

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260

jwlowry@basinenv.com

Office: (575) 396-2378 Fax: (575) 396-1429



REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

**BOPCO, LP
POKER LAKE UNIT #276 FLOW LINE
Eddy County, New Mexico
Unit Letter "P" (SE/SE), Section 12, Township 24 South, Range 29 East
Latitude 32.224862° North, Longitude 103.929663° West
NMOCD Reference #2RP-2298**

Prepared For:

**BOPCO, LP
522 W. Mermod, Suite 704
Carlsbad, New Mexico 88220**

Prepared By:

**Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260**

October 2014

Joel W. Lowry
Project Manager

TABLE OF CONTENTS

1.0 INTRODUCTION & BACKGROUND INFORMATION.....	1
2.0 NMOCD SITE CLASSIFICATION.....	1
3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES.....	2
4.0 QA/QC PROCEDURES.....	3
4.1 Soil Sampling.....	3
4.2 Decontamination of Equipment.....	3
4.3 Laboratory Protocol.....	3
5.0 SITE CLOSURE REQUEST.....	4
6.0 LIMITATIONS.....	4
7.0 DISTRIBUTION.....	5

FIGURES

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

TABLES

Table 1 – Concentrations of Benzene, BTEX, TPH & Chloride in Soil

APPENDICES

Appendix A – Release Notification and Corrective Action (Form C-141)

Appendix B – Photographs

Appendix C – Laboratory Analytical Reports

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary and Site Closure Request* for the release site known as Poker Lake Unit #276 Flow Line (PLU #276 Flow Line). The legal description of the release site is Unit Letter "P" (SE/SE), Section 12, Township 24 South, Range 29 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.224862° North latitude and 103.929663° West longitude. The property affected by the release is owned by the United States Department of the Interior - Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On April 30, 2014, BOPCO discovered a release had occurred on the PLU #276 flow line southeast of the PLU Pierce Canyon 12 Federal 1H tank battery. The "Release Notification and Corrective Action" (Form C-141) indicated an unknown vehicle ran over the flow line swing, resulting in the release of approximately seven barrels (7 bbls) of crude oil and three barrels (3 bbls) of produced water. The release affected approximately one thousand, seven hundred and forty square feet (1,740 ft²) of pasture alongside the road way in the flow line right of way and approximately seven hundred square feet (700 ft²) of lease road. During initial response activities, the well was shut in, and the broken fitting was replaced. The Form C-141 is provided as Appendix A. General photographs of the release site are provided as Appendix B.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 12, Township 24 South, Range 29 East. A depth to groundwater reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicates groundwater should be encountered at approximately one hundred and twenty-five feet (125') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

There are no surface water bodies within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

NMOCD guidelines indicate the PLU #276 Flow Line release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) – 50 mg/Kg (ppm)
- Total Petroleum Hydrocarbons (TPH) – 5,000 mg/Kg (ppm)

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On September 11, 2014, Basin conducted an initial investigation at the release site. During the investigation, a series of hand-augered soil bores were advanced in an effort to determine the vertical and horizontal extent of soil impact. Four (4) soil samples (PA #1 @ 6", PA #1 @ 2', PA #2 @ 6" and PA #2 @ 2') were collected from within the inferred pooling areas at the release site. Collected soil samples were submitted to Cardinal Laboratories of Hobbs, New Mexico, for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from less than the laboratory method detection limit (MDL) for soil sample PA #2 @ 2' to 5,120 ppm for soil samples PA #2 @ 6". Soil samples PA #1 @ 6" and PA #2 @ 6" were also analyzed for concentrations of TPH. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL for soil sample PA #2 @ 6" to 19.0 ppm for soil sample PA #1 @ 6". A summary of "Concentrations of Benzene, BTEX, TPH & Chloride in Soil" is provided in Table 1. A "Site & Sample Location Map" is provided as Figure 2. Laboratory analytical reports are provided as Appendix C.

Twelve (12) soil samples (N. Ditch #1 @ Surface, N. Ditch #1 @ 2', N. Ditch #2 @ Surface, N. Ditch #2 @ 2', N. Ditch #3 @ Surface, N. Ditch #3 @ 2', N. Ditch #4 @ Surface and N. Ditch #4 @ 2', S. Ditch #1 @ Surface, S. Ditch #1 @ 2', S. Ditch #2 @ Surface and S. Ditch #2 @ 2') were collected from the affected bar ditches and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from less than the laboratory MDL for soil samples N. Ditch #2 @ Surface, N. Ditch #2 @ 2', S. Ditch #2 @ Surface and S. Ditch #2 @ 2' to 176 ppm for soil sample N. Ditch #3 @ Surface. Soil samples N. Ditch #1 @ Surface, N. Ditch #2 @ Surface, N. Ditch #3 @ Surface, N. Ditch #4 @ Surface, S. Ditch #1 @ Surface and S. Ditch #2 @ Surface were also analyzed for concentrations of TPH. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL for each of the submitted soil samples, with the exception of soil samples N. Ditch #1 @ Surface and N. Ditch #3 @ Surface, which exhibited a TPH concentrations of 133.7 ppm and 846 ppm, respectively.

