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Ê3 **Effective Solutions**

REMEDIATION SUMMARY

AND SITE CLOSURE REQUEST

BOPCO, LP

POKER LAKE UNIT #430H FRAC HOSE RELEASE Eddy County, New Mexico Unit Letter "H" (SE/NE), Section 22, Township 24 South, Range 30 East Latitude 32.20524° North, Longitude 103.86047° West NMOCD Reference #2RP-2466

Prepared For:

NM OIL CONSERVATION ARTESIA DISTRICT

JAN 06 2015

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

RECEIVED

Prepared By: Basin Environmental Service Technologies, LLC 3100 Plains Highway Lovington, New Mexico 88260

December 2014

Joel W. Project Manager

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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 the Poker Lake Unit #430H Frac Hose Release (PLU #430H Frac Hose). The legal description of the release site is Unit Letter "H" (SE/NE), Section 22, Township 24 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.20524° North latitude and 103.86047° 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 August 20, 2014, a release occurred on an eight-inch (8") lay flat hose transferring water from a BOPCO salt water disposal line to a frac on the PLU #430H well. Failure of a Victaulic clamp that holds the lay-flat hose together resulted in the release of approximately four hundred barrels (400 bbls) of produced water. The New Mexico Oil Conservation Division (NMOCD)-Artesia District Office was notified of the release immediately upon discovery. The "Release Notification and Corrective Action" (Form C-141) indicated approximately one thousand, two hundred (1,200 ft²) of caliche road and thirty-eight thousand (38,000 ft²) pasture was affected by the release. During initial response activities, the transfer pumps were shut down, and the hose was pinched off to stop the water flow, allowing the clamp and a section of hose to be 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 22, Township 24 South, Range 30 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately four hundred feet (400') 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 #430 Frac Hose 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 August 28, 2014, Basin conducted an initial investigation at the release site. During the investigation, six (6) soil samples (RP-1 @ 6", SP-1 @ 6", SP-2 @ 6", SP-3 @ 6", SP-4 @ 6" and SP-5 @ 18") were collected and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 1,280 ppm for soil sample SP-5 @ 18" to 19,400 ppm for soil sample SP-4 @ 6". Soil sample RP-1 @ 6" was also analyzed for concentrations of BTEX and TPH which were determined to be less than the appropriate laboratory method detection limit (MDL). 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.

On September 15, 2014, Basin began excavation activities at the release site. The floor and sidewalls of the excavation were advanced until field tests suggested concentrations of BTEX, TPH and chloride were less than NMOCD regulatory standards. Excavated soil was stockpiled onsite, pending final disposition.

On September 17, 2014, eleven (11) confirmation soil samples (Floor A #1, Floor A #2, Floor A #3, Floor A #4, Floor A #5, Floor A #6, Floor B #1, WSW A, ESW A, ESW B and ESW C) were collected from the excavated area 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 WSW A and ESW A to 1,040 ppm for soil sample ESW C. The excavation was advanced in the area represented by soil sample ESW C. Soil sample Floor A #3 was also analyzed for concentrations of BTEX and TPH, which were determined to be less than the appropriate laboratory MDL.

On September 26, 2014, five (5) confirmation soil samples (Floor B #2, Floor B #3, Floor B #4, Floor B #5 and Floor B #6) were collected from the floor of the excavation and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 64.0 ppm for soil sample Floor B #4 to 432 ppm for soil sample Floor B #5. Excavation activities continued toward the south.

On October 3, 2014, seven (7) confirmation soil samples (West Wall B, East Wall B, East Wall C, Floor C #1, Floor C #2, Floor C #3 and Floor C #4) were collected from the excavated area and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32.0 ppm for soil samples West Wall B and East Wall C to 704 ppm for soil sample Floor C #3. Soil sample Floor C #4 was also analyzed for concentrations of BTEX and TPH, which were determined to be less than the appropriate laboratory MDL. Excavation activities continued toward the south.

On October 8, 2014, five (5) confirmation soil samples (C. West Wall, D. East Wall, D. West Wall, Floor D #2 and Floor D #3) were collected from the excavated area 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 D. East Wall and D.

West Wall to 752 ppm for soil sample Floor D #2. Soil sample Floor D #3 was also analyzed for concentrations of BTEX and TPH, which were determined to be less than the appropriate laboratory MDL. Excavation activities continued toward the south.

On October 14, 2014, six (6) confirmation soil samples (ESW E, WSW E, Floor E #1, Floor E #2, Floor E #3 and Floor D #1) were collected from the excavated area 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 sample WSW E to 336 ppm for soil sample Floor E #3. Soil sample Floor E #2 was also analyzed for concentrations of BTEX and TPH which were determined to be less than the appropriate laboratory MDL. Excavation activities continued toward the south.

On October 20, 2014, eight (8) confirmation soil samples (West Wall F, West Wall G, East Wall G, Floor F #1, Floor F #2, Floor F #3, Floor G #1 and Floor G #2) were collected from the excavated area 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 West Wall G and Floor F #1 to 1,040 ppm for soil sample Floor G #1. Soil sample Floor F #2 was also analyzed for concentrations of BTEX and TPH, which were determined to be less than the laboratory MDL and 11.2 ppm, respectively. Excavation activities continued toward the south.

On October 22, 2014, eighteen (18) confirmation soil samples (East Wall Cb, South Wall #1, South Wall #2, East Wall F, East Wall H, West Wall H, East Wall I, West Wall I, East Wall J, West Wall J, East Wall K, Floor H #1, Floor H #2, Floor I #1, Floor I #2, Floor J #1, Floor J #2 and Floor K #1) were collected from the excavated area 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 East Wall Cb, South Wall #2, East Wall F, East Wall H, West Wall I, West Wall I, West Wall I, East Wall I, West Wall J, East Wall K, and Floor I #1 to 80.0 ppm for soil sample Floor H #2. Excavation activities resumed in the affected pipeline right-of-way in the northern portion of the release site.

On November 10, 2014, five (5) confirmation soil samples (North SW #1, North SW #2, West SW #1, Floor #1 and Floor #2) were collected from the excavated area and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32.0 ppm for soil samples West SW #1 and Floor #1 to 560 ppm for soil sample Floor #2. Soil sample Floor #2 was also 'analyzed for concentrations of BTEX and TPH which were determined to be less than the appropriate laboratory MDL.

On November 12, 2014, three (3) confirmation soil samples (North SW #3, Floor #3 and Floor #4) were collected from the excavated area and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 64.0 ppm for soil sample Floor #4 to 160 ppm for soil sample North SW #3. Soil sample Floor #4 was also analyzed for concentrations of BTEX and TPH which were determined to be less than the appropriate laboratory MDL.

On November 13, 2014, ten (10) confirmation soil samples (East SW, North SW #4, North SW #5, North SW #6, Floor #5, Floor #6, West Road, East Road, North Road 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 ranged from 32.0 ppm for soil sample North Road to 528 ppm for soil sample Floor #5. Soil sample Floor #6 was also analyzed for concentrations of BTEX and TPH which were determined to be less than the appropriate laboratory MDL.

In addition, one (1) soil sample (South SW In-Situ) was collected to help characterize impacted soil left in-situ adjacent to the active oil and natural gas pipelines south of the affected caliche road. Soil sample South SW In-Situ was submitted to the laboratory for analysis of chloride concentrations, which were determined to be 5,920 ppm.

Between September 16, and November 19, 2014, approximately eight thousand, twenty cubic yards (8,020 yd³) of impacted material was transported to Lea Land, Inc. (NMOCD Permit #WM-01-035) for disposal. The final dimensions of the excavation were approximately fifty (50) to two hundred and fifty feet (250') in width, four hundred and fifty feet (450') in length and thirty inches (30") in depth. Upon receiving laboratory analytical data from confirmation soil samples, the excavated area was backfilled with locally purchased, non-impacted soil. Following backfilling, areas affected by the remediation activities were compacted and contoured to match the surrounding topography.

The site will be reseeded with a BLM-approved seed mixture at a time more conducive to germination.

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 PLU #430 Frac Hose excavation 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, with the exception of soil samples Floor G #1 and South SW (In-Situ). 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 #430 Frac Hose release site.

6.0 LIMITATIONS

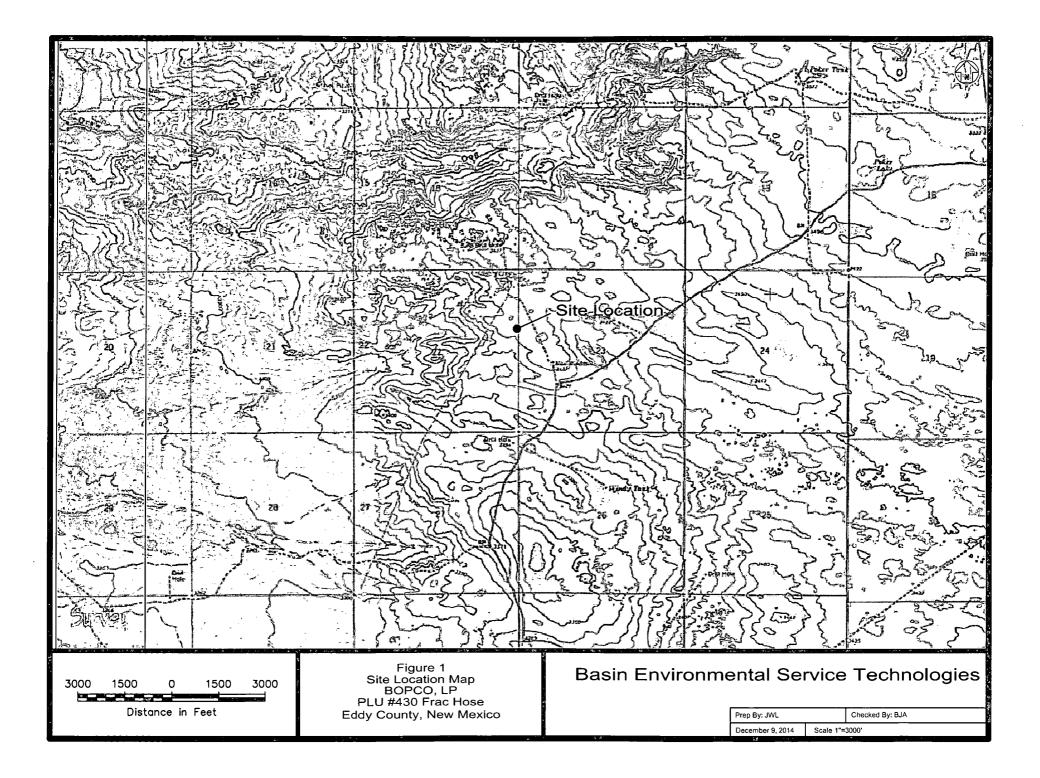
Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary and Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by 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.

