

Basin Environmental Service Technologies, LLC

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Lovington, New Mexico 88260
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REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

BOPCO, LP
JAMES RANCH UNIT #112-H PUMPING WELL
Eddy County, New Mexico
Unit Letter "P" (SE/SE), Section 36, Township 22 South, Range 30 East
Latitude 32.34270° North, Longitude 103.82626° West
NMOCD Reference #2RP-_____

Prepared For:

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

Prepared By:

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

May 2012

Joel W. Lowry

Project Manager

NMOCD

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1.0 INTRODUCTION AND 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 James Ranch Unit #112-H Pumping Well (JRU #112-H). The legal description of the release site is Unit Letter "P" (SE/SE), Section 36, Township 22 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.34270° North latitude and 103.82626° West longitude. The property affected by the release is owned by The State of New Mexico and is administered by the New Mexico State Land Office (NMSLO). Please reference Figure 1 for a "Site Location Map" and Figure 2 for a "Site & Sample Location Map".

On April 30, 2012, BOPCO discovered a release had occurred at the JRU #112-H site. The release was attributed to the failure of the stuffing box packing on a pressurized well. The pressure has since been adjusted and packing replaced. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on April 30, 2012. The "Release Notification and Corrective Action" (Form C-141) indicated approximately fifteen (15) barrels of crude oil and fifteen (15) barrels of produced water were released, with approximately ten (10) barrels of total fluid being recovered. During initial response activities, a vacuum truck was utilized to recover free-standing fluids. The release affected approximately one thousand, eight hundred square feet (1,800 ft²) of caliche well pad. A 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 36, Township 22 South, Range 30 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred seventy five feet (175') 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 1,000 feet 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 1,000 feet 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 JRU #112-H 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)
- BTEX – 50 mg/Kg (ppm)
- 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 May 8, 2012, following initial response activities, excavation of impacted soil commenced at the release site. A Photo-Ionization Detector (PID) and chloride field kit were used to field screen the horizontal and vertical extent of impacted soil and to guide the excavation. Confirmation soil samples were collected and submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of benzene, ethylbenzene, toluene, and xylene (BTEX) using EPA SW-846-8021b, total petroleum hydrocarbon (TPH) using EPA SW-846 8015M, and/or chloride concentrations using EPA method 4500 Cl-B. The excavated soil was stockpiled on-site pending final disposition.

On May 11, 2012, five (5) soil samples (North Wall 1', South Wall 1', West Wall 1', East Wall 1' and Floor 2') were collected from the excavation floor and sidewalls and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory method detection limit (MDL) for soil samples North Wall 1', South Wall 1', West Wall 1' and East Wall 1' to 168 mg/Kg for soil sample Floor 2'. Chloride concentrations ranged from 48.0 mg/Kg for soil sample East Wall 1' to 1,340 mg/Kg for soil sample South Wall 1'. Soil sample Floor 2' was also analyzed for concentrations of BTEX constituents, which were determined to be less than the appropriate laboratory MDL for each constituent. Laboratory analytical reports are provided as Appendix C.

On May 16, 2012, approximately two hundred cubic yards (200 yd³) of impacted material was transported to Lea Land, LLC (NMOCD Permit #WM-01-035), for disposal. The final dimensions of the excavation were approximately twenty-five feet (25') to forty feet (40') in width, seventy-three feet (73') in length and eight inches (8") to two feet (2') in depth. Upon receiving laboratory analytical data from confirmation soil samples, the excavated area was backfilled with locally purchased, non-impacted material, and compacted in twelve inch (12") lifts. Following the backfilling of the excavation, areas affected by the remediation activities were contoured to fit the needs of the well pad.

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

Soil samples collected from the floor and sidewalls of the JRU #112-H excavation were analyzed by an NMOCD-approved laboratory. Laboratory analytical results indicated concentrations of BTEX, TPH and chloride were below NMOCD regulatory remediation action levels established for the site, with the exception of soil sample South Wall 1', which exhibited a chloride concentration of 1,340 mg/Kg. Based on these laboratory analytical results, Basin recommends BOPCO provide the NMOCD Artesia District Office and the NMSLO a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the JRU #112-H 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.