Two (2) soil samples (Road #1 @ Surface and Road #1 @ 2') were collected from the affected caliche access road and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 304 ppm for soil sample Road #1 @ 2' to 4,320 ppm for soil sample Road #1 @ Surface. Soil sample Road #1 @ Surface was also analyzed for concentrations of TPH, which were determined to be 2,588 ppm.

On September 17, 2014, Basin began excavating impacted soil at the release site. The floor and sidewalls of the excavation were advanced until field observations and tests suggested concentrations of BTEX, TPH and chloride were below NMOCD regulatory standards. Excavated soil was stockpiled on-site, pending final disposition.

On September 30, 2014, eleven (11) confirmation soil samples (NSW #1, SSW #1, ESW #1, WSW #1, FP SSW, Road ESW, Road WSW, FP #11, FP #12, Floor #1 @ 2' and Road Floor @ 1') were collected from the excavated area and submitted to the laboratory for analysis of chloride

concentrations. Laboratory analytical results indicated chloride concentrations were less than the laboratory MDL for each of the submitted soil samples, with the exception of soil samples FP SSW and FP #11, which exhibited concentrations of 16.0 ppm and 32.0 ppm, respectively. Soil samples Floor #1 @ 2' and Road Floor @ 1' were also analyzed for concentrations of BTEX and TPH, which were determined to be less than the appropriate laboratory MDL.

Between September 24 and 30, 2014, approximately one hundred and twenty cubic yards (120 yd³) of impacted material was transported to Lea Land, Inc. (NMOCD Permit #WM-01-035), for disposal.

The final dimensions of the primary excavation were approximately thirty feet (30') in width, forty-five feet (45') in length and two feet (2') in depth. A portion of the affected road measuring approximately fifteen feet (15') in width and thirty feet (30') in length was excavated to approximately one foot (1') bgs. In addition, approximately one hundred and eighty (180) linear feet of bar ditch on the north side of the caliche access road was excavated to approximately six inches (6") bgs, along with seventy-five (75) linear feet to the south. Upon receiving laboratory analytical data from confirmation soil samples, the excavated area was backfilled with locally purchased, non-impacted material. Following backfilling, areas affected by the remediation activities were compacted and contoured to match the surrounding topography.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories, Inc., in Hobbs, New Mexico, for BTEX, TPH and/or chloride analyses using the methods described below:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 4500 Cl-B

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Confirmation soil samples collected from the floor and sidewalls of the excavated areas at the PLU #276 Flow Line release site were analyzed by an NMOCD-approved laboratory, which determined concentrations of BTEX, TPH and chloride were less than NMOCD regulatory standards in each of the submitted soil samples. Based on these laboratory analytical results, Basin recommends BOPCO provide the NMOCD - Artesia District Office and the BLM a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the PLU #276 Flow Line release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary and Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

7.0 DISTRIBUTION:

- Copy 1: Mike Bratcher
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88210
- Copy 2: James Amos
Bureau of Land Management
602 E. Greene Street
Carlsbad, NM 88220
- Copy 3: Tony Savoie
BOPCO, LP
522 W. Mermod, Suite 704
Carlsbad, NM 88220
- Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, NM 88260