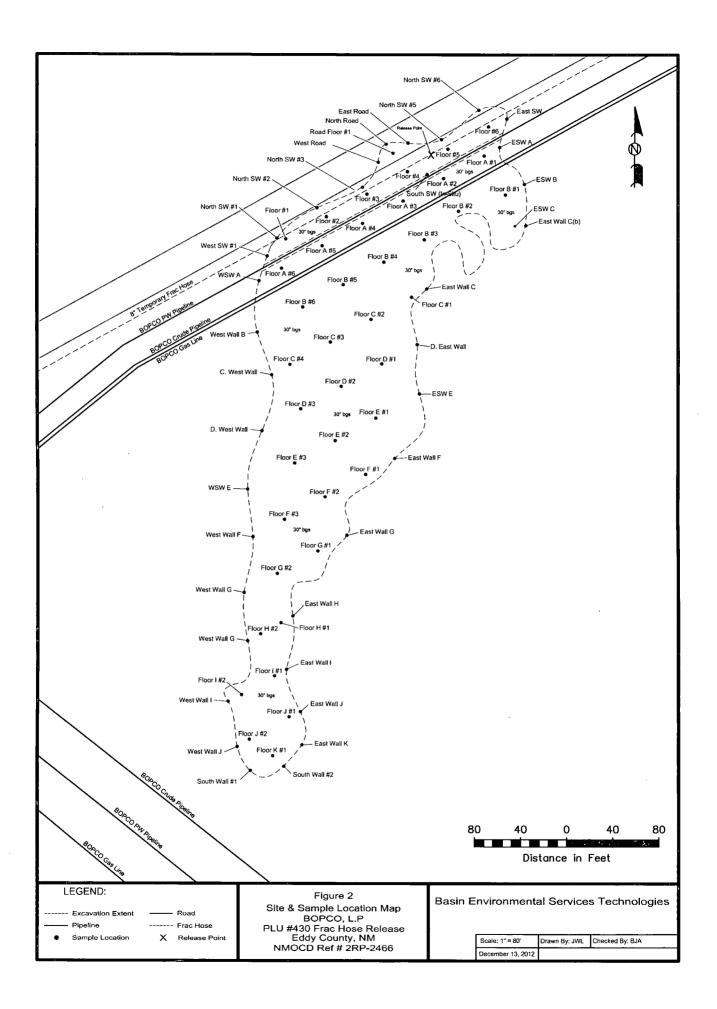
This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

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, New Mexico 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

FIGURES





TABLES

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

BOPCO, LP PLU #430H FRAC HOSE RELEASE EDDY COUNTY, NEW MEXICO NMOCD REFERENCE #: 2RP-2466

96.0 96.0 96.0 96.0 96.0 96.0 16.0 <16.0 16.0 1040 384 <16.0 <16.0 <16.0 64.0 17,200 19,200 14,000 19,400 1,280 112 <16.0 368 32.0 32.0 4500 CI-B CHLORIDE (mg/Kg) 64.0 <16.0 288 272 336 48.0 <16.0</pre>

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16.0 160 80.0 64.0 32.0 672 32.0 32.0 160 160 704 336 336 240 80.0 80.0 176 176 128 32.0 224 224 5,920 224 416 64.0 432 176 560 32.0 560 560 T0TAL TPH Cs-Cs (mg/Kg) <20.0 <10.0 <10.0 10.0 <10.0 10.0 <10.0 <10.0 11.2 8 HOD: 8015M DRO 0RO C₁₂°C₂₈°C₂₈ (mg/Kg) (mg/Kg) (<20.0 <20.0 <10.0 <10.0 <10.0 < <10.0 <10.0 <10.0 <10.0 11.2 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 METH GRO C₆-C₁₂ (mg/Kg) (<20.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 10.0 <10.0 <0.300 <0.300 <0.300 <0.300 TOTAL BTEX (mg/Kg) <0.300 <0.300 <0.300 <0.300 0.300 <0.150 <0.150 <0.150 <0.150 <0.150 <0.150 <0.150 <0.150 EPA SW 846-5 ETHYL-BENZENE (mg/Kg) <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 0.050 <0.050 0.050 TOLUENE (mg/Kg) <0.050 METHOD: E <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 0:050 BENZENE (mg/Kg) <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 ¢0.050 l₽ 9/17/2014 In-Shu 9/17/2014 Excanaled 2032014 In-Silu 0332014 In-Silu 032014 In-Silu 0332014 In-Silu 0332014 In-Silu 0332014 In-Silu 0332014 In-Silu 0332014 In-Silu In-Situ In-Situ In-Situ In-Situ 8/28/2014 Excavaled 8/28/2014 Excavaled 8/28/2014 Excavaled 8/28/2014 Excavaled 8/28/2014 Excavaled 8/28/2014 Excavaled In-Situ In-Situ In-Situ In-Situ In-Situ n Situ n Situ n Situ n Situ n Situ n Situ In-Situ In-Situ In-Situ In-Situ In-Situ In-Silu In-Silu In-Silu In-Silu In-Silu In-Silu In-Silu SOIL In-Situ In-Situ In-Situ 9/26/2014 9/26/2014 9/26/2014 9/26/2014 9/26/2014 10/8/2014 10/8/2014 10/8/2014 10/8/2014 10/8/2014 10/14/2014 10/14/2014 10/14/2014 10/14/2014 10/14/2014 10/14/2014 0/20/2014 10/20/2014 10/20/2014 10/20/2014 10/20/2014 10/20/2014 0722014 07220014 07200000000000000 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/13/2014 1/10/2014 SAMPLE 24* 24* 30* 30* 30* SAMPLE DEPTH (BGS) 30° 30° 30° 30° 24° 24° 24° 24° 24° 30. 30. 30. 24* 24* 30* 24" 24" 30" 30" 24" 24" 24" 24" 24" 24" 30" 30" 24" 24" 24" 24" 24" 24° 24° 30° 30.24 SAMPLE LOCATION East SW North SW #4 North SW #5 North SW #6 Floor #5 Floor #6 East Road East Road Read Floor #1 Road Floor #1 South SW (In Stu) NMOCD Criteria - = Not analyzed. East Wall Cb South Wall #7 South Wall #7 South Wall #7 East Wall H West Wall H West Wall H West Wall J East Wall J East Wall J East Wall J East Wall J Floor H #7 Floor H #7 Floor J #7 Floor J #7 Floor J #7 Floor J #7 C. West Wali D. East Wall D. West Wall Floor D #2 Floor D #3 North SW #1 North SW #2 West SW #1 Floor #1 Floor #2 North SW #3 Floor #3 Floor #4 /est Wall B ast Wall B ast Wall C Floor C #1 Floor C #3 Floor C #4 West Wall F West Wall G East Wall G Floor F #1 Floor F #2 Floor G #1 Floor G #2 RP-1@6" SP-2@6" SP-2@6" SP-2@6" SP-5@18" SP-5@18" ESW E WSW E Floor E #1 Floor E #3 Floor E #3 Floor B #2 Floor B #3 Floor B #4 Floor B #5 Floor A #1 Floor A #1 Floor A #3 Floor A #5 Floor A #5 Floor A #5 Floor B #1 ESW A ESW A ESW A

APPENDICES

Appendix A

Release Notification and Corrective Action (Form C-141)

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District I 1625 N. French Dr., Hobbs, NM 88240 District II	State of New Mexico Energy Minerals and Natural Resources	Form C-141 NM OIL CONSERVATION of August 8, 2011
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	Subart E Copy Stappropriate District Office in SEP 02 2014
and the second		

Release Notification and Corrective Action RECEIVED

<u>NHB1424633443</u>	OPERATOR	Initial Report	Final Report
Name of Company: BOPCO, L.P. 200737	Contact: Tony Savoie		
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329	· · · · · · · · · · · · · · · · · · ·	
Facility Name: PLU-430H The release point was 2,984 ft. southwest of the well pad. The well is in section 14 the spill was in section 22	Facility Type: Exploration and	Production	

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Surface Owner: Federal		Mineral Owner: Federal	API No. 30-015-42374	
	•			

LOCATION OF RELEASEUnit LetterSectionTownshipRangeFeet from theNorth/South LineFeet from theEast/West LineCountyH2224S30EFeet from theNorth/South LineFeet from theEast/West LineEddy

Latitude N 32.20524 Longitude W 103.86047

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 400 bbls	Volume Recovered: None				
Source of Release: 8" lay flat frac hose	Date and Hour of Occurrence Date and Hour of Discovery 8/2					
	8/20/14 between 3:30 a.m. and	about 6:13 a.m.				
	5:30 a.m.					
Was Immediate Notice Given?	If YES, To Whom?					
Yes Do Not Required	Mike Bratcher NMOCD and Jim Ar	nos BLM				
By Whom? Tony Savoie	Date and Hour: 8/20/14 at 7:07 a.m.					
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.				
🗋 Yes 🖾 No						
If a Watercourse was Impacted, Describe Fully.*						
Describe Cause of Problem and Remedial Action Taken.*						
Produced water was being transferred from a BOPCO SWD line to a frac	at the PLU-430H well. The Victaulic c	lamp that holds the lay-flat hose together				
failed due to a combination of loosened bolts on the clamp and a possible						
were shut down and the hose was pinched off to stop the water flow. The						
Describe Area Affected and Cleanup Action Taken.*		· · · · · · · · · · · · · · · · · · ·				
The spill impacted approximately 1200 sq.ft. of caliche road and approxir	nately 38,000 sq.ft. of pasture. Basin E	nv. Collected soil samples from several				
points along the flow path to determine the horizontal extent. The hand au	ger used in the sampling event could n	ot penetrate the caliche that ranged from				
6" to 18' in depth. The remediation will begin as soon as the BLM clears	the Arch survey.					
The spill will be cleaned up in accordance to the NMOCD and BLM reme	diation guidelines.					
		·				
I hereby certify that the information given above is true and complete to the	ne best of my knowledge and understan	id that pursuant to NMOCD rules and				
regulations all operators are required to report and/or file certain release n	otifications and perform corrective acti	ons for releases which may endanger				
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report" de	oes not relieve the operator of liability				
should their operations have failed to adequately investigate and remediate	e contamination that pose a threat to gr	ound water, surface water, human health				
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of responsi	bility for compliance with any other				
federal, state, or local laws and/or regulations.						
·	OIL CONSERV	ATION DIVISION				
2.2						
Signature: 1 an Plume						
	Approved by Environmental Specialist	the land				
Printed Name: Tony Savoie	- · ·	Unico				
	Alalul	Illa				
Title: Waste Management and Remediation Specialist	Approval Date: 9314	Expiration Date: NIH				
E-mail Address: tasavoie@basspet.com	Conditions of Approval:	Attached				
	Remediation per OCD Rule &					
Date: 9/2/14 Phone: 432-556-8730	uidelines. SUBMIT REMEDIATI					
Attach Additional Sheets If Necessary	PRODOCAL NEW EDIATI	ON 2RP-24666				
	PROPOSAL NO LATER THAN:	Lnr- Laur				
-	$ V $ ∂U					