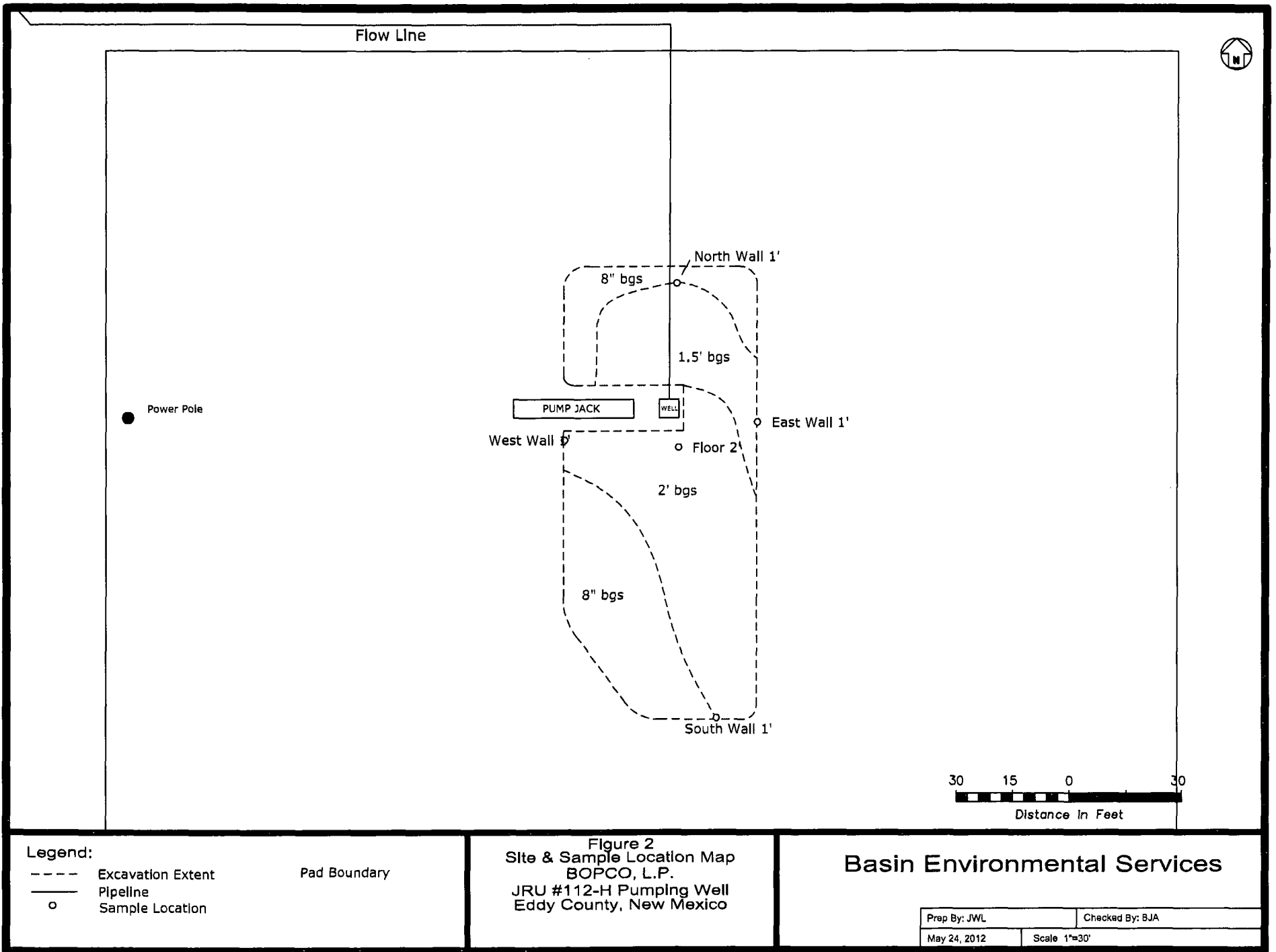
7.0 DISTRIBUTION:

- 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: Andrew Kraemer
New Mexico State Land Office
602 N.Canal, Suite B.
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

Figure 1
Site Location Map

Figure 2
Site & Sample Location Map



TABLES

Table 1

**Concentrations of Benzene, BTEX, TPH & Chloride
in Soil**

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #112-H PUMPING UNIT
EDDY COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	E 300 CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)		
North Wall 1'	1'	5/11/2012	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	288
South Wall 1'	1'	5/11/2012	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,340
West Wall 1'	1'	5/11/2012	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	800
East Wall 1'	1'	5/11/2012	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	48.0
Floor 2'	2'	5/11/2012	In-situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	134	34.3	168	208
NMOCD Criteria				10				50				5,000	

- = Not analyzed.

APPENDICES

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

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. 432-556-8730	
Facility Name: James Ranch Unit #112-H Pumping Well	Facility Type E&P	
Surface Owner: State of N.M.	Mineral Owner State of N.M.	Lease No. NM 02953-C

LOCATION OF RELEASE

Unit Letter P	Section 36	Township 22S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude 32.34270 Longitude W 103.82626

NATURE OF RELEASE

Type of Release: Crude oil and produced water	Volume of Release: 15 bbls crude oil and 15 bbls produced water	Volume Recovered: 10 bbls total fluid
Source of Release: Pump Jack Well Head	Date and Hour of Occurrence 4/30/12 Time unknown	Date and Hour of Discovery 4/30/12 9:00 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD Emergency # 104	
By Whom? Tony Savoie	Date and Hour 4/30/12 2:49 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

RECEIVED

MAY 04 2012

NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The well pressured up and blew out the stuffing box packing. The packing was replaced and the pressure problem was corrected.

Describe Area Affected and Cleanup Action Taken.* An area covering approximately 1800 sq. ft. on the caliche well pad was affected by the release. All of the free standing fluid was recovered with a vacuum truck. The stained area on the well pad was left intact; a remediation crew will start sampling the impacted area on 5/7/12 to determine the vertical extent of the release. The spill will be remediated following the NMOCD guidelines for spill remediation.

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

OIL CONSERVATION DIVISION

Signature: <i>Tony Savoie</i>	Approved by District Supervisor:	
Printed Name: Tony Savoie		
Title: Waste Mgmt. & Remediation Specialist	Approval Date:	Expiration Date:
E-mail Address: TAsavoie@BassPet.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 5/2/12	Phone: 432-556-8730	

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED

AUG 30 2012

NMOCD ARTESIA

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	BOPCO, LP	Contact	Tony Savoie
Address	522 W. Mermod, Suite 704 Carlsbad, NM 88220	Telephone No.	(432) 556-8730
Facility Name	James Ranch Unit #112-H Pumping Well	Facility Type	E & P

Surface Owner State of N.M.	Mineral Owner: State of N.M.	Lease No. NM 02953-C
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LOCATION OF RELEASE

Unit Letter P	Section 36	Township 22S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude N. 32.34270 Longitude W 103.82626

NATURE OF RELEASE

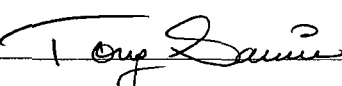
Type of Release	Crude oil and produced water	Volume of Release	15 bbls crude oil and 15 bbls produced water	Volume Recovered:	10 bbls total fluid
Source of Release:	Pump Jack Well Head	Date and Hour of Occurrence	4/30/12 Time unknown	Date and Hour of Discovery	4/30/12 9:00 a.m.
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	NMOCD Emergency #104		
By Whom?	Tony Savoie	Date and Hour:	4/30/12 2:49 p.m.		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The well pressured up and blew out the stuffing box packing. The packing was replaced and the pressure problem was corrected.