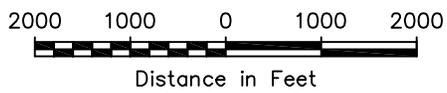
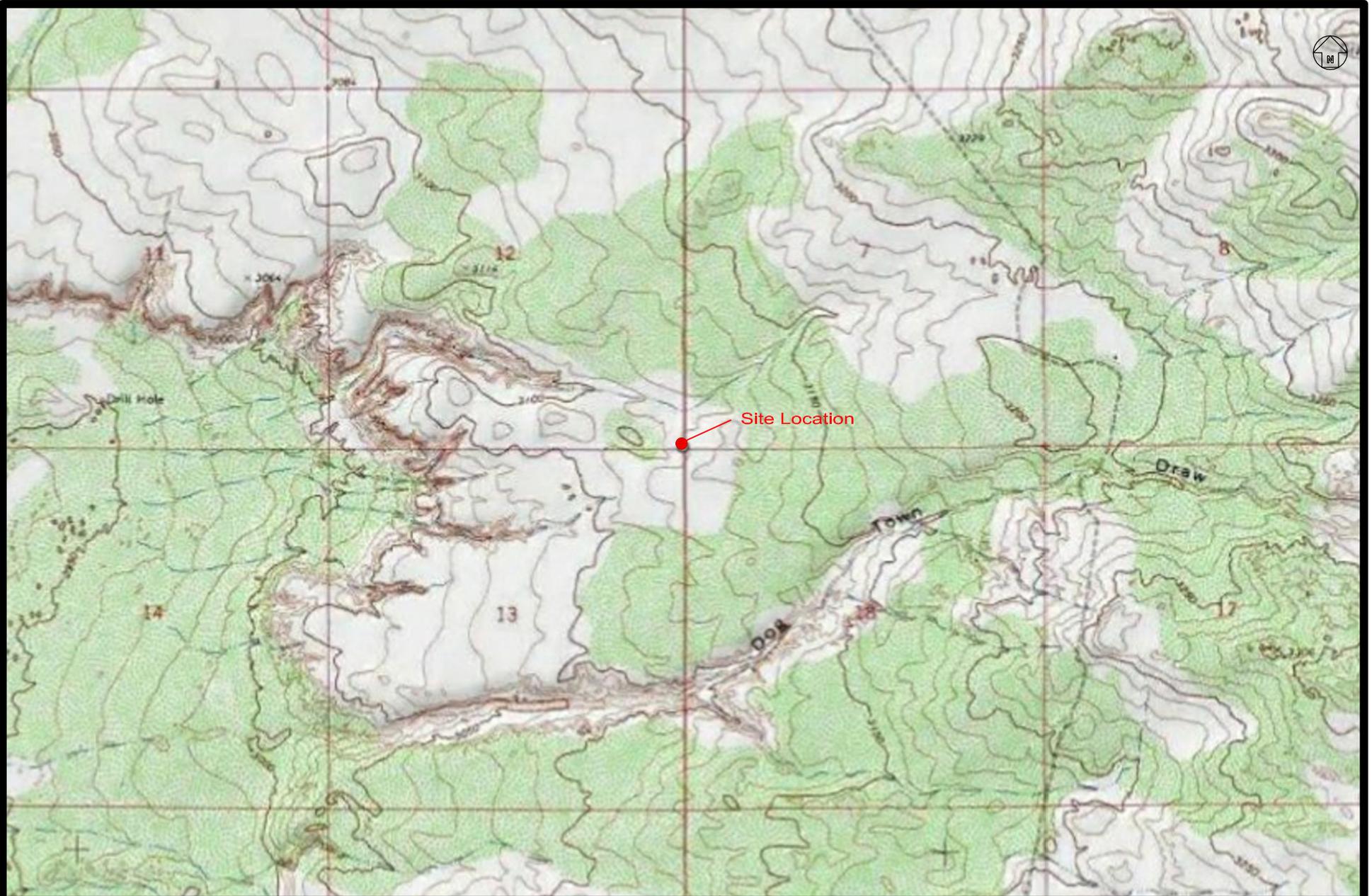


Figure 1
 Site Location Map
 BOPCO, LP
 PLU #276 Flow Line
 Eddy County, New Mexico