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 0 6 2015 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company: BOPCO, L.P.	Contact: Tony Savoie		
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329		
Facility Name: PLU-430H The release point was 2,984 ft. southwest of the well pad. The well is in section 14 the spill was in section 22 (2RP-2466)	Facility Type: Exploration and I	Production	

Surface Owner: Federal

Mineral Owner: Federal

API No. 30-015-42374

LOCATION OF RELEASE

Unit Letter H	Section 22	Township 24S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude N 32.20524 Longitude W 103.86047

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 400 bbls	Volume Re	covered: None
Source of Release: 8" lay flat frac hose	Date and Hour of Occurrence		our of Discovery 8/20/14 at
	8/20/14 between 3:30 a.m. and	about 6:13	a.m.
	5:30 a.m.		
Was Immediate Notice Given?	If YES, To Whom?		
Yes No Not Required	Mike Bratcher NMOCD and Jim A		
By Whom? Tony Savoie	Date and Hour: 8/20/14 at 7:07 a.m		
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.	
🗌 Yes 🖾 No			
If a Watercourse was Impacted, Describe Fully.*			
Describe Cause of Problem and Remedial Action Taken.*			
Produced water was being transferred from a BOPCO SWD line to a frac			
failed due to a combination of loosened bolts on the clamp and a possible			
were shut down and the hose was pinched off to stop the water flow. The	clamp was replaced along with a new	section of hos	se.
Describe Area Affected and Cleanup Action Taken.*	·····	<u>_</u>	
The spill impacted approximately 1200 sq.ft. of caliche road and approxim	nately 38 000 sq ft of nasture Basin	Env. Collecter	t soil samples from several
points along the flow path to determine the horizontal extent. The hand au			
6" to 18' in depth.	······································	F	
The spill was cleaned up in accordance to the NMOCD and BLM remed	liation guidelines. Please reference t	he attached S	ite Closure Request Dated
December 2014 prepared by Basin Environmental.			
I hereby certify that the information given above is true and complete to the			
regulations all operators are required to report and/or file certain release n			
public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediat			
or the environment. In addition, NMOCD acceptance of a C-141 report d			
federal, state, or local laws and/or regulations.	bes not reneve the operator of respon	sionity for cor	inpliance with any other
	OIL CONSERV	VATIONI	DIVISION
\square	<u>OIL CONSER</u>		///////////////////////////////////////
Signature: (Ou Danne			
	Approved by Environmental Speciali	st:	
Printed Name: Tony Savoie			
Title: Waste Management and Remediation Specialist	Approval Date:	Expiration D	ate:
E-mail Address: tasavoie@basspet.com	Conditions of Approval:		· · · · · ·
	conditions of Approval.		Attached
Date: 1/6/15 Phone: 432-556-8730			

* Attach Additional Sheets If Necessary

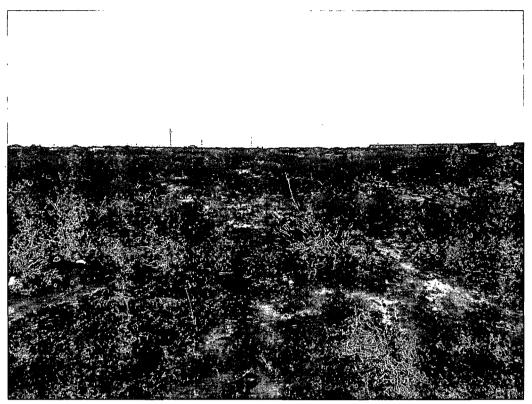
Appendix B Photographs



Photograph of the initial release at the PLU #430 Frac Hose Release Site.



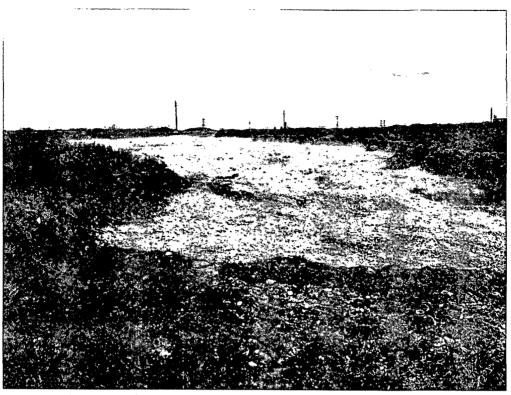
Photograph of the initial release at the PLU #430 Frac Hose Release Site.



Photograph of the initial release at the PLU #430 Frac Hose Release Site.



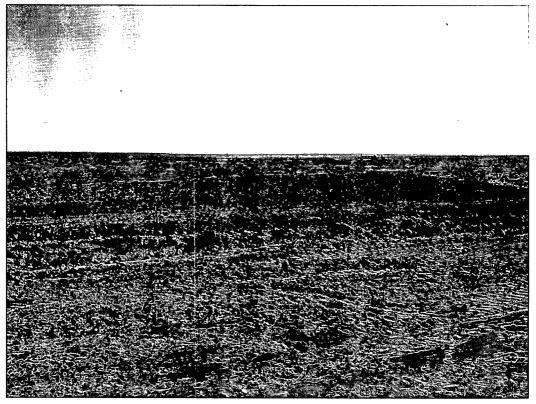
Photograph of the excavated area at the PLU #430 Frac Hose Release Site.



Photograph of the excavated area at the PLU #430 Frac Hose Release Site.



Photograph of the excavated area at the PLU #430 Frac Hose Release Site.



Photograph of the PLU #430 Frac Hose Release Site after remediation activities.



Photograph of the PLU #430 Frac Hose Release Site after remediation activities.

Appendix C

Laboratory Analytical Reports



September 08, 2014

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 FRAC SPILL

Enclosed are the results of analyses for samples received by the laboratory on 08/29/14 15:04.

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 accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited 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)

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/29/2014	Sampling Date:	08/28/2014
Reported:	09/08/2014	Sampling Type:	Soil
Project Name:	PLU #430 FRAC SPILL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: RP-1 @ 6" (H402682-01)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/04/2014	ND	1.93	96.5	2.00	4.03	
Toluene*	<0.050	0.050	09/04/2014	ND	1.74	86.9	2.00	4.69	
Ethylbenzene*	<0.050	0.050	09/04/2014	ND	1.87	93.4	2.00	6.04	
Total Xylenes*	<0.150	0.150	09/04/2014	ND	5.55	92.5	6.00	6.72	
Total BTEX	<0.300	0.300	09/04/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 102 % 89.4-126

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17200	16.0	09/04/2014	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<20.0	20.0	09/03/2014	ND	182	91.2	200	3.74	
DRO >C10-C28	<20.0	20.0	09/03/2014	ND	185	92.5	200	12.0	
EXT DRO >C28-C35	<20.0	20.0	09/03/2014	ND					
Surrogate: 1-Chlorooctane	101	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	120	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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Celez Di Keene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/29/2014	Sampling Date:	08/28/2014
Reported:	09/08/2014	Sampling Type:	Soil
Project Name:	PLU #430 FRAC SPILL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SP-1 @ 6" (H402682-02)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19200	16.0	09/04/2014	ND	416	104	400	3.92	

Sample ID: SP-2 @ 6" (H402682-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14200	16.0	09/04/2014	ND	416	104	400	3.92	

Sample ID: SP-3 @ 6" (H402682-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	09/04/2014	ND	416	104	400	3.92	

Sample ID: SP-4 @ 6" (H402682-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19400	16.0	09/04/2014	ND	416	104	400	3.92	

Sample ID: SP-5 @ 18" (H402682-06)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	09/04/2014	ND	416	104	400	3.92	

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Celleg Litrene

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 SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celez D. Kuna-

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Tech	nolog	jies,	, LLC	2					B	ILL TO						ANA	LYSI	S RE	QUE	ST		
Project Manager:	Joel Lowry							Р.(0. #:														
Address: P.O. I	Box 301							Co	mpai	ny:	BOP	CO, LP			[[[[[
City: Lovington	State: NM	Zip	: 8	826	0			Atl	tn:		Tony Sav	voie		ĺ	[[
Phone #: (575)	396-2378 Fax #: (575)	396-1	429					Ad	Idres	s:	522 W. I	Aarland]]]							
Project #:	Project Own	er:						Cit	ty:		Carlsba	d				Ŧ							
Project Name:	PLU #430 Frac Spill							Sta	ate:	NM	Zip:	88220	<u>a</u>	SM)	218	d L		1					'
Project Location:	Eddy Co., NM								one #		(432)55	5-8730	Chloride	TPH (8015M)	BTEX (8021B)	HOLD FOR TPH							
Sampler Name:	JOEL LOWRY							Fai	x #:		<u>,</u>		ਤਿ	H	۲ ۵	q							
FOR LAB USE ONLY		Т	Г	L	N	ATR	X		PRES	SERV	SAMPL	ING		14	BT	ΙĘ			}				
Lab I.D. H4D2682	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER :	ACID/BASE:	OTHER :	DATE	TIME						-					
	<u>RP-1 @ 6"</u>	g	1			x				$\langle $	8/28/14	1230	×	X	Y_	L	L	L	ļ	 			
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3	SP-2 @ 6"	g	1			×			,	<u>(</u>	8/28/14	1250	×	ļ	ļ				ļ	ļ			
3 4 5	SP-3 @ 6"	9	1			×				4_	8/28/14	1300	×	[[ļ			 	
5	SP-4 @ 6"	9	1			×				4_	8/28/14	1310	×			L		 	[
b_	SP-5 @ 18"	9	1			<u>× </u>			<u></u>	4_	8/28/14	1320	×.	[ļ	ļ	ļ		ļ			[]	
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analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within 30 days after completion of the applicable

service. In no event shall Cardinal be fable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by diert, as subsidiaries,

amatica of successors ansing our of treated to the periority	ance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated h	Alsons of Dukewise.
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	$ b 29 19 \land C'1$	Fax Result: 🛛 Yes 🗋 No 🛛 Add'l Fax #:
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	B/27/19 AID A MAILAD	
Valez Julh	Time: 3:04 Mar Lellon	Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com
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FORM-006	† Cardinal cannot accept verbal changes. Please f	ax written changes to 575-393-2476
Revision 1.0	aramar cannot accept verbar onangeor ricecet	
Revision 1.0	74 (1	



September 24, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 FRAC SPILL

Enclosed are the results of analyses for samples received by the laboratory on 09/22/14 9:07.