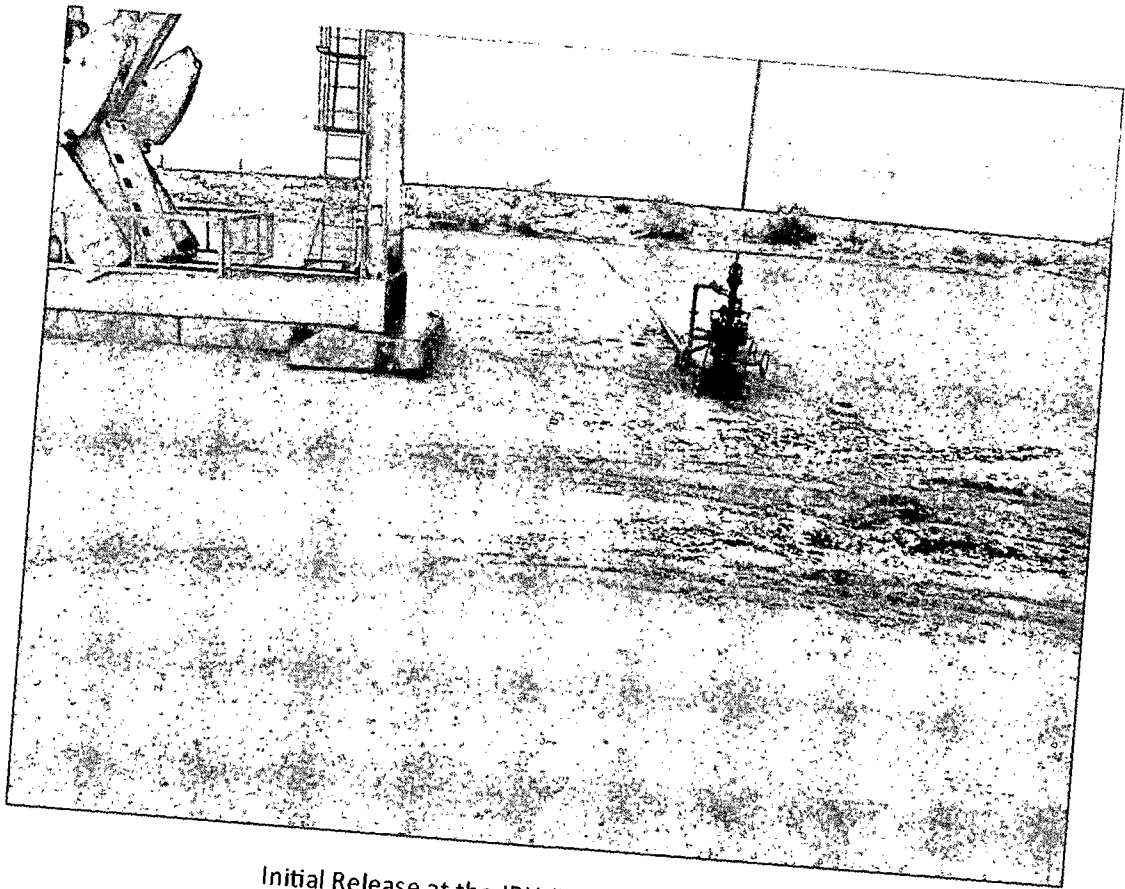
Describe Area Affected and Cleanup Action Taken.* An area covering approximately 1800 sq. ft. on the caliche well pad was affected by the release. The release was remediated according to NMOCD guidelines for spill remediation. Please see the attached Remediation Summary and Site Closure Request, dated May 2012, for details of remediation activities and analytical results from confirmation soil samples.