Basin Environmental Service Technologies

Prep By: JWL

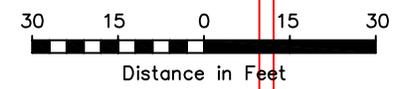
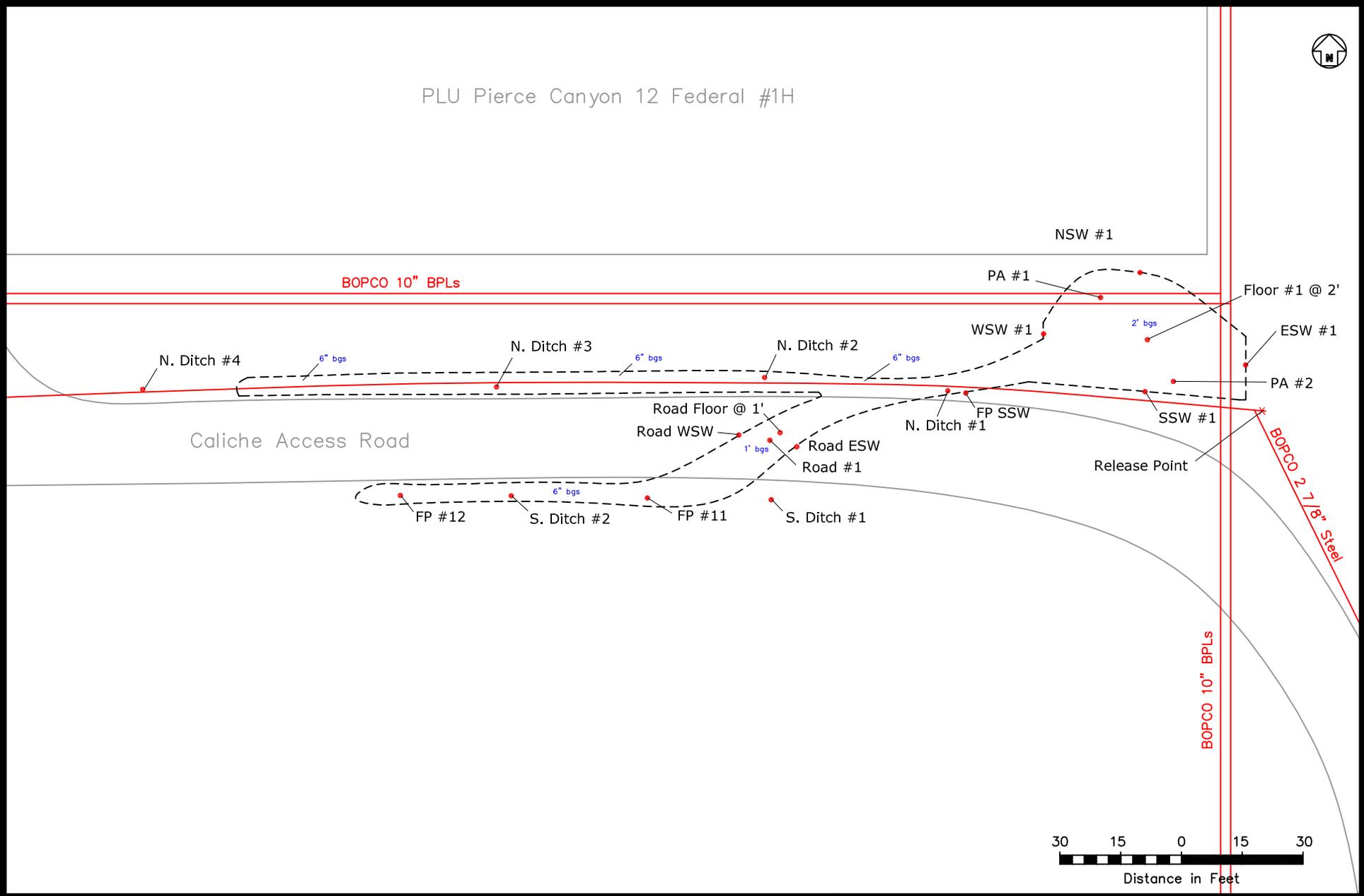
Checked By: BJA

October 17, 2014

Scale 1"=2000'



PLU Pierce Canyon 12 Federal #1H



Legend:

- Excavation Extent
- Sample Location
- X Release Point
- Caliche Road/Well Pad
- Pipeline
- 6" bgs Excavation Grade

Figure 2
 Site and Sample Location Map
 BOPCO, L.P.
 PLU #276 Flow Line
 NMOCD Ref. # 2RP-2298
 Eddy County, New Mexico

Basin Environmental Service Technologies

Prep By: JWL	Checked By: BJA
October 2, 2014	Scale 1"=30'

**TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL**

**BOPCO, LP
POKER LAKE UNIT #276 FLOW LINE
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #: 2RP-2298**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	4500 CI-B CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)		
PA #1 @ 6"	6"	9/11/2014	Excavated	-	-	-	-	-	<10.0	19.0	<10.0	19.0	3,600
PA #1 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	336
PA #2 @ 6"	6"	9/11/2014	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	5,120
PA #2 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
N. Ditch #1 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<10.0	104	29.7	133.7	112
N. Ditch #1 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	48.0
N. Ditch #2 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
N. Ditch #2 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
N. Ditch #3 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<10.0	648	198	846	176
N. Ditch #3 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	32.0
N. Ditch #4 @ Surface	Surface	9/11/2014	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0
N. Ditch #4 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	80.0
S. Ditch #1 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0
S. Ditch #1 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	64.0
S. Ditch #2 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
S. Ditch #2 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
Road #1 @ Surface	Surface	9/11/2014	Excavated	-	-	-	-	-	<50.0	2,040	548	2,588	4,320
Road #1 @ 2'	2'	9/11/2014	In-Situ	-	-	-	-	-	-	-	-	-	304
NSW #1	1'	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
SSW #1	1'	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
ESW #1	1'	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
WSW #1	1'	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
FP SSW	6"	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	16.0
Road ESW	6"	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
Road WSW	6"	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	<16.0
FP #11	6"	9/30/2014	In-Situ	-	-	-	-	-	-	-	-	-	32.0
FP #12	6"	9/30/2014	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
Floor #1 @ 2'	2'	9/30/2014	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
Road Floor @ 1'	1'	9/30/2014	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
NMOCD Criteria				10				50				5,000	1,000

- = Not analyzed.