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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	09/22/2014	Sampling Date:	09/17/2014
Reported:	09/24/2014	Sampling Type:	Soil
Project Name:	PLU #430 FRAC SPILL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR A #1 (H402908-01)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: FLOOR A #2 (H402908-02)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: FLOOR A #3 (H402908-03)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2014	ND	1.75	87.5	2.00	9.30	
Toluene*	<0.050	0.050	09/22/2014	ND	1.65	82.6	2.00	8.36	
Ethylbenzene*	<0.050	0.050	09/22/2014	ND	1.56	78.1	2.00	8.07	
Total Xylenes*	<0.150	0.150	09/22/2014	ND	4.64	77.4	6.00	8.19	
Total BTEX	<0.300	0.300	09/22/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	100	89.4-12	6						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/22/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

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Celeg Di Kane

Celey D. Keene, Lab Director/Quality Manager



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

Received:	09/22/2014	Sampling Date:	09/17/2014
Reported:	09/24/2014	Sampling Type:	Soil
Project Name:	PLU #430 FRAC SPILL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR A #3 (H402908-03)

TPH 8015M	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/22/2014	ND	183	91.5	200	1.25	
DRO >C10-C28	<10.0	10.0	09/22/2014	ND	190	94.9	200	4.20	
EXT DRO >C28-C35	<10.0	10.0	09/22/2014	ND					
Surrogate: 1-Chlorooctane	80.6%	65.2-14	0						
Surrogate: 1-Chlorooctadecane	77.5 %	63.6-15	4						

Sample ID: FLOOR A #4 (H402908-04)

Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: FLOOR A #5 (H402908-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: FLOOR A #6 (H402908-06)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/22/2014	ND	416	104	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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Celleg Ditrene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	09/22/2014	Sampling Date:	09/17/2014
Reported:	09/24/2014	Sampling Type:	Soil
Project Name:	PLU #430 FRAC SPILL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR B #1 (H402908-07)

Chloride, SM4500Cl-B	Chloride, SM4500Cl-B mg/kg					Analyzed By: AP			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: WSW A (H402908-08)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: ESW A (H402908-09)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: ESW B (H402908-10)

Chloride, SM4500CI-B	ICI-B mg/kg			d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	09/22/2014	ND	416	104	400	3.92	

Sample ID: ESW C (H402908-11)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	09/22/2014	ND	416	104	400	3.92	

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Celeg D. Kene-

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 SM4500CI-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

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Celeg 2: Kana

Celey D. Keene, Lab Director/Quality Manager

RDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name: Basin Environmental Service Technologies, LLC								BILL TO						ANALYSIS REQUEST												
Project Manager:	Joel Lowry								P.C), #:	:															
Address: P.O.	P.O. Box 301								Coi	mpa	any:	:	BOP	00, LP												
City: Lovington	State: NM	Zip	o: 8	8826	50				Attı	n:			Tony Sav	oie												
Phone #: (575)	396-2378 Fax #: (575)3	96-1	429						Add	dres	ss:		522 W. M													
Project #:	Project Owne	r:			+				City	v:			Carlsba	d]			Т]]			
Project Name:	PLU #430H Frac Spill								Sta	te:	NI	M	Zip:	e	2W)	(8021B)	НЧТ									
Project Location:	Eddy Co., NM									one			(432)556	-8730	Chloride	rPH (8015M)	802	HOLD, FOR		1						
Sampler Name:	JOEZ loupe								Fax #:					- Ť	E H	втех	<u> </u>									
FOR LAB USE ONLY		Т	Г		į	MAT	RIX			PRE	ESE	RV.	SAMPLI	NG	1	12	ВТ	ē								
Lab I.D. H4D2908	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME												
]	Floor A #1	g	1			x					x		9/17/14	1100	x											
2	Floor A #2	g	1			x					x		9/17/14	1105	x					L						
3	Floor A #3	9	1			x					x		9/17/14	1110	×	×	x			L		L				
Ч	Floor A #4	g	1			x					x		9/17/14	1115	x											
5_	Floor A #5	g	1			x					x		9/17/14	1120	x						L	· .				
ا ما	Floor A #6	9	1			x					x		9/17/14	1125	x											
~ 7	Floor B #1	g	1			x					x		9/17/14	1130	x											
8	WSW A	g	1			x	T				x		9/17/14	1135	x											
9	ESW A	g	1			x	Ī				x		9/17/14	1140	x											
101	ESW B	9	1			x					x		9/17/14	1145	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 finited 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 fable for incidental or consequential damages, including without firstation, business interruptions, loss of use, or loss of profits incurred by client, as 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.

Relinguished By: Date: **Received By:** Phone Result: C Yes O No! Add'l Phone #: 9122114 Fax Result: C Yes O No Add'I Fax #: Time: **REMARKS:** Q:0J Relinquished B Qay **Received By:** HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com Sample Condition CHECKED BY: Delivered By: (Circle/One) (Hitials) Cool Intact, Ð Sampler - UPS - Bus - Other: Ves Ves No No FORM-006 † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 **Revision 1.0**

RDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name: Basin Environmental Service Technologies, LLC										B	ILI	L TO						ANA	LYSIS	S RE	QUE	ST				
Project Manager:	ager: Joel Lowry																									
Address: P.O.). Box 301								Company: BOPCO, LP									l								
City: Lovington	n State: NM	Zip	: 8	3826	60				Attr	1:		т	Fony Sav	oie									l			
Phone #: (575))396-2378 Fax #: (575)3	96-1	429)					Add	Ires	s:	5	522 W. N	larland	1											
Project #:	Project Owne	r:							City	r:			Carlsba	d		[I						[
Project Name:	PLU #430H Frac Spill								Stat	e:	NM	Zi	p:	88220		5M)	21B	d H			1					
Project Location:	Eddy Co., NM								Pho	ne	#:	((432)556	-8730	Chloride	801	(8021B)	l								
Sampler Name:	SOUCLOWAN								Fax #:						ਤ	TPH (8015M)	втех	HOLD FOR TPH								
FOR LAB USE ONLY	······································	Τ.	Γ	Ī	1	MAT	RIX			RE	SER	⊻	SAMPLI	NG	1	1	19	P		1						
Lab I.D. H402908	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL OTHER ·		DATE	TIME												
1	ESW C	g	1			x					x	9	9/17/14	1150	×						<u> </u>	<u> </u>				Ĺ
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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or bot, 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 walved unless made in wrking and received by Cardinal within 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental damages, including wahout (imtation, business interruptions, loss of use, or loss of profits incurred by client, as subsidiaries, afficites or successors arbing 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.

Add'l Phone #: C Yes O No! Relinguished By: Date: **Received By:** Phone Result: 9/22/14 Fax Result: D No Yes Add'I Fax #: REMARKS: Time: 8:00 Rel nguished By: 2019 Receive HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com Tine CHECKED BY: Delivered Sample Condition (One) Cool Intact, 100 -9 Sampler - UPS - Bus - Other: TYes Fres **FORM-006** † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 Revision 1.0



October 01, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H FRAC HOSE

Enclosed are the results of analyses for samples received by the laboratory on 09/30/14 10:00.

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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	09/30/2014	Sampling Date:	09/26/2014
Reported:	10/01/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR B #2 (H402974-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/01/2014	ND	40 0	100	400	0.00	

Sample ID: FLOOR B #3 (H402974-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP	P								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier				
Chloride	416	16.0	10/01/2014	ND	400	100	400	0.00					

Sample ID: FLOOR B #4 (H402974-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/01/2014	ND	400	100	400	0.00	

Sample ID: FLOOR B #5 (H402974-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	10/01/2014	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celleg Di Kene



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

Received:	09/30/2014	Sampling Date:	09/26/2014
Reported:	10/01/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR B #6 (H402974-05)

Chloride, SM4500CI-B	mg/	kg	Analyzed By: AP										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier				
Chloride	176	16.0	10/01/2014	ND	400	100	400	0.00					

Cardinal Laboratories

*=Accredited Analyte

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Celeg Di Keene



Notes and Definitions

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	ND	Analyte NOT DETECTED at or above the reporting limit
Samples not received at proper temperature or 6°C or below. Insufficient time to reach temperature. Chloride by SM4500CI-B does not require samples be received at or below 6°C	RPD	Relative Percent Difference
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C	**	Samples not received at proper temperature of 6°C or below.
	***	Insufficient time to reach temperature.
Samples reported on an as received basis (wet) unless otherwise noted on report	-	Chloride by SM4500CI-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 whistscever 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.