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

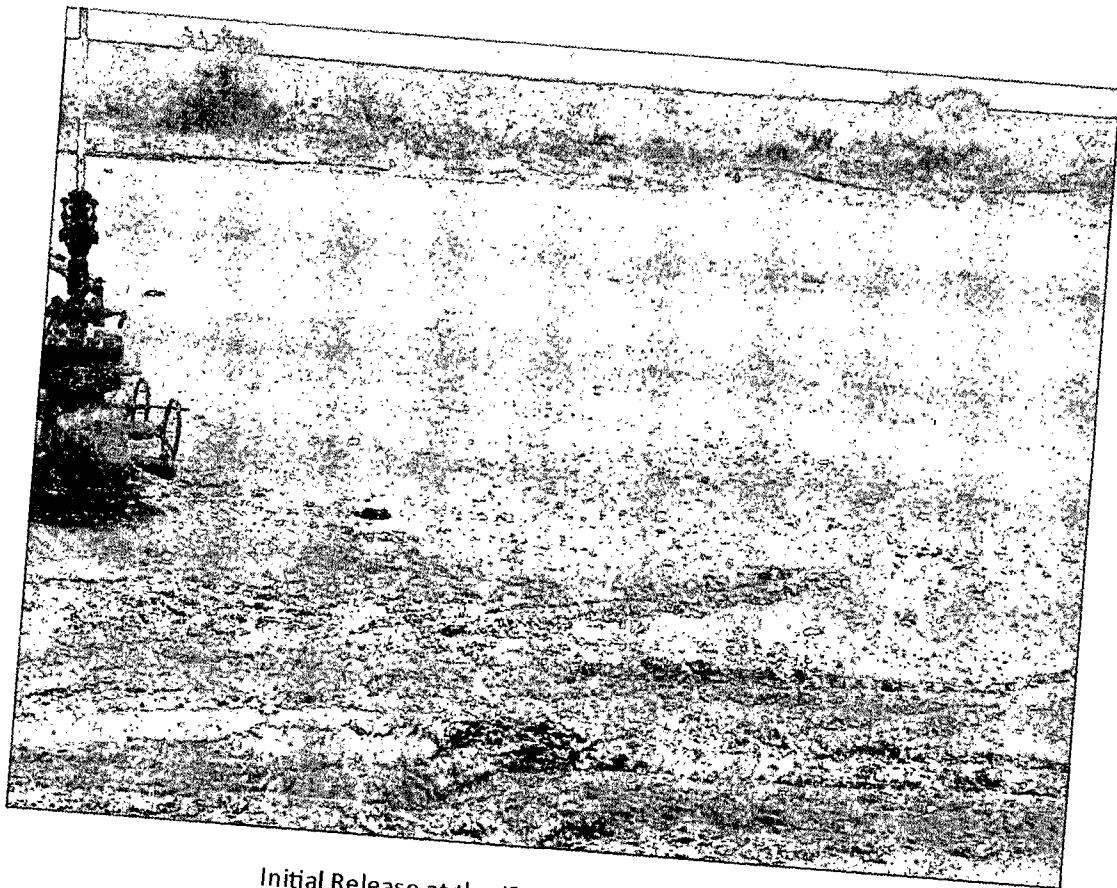
Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Tony Savoie	Approved by District Supervisor:		
Title: Waste Mgmt. & Remediation Specialist	Approval Date:	Expiration Date:	
E-mail Address: tasavoie@basspet.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8/30/12 Phone: (432) 556-8730			