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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nHMP1413247637 OPERATOR Initial Report Final Report

Name of Company: BOPCO, L.P. <i>260737</i>	Contact: Tony Savoie
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: PLU-276 The spill is located 2,760 ft. N.E. of the well pad location in Section 12-24S-29E	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-35137
------------------------	------------------------	----------------------

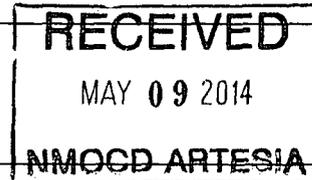
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	12	24S	29E	45	South	15	East	Eddy

Latitude N 32.224862 Longitude W 103.929663

NATURE OF RELEASE

Type of Release: Crude oil and produced water	Volume of Release: 7 bbls. crude oil and 3 bbls produced water	Volume Recovered: None
Source of Release: 2 7/8" flow line	Date and Hour of Occurrence: 4/30/14 approximately 9 a.m.	Date and Hour of Discovery: 4/30/14 at 10 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	



If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
An unknown vehicle ran over the flow line "swing" where the line turns west to head to the tank battery. The well was shut in and the broken fitting was replaced.

Describe Area Affected and Cleanup Action Taken.*
The spill impacted approximately 1,740 sq.ft. of pasture alongside the road way in the flow line right of way and approximately 700 sq.ft. of lease road. The saturated soil was scraped up with a backhoe and shovels and stockpiled on-site. The spill area will be cleaned up in accordance to the NMOCD and BLM remediation guidelines.

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

Signature: <i>Tony Savoie</i>	OIL CONSERVATION DIVISION	
Printed Name: Tony Savoie	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Waste Management and Remediation Specialist	Approval Date: <i>5/12/14</i>	Expiration Date: <i>NA</i>
E-mail Address: <i>tasavoie@basspet.com</i>	Conditions of Approval: Remediation per OCD Rule & Guidelines, & like approval by BLM. SUBMIT REMEDIATION PROPOSAL NO LATER THAN:	Attached <input type="checkbox"/>
Date: 5/8/14 Phone: 432-556-8730	<i>6/12/14</i>	<i>2RP-2298</i>

* Attach Additional Sheets If Necessary



Photograph of the initial release at the PLU #276 Flow Line release site.



Photograph of excavation activities at the PLU #276 Flow Line release site.



Photograph of excavation activities at the PLU #276 Flow Line release site.



Photograph of excavation activities at the PLU #276 Flow Line release site.



Photograph of the PLU #276 Flow Line release site after remediation activities.



Photograph of the PLU #276 Flow Line release site after remediation activities.



September 16, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #276 FLOW LINE

Enclosed are the results of analyses for samples received by the laboratory on 09/15/14 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 09/15/2014
 Reported: 09/16/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/11/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PA #1 @ 6" (H402859-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/15/2014	ND	155	77.6	200	2.07	
DRO >C10-C28	19.0	10.0	09/15/2014	ND	212	106	200	10.2	
EXT DRO >C28-C35	<10.0	10.0	09/15/2014	ND					

Surrogate: 1-Chlorooctane 107 % 65.2-140
 Surrogate: 1-Chlorooctadecane 130 % 63.6-154

Sample ID: PA #1 @ 2' (H402859-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	09/15/2014	ND	416	104	400	8.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 09/15/2014
 Reported: 09/16/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/11/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PA #2 @ 6" (H402859-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5120	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/15/2014	ND	155	77.6	200	2.07	
DRO >C10-C28	<10.0	10.0	09/15/2014	ND	212	106	200	10.2	
EXT DRO >C28-C35	<10.0	10.0	09/15/2014	ND					
<i>Surrogate: 1-Chlorooctane</i>	78.4 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>	88.8 %	63.6-154							