Celeg Z. Kenne-

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Tech	nologie	es, Ll	LC					E	3/	LL TO						ANA	LYSI	S RE	QUE	ST			
Project Manager:	Joel Lowry						Р.	O. #	ŀ									· ·	I					
Address: P.O.	Box 301					_	c	omp	any:		BOPC	0, LP		{				ł						
City: Lovington	State: NM	Zip:	882	260			At	tn:			Tony Save	Die				[
Phone #: (575):	396-2378 Fax #: (575)3	96-142	29				A	ddre	ss:		522 W. M	arland												
Project #:	Project Owne	r:					Ci	ty:			Carlsbac	i j]			Ŧ								
Project Name:	PLU #430H Frac Hose						St	ate:	NN	٨	Zip:	88220	<u>_</u>	5M)	218	HP I								
Project Location:	Eddy Co., NM						Pł	none	e #:		(432)556	-8730	Chloride	TPH (8015M)	(8021B)	HOLD, FOR TPH		[[
Sampler Name:							Fa	x #:					ਤ	Ŧ	втех	ō								
FOR LAB USE ONLY		ТТ			MATE	XIX		PR	ESER	V.	SAMPLI	NG		1	BT	9 P								
Lab I.D. H너O2974	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS GROUNDWATER	WASTEWATER	SOIL.	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	UTHER :	DATE	TIME												
l	Floor B #2	9	1		x				x		9/26/14	900	x				L	L	L					
2	Floor B #3	9	1		x				x		9/26/14	1010	x					L	[[
3	Floor B #4	g	1		x				x		9/26/14	1125	x											
4	Floor B #5	g	1		x				x		9/26/14	1300	x								L			
5	Floor B #6	g	1		x				x		9/26/14	1350	x	ļ			L							
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PLEASE NOTE: Labity and Damages. Cardina's liabity and clear's exclusive remedy for any claim arising whether based in contract or ton, 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 wring and received by Cardinal within 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, as subsidiaries, arising put of or related to the performance of replices b nder by Cardinal recordiars of whether such claim is haved upon any of the phose stated or other

answeres or soccessors and a out of or reduced to the performance	the diservices heredider by cardinal, regardless of whether social claim a based opping the above sector real	
Relinguished By:	Bale [1/] Received By:	Phone Result: 🛛 Yes 🗋 Noj Add'l Phone #:
		Fax Result: 🛛 Yes 🗆 No 🛛 Add'l Fax #:
Jal Mun	TO OCHI Stenson	REMARKS:
<u> </u>		
Relinquished By:	Date: Received By:	HOLD FOR TPH
	······	Diagon amail requile to am@hasianay.com
	Time:	Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com
		INSavole@bassrel.com & Sowallers@bassrel.com
Delivered By: (Circle One)	Sample Condition CHECKED BY:	
	n Cool Intact (Initials)	
Sampler - UPS - Bus - Other:		
FORM-006	† Cardinal cannot accept verbal changes. Please fa	x written changes to 575-393-2476
Revision 1.0	11,001	•
	7194	



October 10, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H FRAC HOSE

Enclosed are the results of analyses for samples received by the laboratory on 10/07/14 12:20.

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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/07/2014	Sampling Date:	10/03/2014
Reported:	10/10/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: WEST WALL B (H403069-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/08/2014	ND	400	100	400	0.00	

Sample ID: EAST WALL B (H403069-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	10/08/2014	ND	400	100	400	0.00	

Sample ID: EAST WALL C (H403069-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/08/2014	ND	400	100	400	0.00	

Sample ID: FLOOR C #1 (H403069-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/08/2014	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celleg Di Kenne



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

Received:	10/07/2014	Sampling Date:	10/03/2014
Reported:	10/10/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		-

Sample ID: FLOOR C #2 (H403069-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP		· · · · · · · · · · · · · · · · · · ·					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	160	16.0	10/08/2014	ND	400	100	400	0.00			

Sample ID: FLOOR C #3 (H403069-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	10/08/2014	ND	400	100	400	0.00	

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Celleg Di Kerne



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

Received:	10/07/2014	Sampling Date:	10/03/2014
Reported:	10/10/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR C #4 (H403069-07)

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	10/09/2014	ND	1.82	90.9	2.00	7.96	
Toluene*	<0.050	0.050	10/09/2014	ND	1.73	86.7	2.00	8.96	
Ethylbenzene*	<0.050	0.050	10/09/2014	ND	1.67	83.5	2.00	9.71	
Total Xylenes*	<0.150	0.150	10/09/2014	ND	5.00	83.4	6.00	9.86	
Total BTEX	<0.300	0.300	10/09/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE 100 % 61-154

Chloride, SM4500CI-B	mg.	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	10/08/2014	ND	400	100	400	0.00	
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	10/08/2014	ND	181	90.6	200	2.75	
DRO >C10-C28	<10.0	10.0	10/08/2014	ND	184	92.1	200	4.38	
EXT DRO >C28-C35	<10.0	10.0	10/08/2014	ND					
Surrogate: 1-Chlorooctane	98.3	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	97.8	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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Celleg Di Kerne

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

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Kerre-

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name:										LL TO						ANA	LYSI	S RE	QUE	ST					
Project Manager:	Joel Lowry							Ρ.	0. 1	-			<u></u>		Т		1	Γ	T	T	T	<u> </u>	Γ	_	
Address: P.O.								Company: BOPCO, LP				1													
City: Lovington	State: NM	Zip	: 8	826	0			-1	tn:		<u> </u>	Tony Sav		1]
Phone #: (575)							-						·				1								
Project #:	Project Owne					-	Address: City:				1		[-					[1			
	PLU #430 Frac Hose					State: NM Zip:				Î	1B	Her													
Project Location: Eddy Co., NM										9720	Ē	015	802	FOR											
Sampler Name: Joel Lowry					Phone #: 432-556-8730 Fax #:			Chloride	TPH (8015M)	BTEX (8021B)	L O														
FOR LAB USE ONLY	AB USE ONLY MATRIX				IX	Ira		ESE	RV	SAMPLI	NG		TP	BTE	НОГР										
Lab I.D. <i>H40</i> 300	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DĂTE	TIME												
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	East Wall B	9	1			×			 	×	_	10/3/14	1155	x	L			ļ	<u> </u>	ļ					L
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	Floor C #4	9	1			×				x		10/3/14	1220	×	×	×			ļ	 	 				\vdash
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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 consequental 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 herounder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinguished By: Phone Result: C Yes O No) Add'l Phone #: Date Received By Fax Result: □ Yes O No 10 Add'l Fax #: **REMARKS:** Time: 100 Relinquished By: **Received By** Date: HOLD FOR TPH 10-1-10 Time: 2:20 Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com aw Delivered By: (Circle One) CHECKED BY: Sample Condition Cool Intact (initia)s 3.6° Tes Yes Sampler - UPS - Bus - Other: **FORM-006**

Revision 1.0

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

Page 6 of 6



October 15, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H

Enclosed are the results of analyses for samples received by the laboratory on 10/09/14 16:11.

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 accredited 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)

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/09/2014	Sampling Date:	10/08/2014
Reported:	10/15/2014	Sampling Type:	Soil
Project Name:	PLU #430 H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY CO. NM		

Sample ID: C. WEST WALL (H403114-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	10/13/2014	ND	400	100	400	0.00	

Sample ID: D. EAST WALL (H403114-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/13/2014	ND	400	100	400	0.00	

Sample ID: D. WEST WALL (H403114-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP		<u> </u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/13/2014	ND	400	100	400	0.00	

Sample ID: FLOOR D #2 (H403114-04)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	10/13/2014	ND	400	100	400	0.00	

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Celeg Littere



10/08/2014

Cool & Intact

Kathy Perez

Soil

Analytical Results For:

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

> Sampling Date: Sampling Type:

Sampling Condition:

Sample Received By:

10/09/2014
10/15/2014
PLU #430 H
NONE GIVEN
EDDY CO. NM

Sample ID: FLOOR D #3 (H403114-05)

BTEX 8021B Analyzed By: ms mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Benzene* < 0.050 0.050 10/14/2014 ND 2.00 4.94 1.88 93.9 Toluene* < 0.050 0.050 10/14/2014 ND 1.79 89.4 2.00 4.98 Ethylbenzene* <0.050 0.050 10/14/2014 ND 1.70 85.1 2.00 4.62 Total Xylenes* < 0.150 0.150 10/14/2014 ND 5.06 84.3 6.00 4.69 Total BTEX <0.300 0.300 10/14/2014 ND

Surrogate: 4-Bromofluorobenzene (PIL 102 % 61-154

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chioride	64.0	16.0	10/13/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/13/2014	ND	173	86.4	200	3.06	
DRO >C10-C28 .	<10.0	10.0	10/13/2014	ND	173	86.6	200	4.38	
EXT DRO >C28-C35	<10.0	10.0	10/13/2014	ND					
Surrogate: 1-Chlorooctane	93.9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	104	% 52.1-17	6						

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Celeg Ditera

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

1

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Celeg Dithere

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

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

Company Name:			_								BI	LL TO						ANA	LYSI	S RE	QUE	ST			
Project Manager	Joel Lowry	ý –				F	P.O.	#:					Γ	Γ											
Address: P.O.	Box 301							c	Company: BOPCO, LP				([[[1			ĺ			
City: Lovington	Lovington State: NM Zip: 88260				A	Attn: Tony Savoie							1												
Phone #: (575)	396-2378 Fax #: (575)3	96-1	429					A	ddr	ess	:			1											1
Project #:	Project Owne							c	ity:					1			I I								
Project Name:	Hurdson Federal #1 Battery PLU	#	43	0	H	*	F	s	itate	. · I	NM	Zip:		0	2W)	BTEX (8021B)	ТРН								
Project Location	Eddy Co., NM			V					hon					Chloride	801	(80)	FOR								
Sampler Name:	Maff Thylor								ax f					ਲੋ	TPH (8015M)	Б									
FOR LAB USE ONLY		T	Γ			MAT	RIX		PI	RES	ERV.	SAMPL	ING	1	L L	81	НОГР								
Lab I.D. H-103111	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OLINEN ; ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME										X		
	C. West Wall	9	1			x				X		10/8/14	1210	×	L			<u> </u>	Ļ		ļ				
	D. East Wall	g	1			x				x		10/8/14	1220	×	ļ			ļ	L		ļ				
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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. Phone Result: O Yes O No! |Add'l Phone #: Relinguished By: Received By: Date O Yes No Add'l Fax #: Fax Result: **REMARKS:** Time , j Received By: Dates HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com Time CHECKED-BY: Delivered By: (Circle One) Sample Condition * Project name changed as per Joel. Cool Intact (Initia(s) 8% TYes Yes Sampler - UPS - Bus - Other: [] 0 FORM-006 † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 社口 **Revision 1.0**



October 17, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430H FRAC RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/15/14 16:15.