Appendix B

Photographs



Initial Release at the JRU #112-H Pumping Well



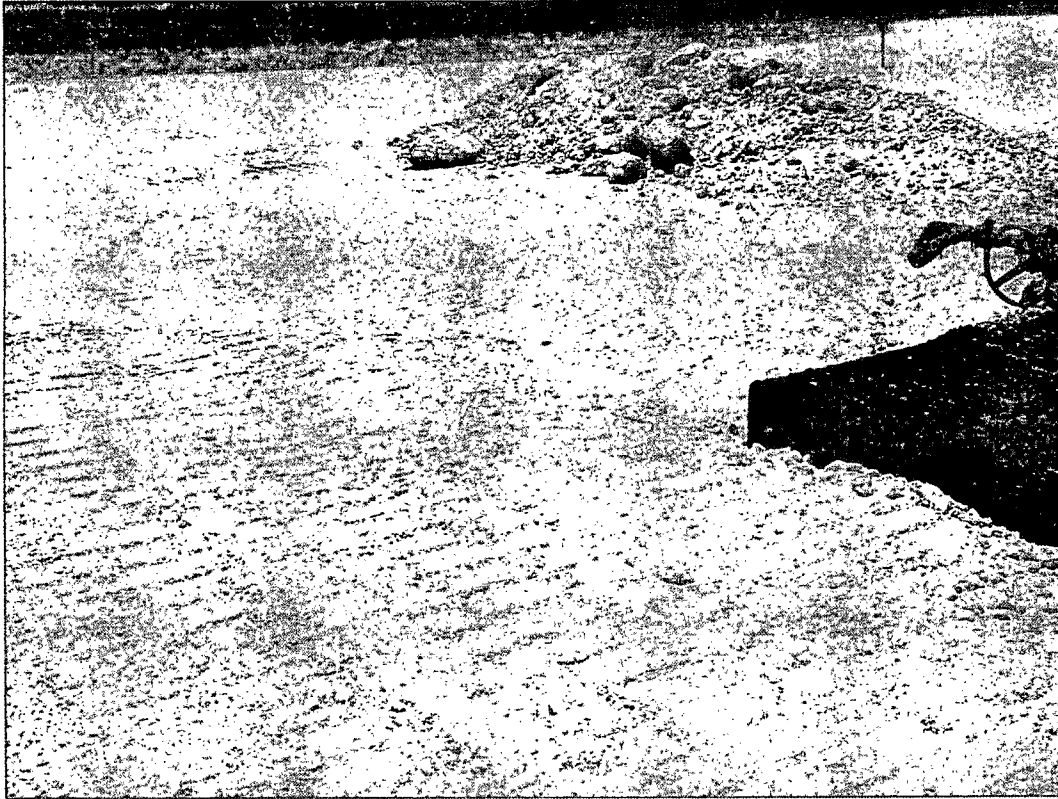
Initial Release at the JRU #112-H Pumping Well



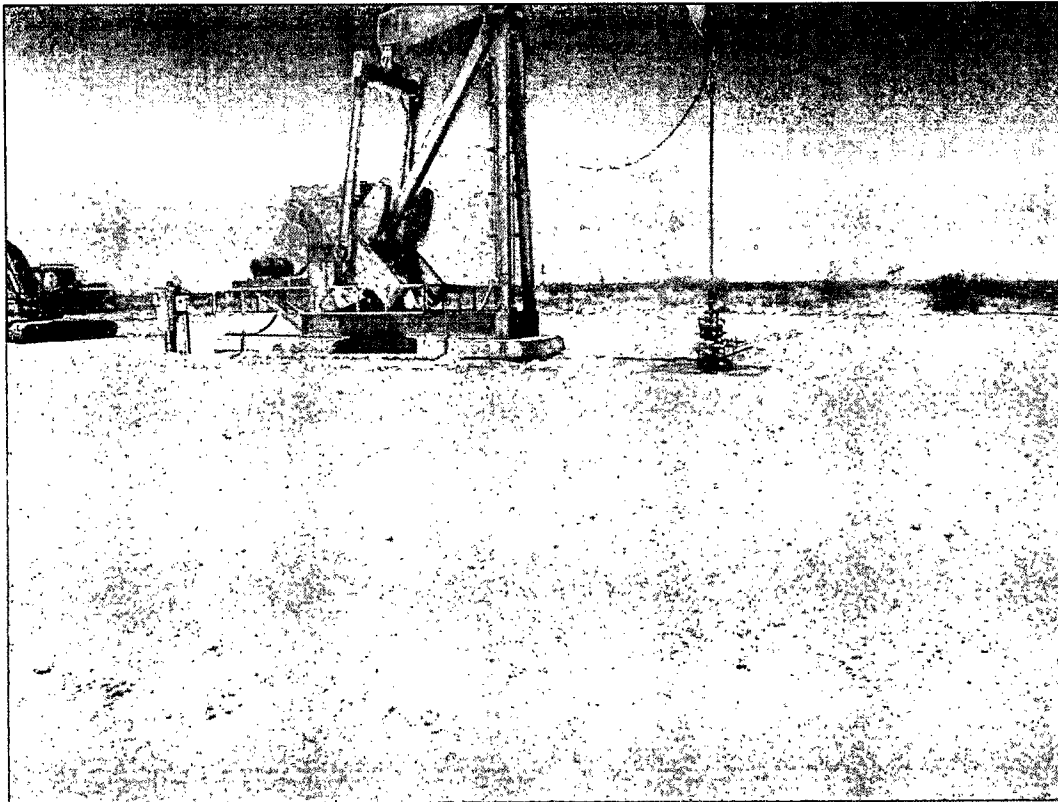
Excavation Activities at the JRU #112-H Pumping Well