Sample ID: PA #2 @ 2' (H402859-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/15/2014	ND	416	104	400	8.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 09/15/2014
 Reported: 09/16/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/11/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N. DITCH #1 @ SURFACE (H402859-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/15/2014	ND	155	77.6	200	2.07	
DRO >C10-C28	104	10.0	09/15/2014	ND	212	106	200	10.2	
EXT DRO >C28-C35	29.7	10.0	09/15/2014	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>97.0 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>120 %</i>	<i>63.6-154</i>							

Sample ID: N. DITCH #1 @ 2' (H402859-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/15/2014	ND	416	104	400	8.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	09/15/2014	Sampling Date:	09/11/2014
Reported:	09/16/2014	Sampling Type:	Soil
Project Name:	PLU #276 FLOW LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: N. DITCH #2 @ SURFACE (H402859-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/15/2014	ND	416	104	400	8.00		

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	09/15/2014	ND	155	77.6	200	2.07		
DRO >C10-C28	<10.0	10.0	09/15/2014	ND	212	106	200	10.2		
EXT DRO >C28-C35	<10.0	10.0	09/15/2014	ND						

<i>Surrogate: 1-Chlorooctane</i>	<i>94.6 %</i>	<i>65.2-140</i>
<i>Surrogate: 1-Chlorooctadecane</i>	<i>108 %</i>	<i>63.6-154</i>

Sample ID: N. DITCH #2 @ 2' (H402859-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/15/2014	ND	416	104	400	8.00		

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	09/15/2014	Sampling Date:	09/11/2014
Reported:	09/16/2014	Sampling Type:	Soil
Project Name:	PLU #276 FLOW LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: N. DITCH #3 @ SURFACE (H402859-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/15/2014	ND	155	77.6	200	2.07	
DRO >C10-C28	648	10.0	09/15/2014	ND	212	106	200	10.2	
EXT DRO >C28-C35	198	10.0	09/15/2014	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>92.4 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>119 %</i>	<i>63.6-154</i>							

Sample ID: N. DITCH #3 @ 2' (H402859-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/15/2014	ND	416	104	400	8.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	09/15/2014	Sampling Date:	09/11/2014
Reported:	09/16/2014	Sampling Type:	Soil
Project Name:	PLU #276 FLOW LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: N. DITCH #4 @ SURFACE (H402859-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	09/15/2014	ND	416	104	400	8.00		
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	09/16/2014	ND	155	77.6	200	2.07		
DRO >C10-C28	<10.0	10.0	09/16/2014	ND	212	106	200	10.2		
EXT DRO >C28-C35	<10.0	10.0	09/16/2014	ND						
<i>Surrogate: 1-Chlorooctane</i>	<i>73.4 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>78.9 %</i>	<i>63.6-154</i>								

Sample ID: N. DITCH #4 @ 2' (H402859-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	09/15/2014	ND	416	104	400	8.00		

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 09/15/2014
 Reported: 09/16/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/11/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S. DITCH #1 @ SURFACE (H402859-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/15/2014	ND	155	77.6	200	2.07	
DRO >C10-C28	<10.0	10.0	09/15/2014	ND	212	106	200	10.2	
EXT DRO >C28-C35	<10.0	10.0	09/15/2014	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>103 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>119 %</i>	<i>63.6-154</i>							

Sample ID: S. DITCH #1 @ 2' (H402859-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/15/2014	ND	416	104	400	8.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	09/15/2014	Sampling Date:	09/11/2014
Reported:	09/16/2014	Sampling Type:	Soil
Project Name:	PLU #276 FLOW LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: S. DITCH #2 @ SURFACE (H402859-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/15/2014	ND	416	104	400	8.00		
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	09/16/2014	ND	155	77.6	200	2.07		
DRO >C10-C28	<10.0	10.0	09/16/2014	ND	212	106	200	10.2		
EXT DRO >C28-C35	<10.0	10.0	09/16/2014	ND						
<i>Surrogate: 1-Chlorooctane</i>	<i>95.8 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>117 %</i>	<i>63.6-154</i>								

Sample ID: S. DITCH #2 @ 2' (H402859-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/15/2014	ND	416	104	400	8.00		

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 09/15/2014
 Reported: 09/16/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/11/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: ROAD #1 @ SURFACE (H402859-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4320	16.0	09/15/2014	ND	416	104	400	8.00		
TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	09/16/2014	ND	155	77.6	200	2.07		
DRO >C10-C28	2040	50.0	09/16/2014	ND	212	106	200	10.2		
EXT DRO >C28-C35	548	50.0	09/16/2014	ND						
<i>Surrogate: 1-Chlorooctane</i>		<i>93.6 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>166 %</i>	<i>63.6-154</i>							

Sample ID: ROAD # 1 @ 2' (H402859-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	09/15/2014	ND	416	104	400	8.00		

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 whatsoever 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.