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 accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited analytes and water and solid and solid and solid analytes and water and solid and solid analytes and water analytes and water analytes and water analytes and water and solid analytes analytes and water analytes analytes analytes and water analytes analytes

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/15/2014	Sampling Date:	10/14/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: ESW E (H403164-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/16/2014	ND	416	104	400	3.92	

Sample ID: WSW E (H403164-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/16/2014	ND	416	104	400	3.92	

Sample ID: FLOOR E #1 (H403164-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP											
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier						
Chloride	288	16.0	10/16/2014	ND	416	104	400	3.92							

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

Received:	10/15/2014	Sampling Date:	10/14/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR E #2 (H403164-04)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/16/2014	. ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 104 % 61-154

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	10/16/2014	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/16/2014	ND	175	87.5	200	1.53	
DRO >C10-C28	<10.0	10.0	10/16/2014	ND	176	87.8	200	5.17	
EXT DRO >C28-C35	<10.0	10.0	10/16/2014	ND					
Surrogate: 1-Chlorooctane	91.8	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	104	% 52.1-17	6						

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

Received:	10/15/2014	Sampling Date:	10/14/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR E #3 (H403164-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	10/16/2014	ND	416	104	400	3.92	

Sample ID: FLOOR P #1 (H403164-06)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP												
Analyte	Result	Reporting Limit	. Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier							
Chloride	48.0	16.0	10/16/2014	ND	416	104	400	3.92								

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Celleg Z. Kere

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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 SM4500CI-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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name:											8/	LL TO		ANALYSIS REQUEST										
Project Manager:	Joel Lowry	•						P.O. #:									1							
Address: P.O. E	3ox 301							Company:																
City: Lovington	State: NM	te: NM Zip: 88260				At	n:								ľ							l		
Phone #: (575)3	396-2378 Fax #: (575)39	96-14	429					Ad	dre	ss:			·····							1				
Project #:	Project Owner							Cit	ty:								I							
Project Name:	PLU #430H Frac Release							Sta	ate:	N	M	Zip:		0	Q)	18	Ъ Ц							
Project Location:	Eddy Co., NM									e #:				Chloride	TPH (8015M)	BTEX (8021B)	FOR TPH					1		
Sampler Name:				·				Fa	x #:				·	ਤਿ	Ĕ	Ш	٦ ٩							l
FOR LAB USE ONLY		Γ	Γ		М	ATR	IX		_	ESE	RV.	SAMPLI	NG	1	۲ ا	81	НОГР							
Lab I.D. HY0러64	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SUL	SLUDGE	OTHER :-	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME											
1	ESW E	g	1			×				x		10/14/14	1150	x					L					
<u>2</u>	WSW E	9	1			×				x		10/14/14	1155	x										Ŀ
3	Floor E #1	g	1			x				x		10/14/14	1200	x										
4	Floor E #2	9				x				x		10/14/14	1205	x	x	x								
5	Floor E #3	g	-			x		Γ		x		10/14/14	1210	x										
6	Floorphi	5	Ī			xI				1		OPIN	1715	X										
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PLEASE NOTE: Lisbity and Damages. Cardinal's fabity and client's exclusive remedy for any claim arising whether based in contract or ton, 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 lisble for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profile incurred by client, its subsidiaries,

afflicates or successora 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, C Yes Phone Result: O No [Add'l Phone #: Relinguished By: Date: **Received By:** 10-15 Fax Result: □ Yes O No Add'l Fax #: **REMARKS:** Time; Relinquished Received By Date: HOLD FOR TPH 10-15 Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com Time: (US al Delivered By: (Circle One) CHECKED BY: (Sample Condition (Initials) -3.4° Cool Intact *(*1) S Sampler - UPS - Bus - Other: FORM-006 † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 <u>₩5</u>1 Revision 1.0



October 27, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430H FRAC RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/22/14 13:25.

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.qov/field/qa/lab accredited analytes.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/22/2014	Sampling Date:	10/20/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: WEST WALL F (H403253-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier			
Chloride	32.0	16.0	10/23/2014	ND	400	100	400	0.00				

Sample ID: WEST WALL G (H403253-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	0.00	

Sample ID: EAST WALL G (H403253-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/23/2014	ND	400	100	400	0.00	

Sample ID: FLOOR F #1 (H403253-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	0.00	

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Celleg Z. Kenne



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

Received:	10/22/2014	Sampling Date:	10/20/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR F #2 (H403253-05)

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	10/24/2014	ND	1.99	99.3	2.00	2.06	
Toluene*	<0.050	0.050	10/24/2014	ND	1.89	94.6	2.00	1.81	
Ethylbenzene*	<0.050	0.050	10/24/2014	ND	1.79	89.3	2.00	2.72	
Total Xylenes*	<0.150	0.150	10/24/2014	ND	5.33	88.9	6.00	2.78	
Total BTEX	<0.300	0.300	10/24/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL 102 % 61-154

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	10/23/2014	ND	400	100	400	0.00	
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	10/23/2014	ND	179	89.6	200	4.26	
DRO >C10-C28	<10.0	10.0	10/23/2014	ND	195	97.5	200	7.17	
EXT DRO >C28-C35	11.2	10.0	10/23/2014	ND					
Surrogate: 1-Chlorooctane	100	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	134	% 52.1-17	6						

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

Received:	10/22/2014	Sampling Date:	10/20/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR F #3 (H403253-06)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	10/23/2014	ND	400	100	400	0.00	

Sample ID: FLOOR G #1 (H403253-07)

Chloride, SM4500Cl-B mg/kg			Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	10/23/2014	ND	400	100	400	0.00	

Sample ID: FLOOR G #2 (H403253-08)

Chloride, SM4500Cl-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	10/23/2014	ND	400	100	400	0.00	

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*=Accredited Analyte

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Notes and Definitions

	Samples reported on an as received basis (wet) unless otherwise noted on report
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
***	Insufficient time to reach temperature.
**	Samples not received at proper temperature of 6°C or below.
RPD	Relative Percent Difference
ND	Analyte NOT DETECTED at or above the reporting limit

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Celleg Di Kerne

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:										8	811	LL TO					_	ANA	LYSI	S RE	QUE	ST		
Project Manager:	Joel Lowry							Р.	0. #	:				Ī	Γ	Ι	Γ		Τ			Γ		Γ
Address: P.O. f	Box 301							Ca	ompa	any:		BOPC	O, LP	1										
City: Lovington	State: NM	Zi	p: 8	8820	60			At	tn:			Tony Save	Die											
Phone #: (575)	396-2378 Fax #: (575)	396-	1429)				Ac	Idres										[
Project #:	Project Owr	er:				********		Ci									I							
Project Name:	PLU #430H Frac Release							St	ate:	NM	1 2	Zio:			(W	18	TP							
Project Location:	Eddy Co., NM								one					Chloride	TPH (8015M)	BTEX (8021B)	0 B							
Sampler Name:	Joel Lowry		****						x #:					Ĕ	E H	X	L L							
FOR LAB USE ONLY		Т	Т			MATR	iX			SER	v.	SAMPLI	NG	Ĭ	₽	BTI	HOLD FOR TPH							
Lab I.D. H403253	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL		DATE	TIME											
	West Wall F	g	1	_		x				x		10/200/14	1000	x										
	West Wall G	9	1			x				x		10/20/14	1005	x							<u> </u>		L	
	East Wall G	9	1			x				x		10/20/14	1010	x							ļ			
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	Floor F #1	g	1			x				x		10/20/14	1020	x										
	Floor F #2	9	1			x				x		10/20/14	1025	x	x	x								
	Floor F #3	g	1			x				x		10/20/14	1030	x										
	Floor G #1	g	1			x				x	Γ	10/20/14	1035	x										
	Floor G #2										Γ	10/20/14	1040	x										
										T	T													

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Relinquished By:	Date: /0/20/19 Received By: Time: 0700	Phone Result: Yes No Add'l Phone #: Fax Result: Yes No Add'l Fax #: REMARKS: REMARKS: Image: Constraint of the second s
Relinquished By: Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Date: 10/32/14 Time: 130 Col Intact Col Intact Col Intact Col Intact Col Intact Checked By: (Initials) Checked By: (Initials)	HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com, Acruth@basspet.com, Bblevins@basspet.com
FORM-006 Revision 1.0 BABlahen	t Cardinal cannot accept verbal changes. Please fa	x written changes to 575-393-2476



October 27, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430H FRAC RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/23/14 10:05.

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/ga/lab accredited 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)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/23/2014	Sampling Date:	10/22/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: EAST WALL CB (H403264-01)

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: SOUTH WALL #1 (H403264-02)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: SOUTH WALL #2 (H403264-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP	· · · · · · ·				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: EAST WALL F (H403264-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

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Celleg Dithera



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

Received:	10/23/2014	Sampling Date:	10/22/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: EAST WALL H (H403264-05)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: WEST WALL H (H403264-06)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: EAST WALL I (H403264-07)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: WEST WALL I (H403264-08)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: EAST WALL J (H403264-09)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/23/2014	ND	400	100	400	3.92	

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Celeg Ditrene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/23/2014	Sampling Date:	10/22/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: WEST WALL J (H403264-10)

Chloride, SM4500Cl-B	le, SM4500Cl-Bmg/kg			Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: EAST WALL K (H403264-11)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR H #1 (H403264-12)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP			· · · · · · · · · · · · · · · · · · ·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR H #2 (H403264-13)

Chloride, SM4500Cl-B	mg	/kg	Analyzee	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR I #1 (H403264-14)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/23/2014	ND	400	100	400	3.92	

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Celeg Zithere-

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/23/2014	Sampling Date:	10/22/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	PLU #430H FRAC RELEASE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR I #2 (H403264-15)

Chloride, SM4500CI-B	/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR J #1 (H403264-16)

Chloride, SM4500Cl-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	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR J #2 (H403264-17)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/23/2014	ND	400	100	400	3.92	

Sample ID: FLOOR K #1 (H403264-18)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/23/2014	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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Celleg H. Kenne-



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 SM4500CI-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