Excavation Activities at the JRU #112-H Pumping Well



Backfilling Activities at the JRU #112-H Pumping Well



JRU #112-H Pumping Well Post Remediation Activities

Appendix C

Laboratory Analytical Reports

May 16, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JRU 112 H

Enclosed are the results of analyses for samples received by the laboratory on 05/14/12 13:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

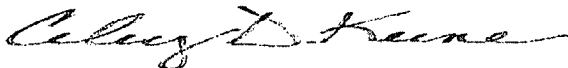
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received: 05/14/2012
Reported: 05/16/2012
Project Name: JRU 112 H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 05/11/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SOUTH WALL 1' (H201076-01)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	90.0 %	55.5-154							
Surrogate: 1-Chlorooctadecane	95.1 %	57.6-158							

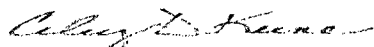
Sample ID: WEST WALL 1' (H201076-02)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	88.9 %	55.5-154							
Surrogate: 1-Chlorooctadecane	98.0 %	57.6-158							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 05/14/2012
Reported: 05/16/2012
Project Name: JRU 112 H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 05/11/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: EAST WALL 1' (H201076-03)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					

Surrogate: 1-Chlorooctane 91.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 95.8 % 57.6-158

Sample ID: FLOOR 2' (H201076-04)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/15/2012	ND	416	104	400	10.9	
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	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	134	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	34.3	10.0	05/15/2012	ND					

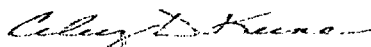
Surrogate: 1-Chlorooctane 95.6 % 55.5-154

Surrogate: 1-Chlorooctadecane 121 % 57.6-158

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 05/14/2012
 Reported: 05/16/2012
 Project Name: JRU 112 H
 Project Number: NONE GIVEN
 Project Location: EDDY COUNTY, NM

 Sampling Date: 05/11/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: NORTH WALL 1' (H201076-05)

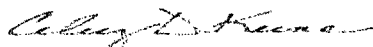
Chloride, SM4500Cl-B			mg/kg							Analyzed By: HM	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	288	16.0	05/15/2012	ND	416	104	400	10.9			
TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82			
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37			
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND							

 Surrogate: 1-Chlorooctane 95.2 % 55.5-154
 Surrogate: 1-Chlorooctadecane 103 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

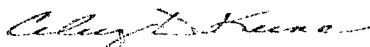
Notes and Definitions

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

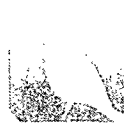
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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]

† Cardinal cannot accept verbal changes. Please fax written changes to 506-393-2476

May 22, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JRU 112 H

Enclosed are the results of analyses for samples received by the laboratory on 05/14/12 13:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

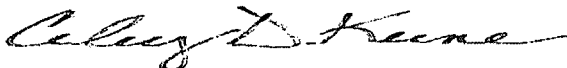
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/14/2012	Sampling Date:	05/11/2012
Reported:	05/22/2012	Sampling Type:	Soil
Project Name:	JRU 112 H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SOUTH WALL 1' (H201076-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	90.0 %	55.5-154							
Surrogate: 1-Chlorooctadecane	95.1 %	57.6-158							

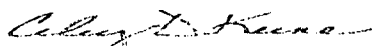
Sample ID: WEST WALL 1' (H201076-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	88.9 %	55.5-154							
Surrogate: 1-Chlorooctadecane	98.0 %	57.6-158							

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/14/2012	Sampling Date:	05/11/2012
Reported:	05/22/2012	Sampling Type:	Soil
Project Name:	JRU 112 H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: EAST WALL 1' (H201076-03)