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.
- 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



Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC Project Manager: Joel Lowry Address: P. O. Box 301 City: Lovington Phone #: (575)396-2378 Project #: Project Name: PLU # 2796 Flow Line Project Location: Eddy Co., NM Sampler Name: Joel Lowry		P. O. #: Company: BOPCO, LP Attn: Tony Savoie Address: 522 W. Marland City: Carlsbad State: NIM Zip: 88220 Phone #: (432)556-8730 Fax #:		BILL TO		ANALYSIS REQUEST							
FOR LAB USE ONLY Lab I.D. Sample I.D.		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		MATRIX PRESERV SAMPLING		DATE TIME		Chloride TPH (8015M) BTEX (8021B) HOLD FOR TPH		Rush			
PA #1 @ 6" PA #1 @ 2' PA #2 @ 6" PA #2 @ 2' N. Ditch #1 @ Surface N. Ditch #1 @ 2' N. Ditch #2 @ Surface N. Ditch #2 @ 2' N. Ditch #3 @ Surface N. Ditch #3 @ 2'		1 2 3 4 5 6 7 8 9 10		1 1 1 1 1 1 1 1 1 1		9/11/14 9/11/14 9/11/14 9/11/14 9/11/14 9/11/14 9/11/14 9/11/14 9/11/14		1100 1105 1110 1115 1120 1125 1130 1135 1140 1145		X X X X X X X X X X		X X X X X X X X X X	
<p>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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived in writing and received by Cardinal within 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</p>													
Relinquished By: [Signature] Date: 9/17/14 Time: 4:00		Received By: [Signature] Date: 9-15-14 Time: 8:30		Sample Condition Cool <input type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: [Signature]		REMARKS: HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:			
Relinquished By: [Signature]		Received By: [Signature]		Sample Condition Cool <input type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: [Signature]		REMARKS: HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:			

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

#54



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC
 Project Manager: Joel Lowry
 Address: P. O. Box 301
 City: Lovington State: NM Zip: 88260
 Phone #: (575)396-2378 Fax #: (575)396-1429
 Project #: Project Owner:
 Project Name: PLU #276 Flow Line
 Project Location: Eddy Co., NM
 Sampler Name: *SOGL LOWRY*
 P.O. #: Company: BOPCO, LP
 Attn: Tony Savoie
 Address: 522 W. Marland
 City: Carlsbad
 State: NM Zip: 88220
 Phone #: (432)556-8730
 Fax #:

Lab I.D.	Sample I.D.	FOR LAB USE ONLY	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)	HOLD FOR TPH	ANALYSIS REQUEST	
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :								ACID/BASE:
11	N. Ditch #4 @ Surface			1							9/11/14	1150						
12	N. Ditch #4 @ 2'			1							9/11/14	1155						
13	S. Ditch #1 @ Surface			1							9/11/14	1240						
14	S. Ditch #1 @ 2'			1							9/11/14	1245						
15	S. Ditch #2 @ Surface			1							9/11/14	1250						
16	S. Ditch #2 @ 2'			1							9/11/14	1255						
17	Road #1 @ Surface			1							9/11/14	1300						
18	Road #1 @ 2'			1							9/11/14	1305						

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising under this contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *Joel Lowry* Date: *9/11/14* Time: *9:00*
 Received By: *Daley Spahr*
 Relinquished By: *Daley Spahr* Date: *9-15-14* Time: *8:30*
 Received By: *Spede Henderson*
 Delivered By: (Circle One) UPS Bus Other: *-5.86*
 Sample Condition: Cool Intact
 Yes No
 CHECKED BY: (Initials) *JS*
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS: HOLD FOR TPH
 Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com



October 07, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #276 FLOW LINE

Enclosed are the results of analyses for samples received by the laboratory on 10/01/14 15:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 10/01/2014
 Reported: 10/07/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/30/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Amanda Ponce

Sample ID: NSW #1 (H402995-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: SSW #1 (H402995-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: ESW #1 (H402995-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: WSW #1 (H402995-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 10/01/2014
 Reported: 10/07/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/30/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Amanda Ponce

Sample ID: FP SSW (H402995-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: ROAD ESW (H402995-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: ROAD WSW (H402995-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

Sample ID: FP #11 (H402995-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/02/2014	ND	416	104	400	0.00	

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 10/01/2014
 Reported: 10/07/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/30/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Amanda Ponce

Sample ID: FP #12 (H402995-09)