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Celeg Di Keine

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name:							BILL TO ANALYSIS REQUEST]											
Project Manager: Joel Lowry								P.0), #:														1			1	
Address: P.O. Box 301							Ċor	npa	iny:		BOPC	:O, LP		1											l		
City: Lovington	State: NM	Zip	: 8	826	50				Attr	ו:			Tony Savo	pie													
Phone #: (575):	396-2378 Fax #: (575)3	96-1	429	T					Add	ires	3S:												1				I
Project #:	Project Owne	er:							City	r:								II				1					ł
Project Name:	PLU #430H Frac Release								Stat	te:	NN	N	Zip:		0	EM)	218	ТРН					1				ł
Project Location:	Eddy Co., NM		****							one					Chloride	TPH (8015M)	BTEX (8021B)	HOLD FOR					1				
وجد الكاملة منصور جردا و سنادخو وروم الاخامانجان مروجين اطلالا مصد وصور أخلاف و	Steve Taylor			ò		1.3 A 6400			Fax	#:	*******			مرز آر مرور بر المراجع	Ť	H	X	ā				.	ł]		. .	-
FOR LAB USE ONLY		Τ	Τ		,	MAT	RIX			PRE	SER	<u>۲۷</u>	SAMPLI	NG		H	BT	ē									ŀ
Lab I.D. H4032104	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME													
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2	South Wall #1	g	1			x					x		10/22/14	1010	x								[
3	South Wall #2	g	1			x					x		10/22/14	1015	x		L		L								
ŭ	East Wall F	g	1			x					x		10/22/14	1020	x											Ì	
5	East Wall H	9	1			x					x		10/22/14	1025	x												
Ğ.	West Wall H	.g	1			x					x		10/22/14	1030	x												
-41	East Wall I	g	1			x					x		10/22/14	1035	x												
8	West Wall I	g	1			x					x		10/22/14	1040	x												
9	East Wall J	g	1			x					x		10/22/14	1045	x												
10	West Wall J	g	1			x				T	x		10/22/14	1050	x												

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arbing 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

analyses. All carms including trose for negrejence and any other cause whigtsoever shall be deemed warred threas made in whith grant received by Cardhal within 30 days and roompetion of the appactual service. In no event shall Cardinal be fable for incidental or consequental 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.

Relinguished By:	Date: Received By:	Phone Result:
	10.23.14	Fax Result: 🛛 Yes 🗋 No 🛛 Add'l Fax #:
Had Journ	9:26 cm Valuy John	REMARKS:
Relinquished By:	Date: Received/By:	HOLD FOR TPH
	10-23-14 And NullAM	
July John	TIME OS CH CU HUNDUN	Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com
Delivered By: (Circle One)	Sample Condition CHECKEO BY: Cool Intact (Initials)	
Sampler - UPS - Bus - Other:	10.22 Ves Ves CHA	
FORM-006	† Cardinal cannot accept verbal changes. Please fa	x written changes to 575-393-2476
Revision 1.0		······································
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



(575) 393-2326 FAX (575) 393-2476

Company Name:					BILL TO					ANALYSIS REQUEST													
Project Manager:	Joel Lowry							P.O. #:]								1		—
Address: P.O. Box 301						Com	рап	у;	BOPO	CO, LP													
City: Lovingtor	State: NM	Zip	: 8	8260				Attn			Tony Sav	oie]			1							
Phone #: (575)	396-2378 Fax #: (575)	396-14	129					Add	ess	:						l							1
Project #:	Project Own	er:						City:						[I		[[[1
Project Name:	PLU #430H Frac Release							State): I	NM	Zip:		9	2W	218	4							
Project Location:	Eddy Co., NM		~	······································				Phor	ne #	:			Pro l	801	(80	l n n		1	1				
	Steve Taylor.							Fax	¥:			*****	Chloride	TPH (8015M)	BTEX (8021B)	HOLD FOR TPH	ŀ	ŀ	1.				-
FOR LAB USE ONLY		Т			MA	TRD	(Р	RES	ERV.	SAMPLI	ING		۴.	BT	ş							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER :	ICE / COOL	OTHER :	DATE	TIME											
	East Wall K	g	1		X				×		10/22/14	1100	x										
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16_	Floor J #1	<u> </u>	1		×				×		10/22/14	1125	×		[ļ	ļ	Ļ	ļ	ļ	ļ
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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. D No! Relinguished By: **Received By:** Phone Result: □ Yes

Date: 10-23-14 Add'l Phone #: Fax Result: □ Yes O No Add'I Fax #: Time: 9:26 64 **REMARKS:** Date: /0-23-19 Relinquished By: Received By: HOLD FOR TPH Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com Delivered By: (Circle One) Sample Condition CHECKED BX Cool Intact 10.22 Ves Ves Sampler - UPS - Bus - Other: FORM-006 t Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 **Revision 1.0**



November 14, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H FRAC HOSE

Enclosed are the results of analyses for samples received by the laboratory on 11/11/14 13:15.

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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	11/11/2014	Sampling Date:	11/10/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: NORTH SW #1 (H403456-01)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/12/2014	ND	400	100	400	3.92	

Sample ID: NORTH SW #2 (H403456-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	11/12/2014	ND	400	100	400	3.92	

Sample ID: WEST SW #1 (H403456-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/12/2014	ND	400	100	400	3.92	

Sample ID: FLOOR #1 (H403456-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/12/2014	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	11/11/2014	Sampling Date:	11/10/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR #2 (H403456-05)

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	11/13/2014	ND	1.74	87.0	2.00	10.0	
Toluene*	<0.050	0.050	11/13/2014	ND	1.65	82.6	2.00	10.2	
Ethylbenzene*	<0.050	0.050	11/13/2014	ND	1.61	80.5	2.00	10.3	
Total Xylenes*	<0.150	0.150	11/13/2014	ND	4.82	80.4	6.00	10.9	
Total BTEX	<0.300	0.300	11/13/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE 93.5 % 61-154

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	11/12/2014	ND	400	100	400	3.92	
ТРН 8015М	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	11/12/2014	ND	188	93.9	200	0.555	
DRO >C10-C28	<10.0	10.0	11/12/2014	ND	196	98.2	200	2.55	
EXT DRO >C28-C35	<10.0	10.0	11/12/2014	ND					
Surrogate: 1-Chlorooctane	109	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	117	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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Celeg 2 Kene

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 SM4500CI-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

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Celeg Di Kenne



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:										B	3/[LL TO						ANA	_YSIS	S RE	QUE	ST			
Project Manager:	Joel Lowry							P.0). #:					1											
Address: P.O.	Box 301							Co	mpa	any:		BOPC	ю, LP								1				
City: Lovington	State: NM	Zip	o: 8	38260)			Att	in:			Tony Savo	pie			1									
Phone #: (575)	none #: (575)396-2378 Fax #: (575)396-1429				Address:																				
Project #:	roject #: Project Owner:				Cit	y:					1			Ξ								ł			
Project Name:	PLU #430 Frac Hose							Sta	ste:	NM	1 2	Zip:		0	2W	218	НЧТ								
Project Location:	Eddy Co., NM				-			Ph	one	#:				Chloride	801	(8021B)	For			1				}	
Sampler Name:					Fa	x #:					ਤਿ	TPH (8015M)	BTEX												
FOR LAB USE ONLY		Т	Т		M	ATRI	x		PRE	SER	<u>v.</u>	SAMPLI	NG	1	≓	6	НОГР								
Lab I.D. H403466	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL		DATE	TIME												
	North SW #1	g	1		,	x	1			x		11/10/14	1100	x											
	North SW #2	9	1			<u>×</u> L				x		11/10/14	1105	x											
And the second	West SW #1	9	1			×				x		11/10/14	1110	×						<u> </u>	<u> </u>				
<u> </u>	Floor #1	9	1			<u>< _</u>				×	₋┟	11/10/14	1115	x							ļ				L
5	Floor #2	9	1		_	<u>× </u>	<u> </u>			x	_	11/10/14	1120	×	x	x					ļ				
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PLEASE NOTE: Liability and	Damages. Cardinal's liability and client's exclusive remedy for any	claim a	l	Mether t	i Dece		act or 1	L sha	1000	l of bedin	the a	amount paid by th	e cleni for the	L						L	L	L			L
	hose for nectionence and any other cause whatspever shall be de													ملخوحك											

service, In no event shall Cardinal be table for incidential or consequental damages, including without imitation, business interruptions, loss of use, or loss of profile incurrent by client, its subsidiaries.

Relinquished By:	Date://///LiReceived By:	\bigwedge	Phone Result: I Yes No; (Add'I Phone #: Fax Result: I Yes No; (Add'I Fax #:
Jul Jun	Timer 30 Black	4_	REMARKS:
Relinquished By:	Dates		Run Highest TPH for BTEX Please email results to pm@basinenv.com.
Delivered By: (Circle One)	Sample Condition	CHECKED BY	TASavoie@BassPet.com, acruth@basspet.com
Sampler - UPS - Bus - Other:	- 7, 2 L Col Intact	(initials)	

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

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Page 5 of 5



November 17, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H FRAC HOSE

Enclosed are the results of analyses for samples received by the laboratory on 11/13/14 11:20.