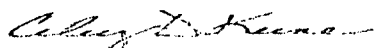
Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/14/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					

Surrogate: 1-Chlorooctane	91.0 %	55.5-154
Surrogate: 1-Chlorooctadecane	95.8 %	57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 05/14/2012
Reported: 05/22/2012
Project Name: JRU 112 H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 05/11/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: FLOOR 2' (H201076-04)

BTEX 8021B		mg/kg	Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/22/2012	ND	1.89	94.6	2.00	17.6	
Toluene*	<0.050	0.050	05/22/2012	ND	1.99	99.4	2.00	17.3	
Ethylbenzene*	<0.050	0.050	05/22/2012	ND	2.00	99.8	2.00	16.9	
Total Xylenes*	<0.150	0.150	05/22/2012	ND	6.21	103	6.00	15.9	

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/15/2012	ND	416	104	400	10.9	

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	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	134	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	34.3	10.0	05/15/2012	ND					

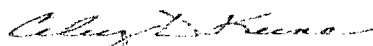
Surrogate: 1-Chlorooctane 95.6 % 55.5-154

Surrogate: 1-Chlorooctadecane 121 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 05/14/2012
Reported: 05/22/2012
Project Name: JRU 112 H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 05/11/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

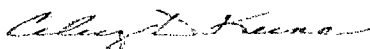
Sample ID: NORTH WALL 1' (H201076-05)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	05/15/2012	ND	416	104	400	10.9	
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	05/15/2012	ND	172	86.0	200	9.82	
DRO >C10-C28	<10.0	10.0	05/15/2012	ND	169	84.7	200	4.37	
EXT DRO >C28-C35	<10.0	10.0	05/15/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	95.2 %	55.5-154							
Surrogate: 1-Chlorooctadecane	103 %	57.6-158							

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Celey D. Keene, Lab Director/Quality Manager

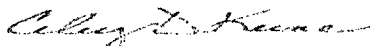
Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 7 of 7

Company Name: Basin Environmental Service Technologies, LLC				BILL TO				ANALYSIS REQUEST																			
Project Manager: Ben J. Arquijo				P.O. #:																							
Address: P.O. Box 303				Company: BOPCO, LP																							
City: Lovington State: NM Zip: 88260				Attn: Tony Savoie																							
Phone #: (575) 396-2378 Fax #: (575) 396-1429				Address: 522 W. Mermod																							
Project #: Project Owner: BOPCO, LP				City: Carlsbad																							
Project Name: JRU 112H				State: NM Zip: 88220																							
Project Location: EDDY, N.M.				Phone #: (432) 556-8730																							
Sampler Name: Jody Walters				Fax #:																							
FOR LAB USE ONLY																											
Lab I.D.		Sample I.D.		GIRAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV		SAMPLING													
								GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				ACID/BASE: ICE / COOL OTHER:		DATE TIME													
H2D1076																											
1 South Wall 1'				G 1				X				X		5-11-12 9:40													
2 West Wall 1'				G 1				Y				Y		5-11-12 9:50													
3 East Wall 1'				G 1				Y				X		5-11-12 10:00													
4 Floor 2'				G 1				Y				X		5-11-12 10:10													
5 North Wall 1'				G 1				X				X		5-11-12 10:20													
<p>PLEASE NOTE: Liability and Damages. Cardinal's liability and third's exposure remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or licensors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</p>																											
Relinquished By:		Date: 5/14/12		Received By:		Date: 5/14/12		Time: 7:05		Signature: Dodie Stenson		Phone Result: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:													
Relinquished By:		Date:		Received By:		Date:		Time:		Signature:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:													
Delivered By: (Circle One)		Sample Condition		CHECKED BY:		Initials		Signature		Date		REMARKS:															
Sampler - UPS - Bus - Other:		Cool Intact?		1.50		Yes No		Yes No		Yes No		Yes No		Yes No													
												Please email results to pm@basinenv.com															
												& TA Savoie@BasinEnv.com															
												*Added as per Ben 5/14/12. ch															

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#710