2.00	1.18	
Ethylbenzene*	<0.050	0.050	11/14/2016	ND	2.41	121	2.00	1.26	
Total Xylenes*	<0.150	0.150	11/14/2016	ND	7.28	121	6.00	1.22	
Total BTEX	<0.300	0.300	11/14/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/15/2016	ND	400	100	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	11/11/2016	ND	190	94.8	200	5.13	
DRO >C10-C28	<10.0	10.0	11/11/2016	ND	200	99.8	200	4.45	
Surrogate: 1-Chlorooctane	87.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	88.3	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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.

BS1 Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.

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 claim 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 whistoever 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, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Environmental Plus, Inc.

(575) 394-3481 FAX: (575) 394-2601 2100 Avenue O, Eunice, NM 88231

P.O. Box 1558, Eunice, NM 88231

Company Name P.O. BOX 1558 **Daniel Dominguez** Environmental Plus, Inc. Bill To ANALYSIS REQUEST Cardinal

Sampler Relinquished **EPI Sampler Name** AFE# Facility Name Client Company EPI Phone#/Fax# Location **EPI Project Manager** City, State, Zip Mailing Address LAB I.D. SP5 (8') SP5 (1") SP4 (1") SP3 (4") SP4 (6') SP2 (1') SP1 (1") SP3 (1') SP1 (2") SAMPLE I.D. **David Robinson** PLU #78 Battery BOPCO 575-394-3481 / 575-394-2601 UL- A Sec. 25, T24S, R30E **Eunice New Mexico 88231** Date 11/7/16 G G G G G G G G (G)RAB OR (C)OMP. # CONTAINERS **GROUND WATER** WASTEWATER × × SOIL MATRIX CRUDE OIL SLUDGE 522 W. Mermod, Suite 704 OTHER: Carlsbad, NM 88220 Attn: Brad Blevins ACID/BASE PRESERV. E-mail results to: ddominguezepi@gmail.com & bblevins@basspet.com BOPCO, L.P. × ICE/COOL OTHER 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 04-Nov-16 DATE SAMPLING 11:40 13:28 12:56 11:06 10:14 9:56 9:26 8:22 8:06 TIME BTEX 8021B × × **TPH 8015M** CHLORIDES (CI') SULFATES (SO4") pН TCLP OTHER >>> PAH

Page 12 of 12

Chain of Custody Form

elivered by

Time 6:00 am 11/10/11

NOTES

Sample Cool & Intact Yes No