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 accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/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)

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	11/13/2014	Sampling Date:	11/12/2014
Reported:	11/17/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

Sample ID: NORTH SW #3 (H403489-01)

Chloride, SM4500CI-B	OCI-B mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/14/2014	ND	400	100	400	3.92	

Sample ID: FLOOR #3 (H403489-02)

Chloride, SM4500CI-B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/14/2014	ND	400	100	400	3.92	

Sample ID: FLOOR #4 (H403489-03)

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	11/13/2014	ND	1.83	91.3	2.00	6.10	
Toluene*	<0.050	0.050	11/13/2014	ND	1.77	88.4	2.00	5.96	
Ethylbenzene*	<0.050	0.050	11/13/2014	ND	1.71	85.3	2.00	7.07	
Total Xylenes*	<0.150	0.150	11/13/2014	ND	5.12	85.3	6.00	7.69	
Total BTEX	<0.300	0.300	11/13/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIC	98.6	% 61-154			<u></u> ,				
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/14/2014	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

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Celeg Di Kane-



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

Received:	11/13/2014	Sampling Date:	11/12/2014
Reported:	11/17/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR #4 (H403489-03)

TPH 8015M	mg/k	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	11/14/2014	ND	186	92.8	200	0.855	
DRO >C10-C28	<10.0	10.0	11/14/2014	ND	188	94.1	200	1.14	
EXT DRO >C28-C35	<10.0	10.0	11/14/2014	ND					
Surrogate: 1-Chlorooctane	118 %	6 47.2-15	7			, <u>,</u> ,,			
Surrogate: 1-Chlorooctadecane	129 %	6 52.1-17	6						

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Celleg Di Kenne-



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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 SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez Di Kane

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:											BI	LL TO						ANAL	YSIS	RE	QUES	ST	 	
Project Manager:	Joel Lowry							Р.(). #:	:											1			
Address: P.O.	Box 301							Co	mpa	any	:	BOPC	0, LP			{								
City: Lovingtor	State: NM	Zip:	8	8260				Att	n:			Tony Savo	xie	.		}							1	
Phone #: (575)	396-2378 Fax #: (575)3	96-14	29					Ad	dre	ss:														
Project #:	Project Owne	r:						Cit	у:								II	l]	1			l
Project Name:	PLU #430 Frac Hose	in the second						Sta	ite:	N	м	Zip:			(W)	18	H		l	ļ				[
Project Location:	Eddy Co., NM							Ph	one	;#:			*******	Chloride	TPH (8015M)	BTEX (8021B)	FOR							
Sampler Name:	JOEI lows								x #:				<u>-</u>	ਤੱ	Ξ	X					}			
FOR LAB USE ONLY					MA	TRU	<		PRI	ESE	RV.	SAMPLI	NG	-	₽	BT	НОГР				1			
Lab I.D. HYQ 3489	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	ÓTHER :	DATE	TIME											
01	North SW #3	9	1		X	1				x		11/12/14	900	x										
02	Floor #3	9	1		×					×		11/12/14	910	x										
ß	Floor #4	9	1		x					x		11/12/14	920	x	x	x								
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Relinquished By:	Dater / Received By:	Phone Result: D Yes D No) (Add'l Phone #:
	11-13-14	Fax Result: 🛛 Yes 🗆 No 🛛 Add'l Fax #:
Un love	Time:00 BRBlacker	REMARKS:
Relinquished By	Dates & Received By: A	Run Highest TPH for BTEX
BlBlakunl	Time://:20	Please email results to pm@basinenv.com, TASavoie@BassPet.com, acruth@basspet.com
Delivered By: (Circle One)	Sample Condition CHECKED BY:	
Sampler - UPS - Bus - Other:	$1,2^{\circ}C$ \square No \square No \square No \square No	
	† Cardinal cannot accept verbal changes. Please fax	written changes to 575-393-2476

FORM-006 Revision 1.0



November 18, 2014

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU #430 H FRAC HOSE

Enclosed are the results of analyses for samples received by the laboratory on 11/14/14 10:40.

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 accredited analytes.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Kune

Celey D. Keene Lab Director/Quality Manager



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

Received:	11/14/2014	Sampling Date:	11/13/2014
Reported:	11/18/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: EAST SW (H403514-01)

Chloride, SM4500Cl-B	hloride, SM4500Cl-B mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	11/17/2014	ND	400	100	400	3.92	

Sample ID: NORTH SW #4 (H403514-02)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: A		alyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/17/2014	ND	400	100	400	3.92	

Sample ID: NORTH SW #5 (H403514-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	11/17/2014	ND	400	100	400	3.92	

Sample ID: NORTH SW #6 (H403514-04)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/17/2014	ND	400	100	400	3.92	

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Celeg D. Keine



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

Received:	11/14/2014	Sampling Date:	11/13/2014
Reported:	11/18/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR #5 (H403514-05)

Chloride, SM4500Cl-B mg/kg			Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	11/17/2014	ND	400	100	400	3.92	

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

Received:	11/14/2014	Sampling Date:	11/13/2014
Reported:	11/18/2014	Sampling Type:	Soil
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: FLOOR #6 (H403514-06)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2014	ND	1.83	91.4	2.00	8.21	
Toluene*	<0.050	0.050	11/18/2014	ND	1.76	88.2	2.00	6.70	
Ethylbenzene*	<0.050	0.050	11/18/2014	ND	1.75	87.4	2.00	6.66	
Total Xylenes*	<0.150	0.150	11/18/2014	ND	5.27	87.9	6.00	6.78	
Total BTEX	<0.300	0.300	11/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE 99.0 % 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	80.0	16.0	11/17/2014	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	11/14/2014	ND	212	106	200	1.79	
DRO >C10-C28	<10.0	10.0	11/14/2014	ND	213	107	200	1.12	
EXT DRO >C28-C35	<10.0	10.0	11/14/2014	ND					
Surrogate: I-Chlorooctane	106	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	105	% 52.1-17	6						

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Celleg D. Keine



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

Received:	11/14/2014	Sampling Date:	11/13/2014	
Reported:	11/18/2014	Sampling Type:	Soil	
Project Name:	PLU #430 H FRAC HOSE	Sampling Condition:	Cool & Intact	
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson	
Project Location:	EDDY COUNTY, NM			

Sample ID: WEST ROAD (H403514-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPÐ	Qualifier
Chloride	176	16.0	11/17/2014	ND	400	100	400	3.92	

Sample ID: EAST ROAD (H403514-08)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/17/2014	ND	400	100	400	3.92	

Sample ID: NORTH ROAD (H403514-09)

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	11/17/2014	ND	400	100	400	3.92	

Sample ID: ROAD FLOOR #1 (H403514-10)

Chloride, SM4500Cl-B	mg	/kg	Analyze	zed By: AP												
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier							
Chloride	224	16.0	11/17/2014	ND	400	100	400	3.92								

Sample ID: SOUTH SW (IN-SITU) (H403514-11)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5920	16.0	11/17/2014	ND	400	100	400	3.92	

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Celeg Di Kana

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 SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:						BILL TO						ANALYSIS REQUEST											
Project Manager: Joel Lowry						P.O. #:						ſ		Τ									
Address: P.O. Box 301							Co	mpar	ıy:	BOPC	ю, LP												
City: Lovington	State: NM	Zip	: 8	826	0			Att	n:		Tony Save	Die			l I								
Phone #: (575):	396-2378 Fax #: (575)39	96-1	429					Ad	dress	:													
Project #:	Project Owner	:						Cit	y:							II							
Project Name:	PLU #430 Frac Hose	-						Sta	te:	NM	Zip:			2W)	218	ТРН							
Project Location:	Eddy Co., NM								one #				Chloride	(8015M)	80	For							
Sampler Name:	Joel Lowry							Fax	c #:				Ē	ТРН (BTEX (8021B)								
FOR LAB USE ONLY			Γ	 ,	MA	TRI	X		PRES	ERV.	SAMPLI	NG	1	Ħ	18	НОГР							
Lab I.D. H403514	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER :	ACID/BASE:	OTHER :	DATE	TIME											
l	East SW	g	1		×				,		11/13/14	1300	×					L					
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3	North SW #5	9	1		×				<u> </u>		11/10/14	1310	x										
4	North SW #6	g	1		x),	(11/10/14	1315	x										
5	Floor #5	g	1		x				,	,	11/10/14	1320	x										
6	Floor #6	9	1		x				,		11/13/14	1325	x	x	x								
	West Road	9	1		x),	(11/13/14	1330	x										
46	East Road	9	1		x	Τ			,		11/13/14	1335	x										
9	North Road	9	1		x				,	(11/13/14	1340	x										
101	Road Floor #1	g	1		x	Τ			,		11/13/14	1345	x										

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Image: 1/-74-74 Image: 1/2-74-74 Relinguished al: Time: 9:00 Delachunc Balanne Date: 1/4-74 Received Bv: Date: 1/4-74 Balanne Time: 9:00 Date: 1/4-74 Received Bv: Balanne Time: 9:00 Date: 1/4-74 Received Bv: Balanne Time: 9:00 Delivered Bv: (Circle One) Sample Condition Sampler - UPS - Bus - Other: - 1.22 Delivered No: 1/2 No No No	Relinquished By:	Date: Received By:	Phone Result: Ves No! Add'I Phone #:
Refininguished BY: Date: Date: Received By: Received By: Delivered By: Time: Image: Address of the state of th			
Delivered By: (Circle One) Sample Condition CHECKED BY: Sampler UBS - Rue - Other:	Reinquished BY:	Date: 1-14-14 Received By:	Please email results to pm@basinenv.com,
		-170 Cool Intact (midals)	

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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476

Company Name:											B	IL	L TO						ANAL	YSIS	S RE	QUE	ST		
Project Manager:	Joel Lowry					_		_	P.O. #:											1				Γ	
Address: P.O.	Address: P.O. Box 301							d	Con	npai	ny:		BOPC	O, LP								1			
City: Lovington	State: NM	Zip	: 8	826	60			4	Attn	:			Tony Savo	Die											
Phone #: (575)	396-2378 Fax #: (575)39	96-14	429					4	٨dd	res	s:												1		
Project #:	Project Owner	r:						d	City	:								Ξ							
Project Name:	PLU #430 Frac Hose							-	Stat	e:	NM	2	Zip:		•	SM)	218	4							
Project Location:	Eddy Co., NM							F	Pho	ne #	¥:				Chloride	801	8	FOR TPH							
Sampler Name:	Joel Lowry							F	ax	#:					ਲੋ	TPH (8015M)	BTEX (8021B)	ū.							
FOR LAB USE ONLY		Γ	Γ			MAT	RIX			RES	SERV	4	SAMPLI	NG	1	ΤF	BT	НОГР		ļ	ļ				
Lab I.D. H403514	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL		SLUDGE	OTHER :	ACID/BASE:	DTHER :		DATE	TIME											
	South SW (In-Situ)	9	1			x				i	x		11/13/14	1350	x										
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PLEASE NOTE: Liability and	Damages. Cardinal's lability and client's exclusive remedy for any o	lain ar	aing w	diethe	r bater	d in cor	inact o	ar tort		i be îmi	1 1 or the	. L	mount paid by t	ne clent for the	L		L		L	L	1	1	1	L	

analyses. All claims including those for negligence and any other cause whatboever shall be deemed walved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be lable for incidential or consequential damages, including without fination, business interruptions, biss of protis incurred by dent, its subsidiaries, efficience or uncessore action or unit of or related to the ondormanic of events became for writing encoded and event shall cardinal be lable for incident is a subsidiaries, efficience or uncessore actions out of or related to the ondormanic of events becamends by Cardinal encodies or uncertain to based room or to otherwise

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