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	10/03/2014	ND	1.90	95.2	2.00	2.17	
Toluene*	<0.050	0.050	10/03/2014	ND	1.83	91.4	2.00	0.748	
Ethylbenzene*	<0.050	0.050	10/03/2014	ND	1.71	85.4	2.00	2.04	
Total Xylenes*	<0.150	0.150	10/03/2014	ND	5.04	84.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/03/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

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	10/06/2014	ND	181	90.5	200	3.56	
DRO >C10-C28	<10.0	10.0	10/06/2014	ND	187	93.4	200	6.02	
EXT DRO >C28-C35	<10.0	10.0	10/06/2014	ND					

Surrogate: 1-Chlorooctane 93.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.0 % 52.1-176

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 10/01/2014
 Reported: 10/07/2014
 Project Name: PLU #276 FLOW LINE
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 09/30/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Amanda Ponce

Sample ID: FLOOR #1 @ 2' (H402995-10)

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	10/03/2014	ND	1.90	95.2	2.00	2.17	
Toluene*	<0.050	0.050	10/03/2014	ND	1.83	91.4	2.00	0.748	
Ethylbenzene*	<0.050	0.050	10/03/2014	ND	1.71	85.4	2.00	2.04	
Total Xylenes*	<0.150	0.150	10/03/2014	ND	5.04	84.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/03/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/02/2014	ND	416	104	400	0.00	

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	10/06/2014	ND	181	90.5	200	3.56	
DRO >C10-C28	<10.0	10.0	10/06/2014	ND	187	93.4	200	6.02	
EXT DRO >C28-C35	<10.0	10.0	10/06/2014	ND					

Surrogate: 1-Chlorooctane 92.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.7 % 52.1-176

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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



Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: **Joel Lowry**

Project Manager: **Joel Lowry**

Address: **P. O. Box 301**

City: **Lovington** State: **NM** Zip: **88260**

Phone #: **(575)396-2378** Fax #: **(575)396-1429**

Project #: _____ Project Owner: _____

Project Name: **PLU #276 Flow Line**

Project Location: **Eddy Co., NM**

Sampler Name: **Soet Court**

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			ACID/BASE:	ICE / COOL	OTHER :	Chloride	TPH (8015M)	BTEX (8021B)
HNO2995	NSW #1	g	1	X						9/30/14	1300	X					
	SSW #1	g	1	X						9/30/14	1305	X					
	ESW #1	g	1	X						9/30/14	1310	X					
	WSW #1	g	1	X						9/30/14	1315	X					
	FP SSW	g	1	X						9/30/14	1320	X					
	Road ESW	g	1	X						9/30/14	1325	X					
	Road WSW	g	1	X						9/30/14	1330	X					
	FP #11	g	1	X						9/30/14	1335	X					
	FP #12	g	1	X						9/30/14	1340	X					
	Floor #1 @ 2'	g	1	X						9/30/14	1345	X					

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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *Joel Lowry* Date: *10/1/14* Time: *2:20pm* Received By: *Jane Austin*

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

Delivered By: (Circle One) *James Austin* Sample Condition: Cool Intact

Sampler - UPS - Bus - Other: *1.6 C#54* Checked By: (Initials) *JA*

Phone Result: Yes No Add'l Phone #: _____

Fax Result: Yes No Add'l Fax #: _____

REMARKS: **HOLD FOR TPH**

Please email results to pm@basinrv.com, TASavoie@BassPet.com & SJWalters@BassPet.com



October 09, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #276 FLOW LINE

Enclosed are the results of analyses for samples received by the laboratory on 10/03/14 13:14.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	10/03/2014	Sampling Date:	09/30/2014
Reported:	10/09/2014	Sampling Type:	Soil
Project Name:	PLU #276 FLOW LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: ROAD FLOOR @ 1' (H403036-01)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2014	ND	1.89	94.3	2.00	1.65	
Toluene*	<0.050	0.050	10/07/2014	ND	1.81	90.3	2.00	2.65	
Ethylbenzene*	<0.050	0.050	10/07/2014	ND	1.71	85.4	2.00	2.12	
Total Xylenes*	<0.150	0.150	10/07/2014	ND	5.05	84.2	6.00	1.70	
Total BTEX	<0.300	0.300	10/07/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/06/2014	ND	400	100	400	0.00	

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	10/06/2014	ND	188	93.8	200	2.42	
DRO >C10-C28	<10.0	10.0	10/06/2014	ND	193	96.5	200	3.50	
EXT DRO >C28-C35	<10.0	10.0	10/06/2014	ND					

Surrogate: 1-Chlorooctane 110 % 47.2-157
Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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 whatsoever 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.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
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



Celey D. Keene, Lab Director/Quality Manager

