



**Legend:**

- 1st Release Margins
- 2nd Release Margins
- Pipelines
- 1st Release Sample Locations
- Sample Location
- ⊕ Hand Auger Sample Point

**Figure 2**  
**Site & Sample Location Map**  
**BOPCO, L.P.**  
**BEU DI 9 Process Facility**  
**Eddy County, New Mexico**  
**NMOCD Ref # 2RP-**

**Basin Environmental Services**

Prep By: JWL

Checked By: BJA

February 20, 2015

Scale 1"=20'

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

**BOPCO, LP**  
**BEU DI #9 34H FREE WATER KNOCK OUT**  
**EDDY COUNTY, NEW MEXICO**  
**NMOCD REFERENCE #: 2RP-**

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL	4500 CI-B
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)	TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	
Floor #1a	6"	2/13/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	40.4	11.9	52.3	496
Floor #2b	1'	2/13/2015	Excavated	<b>10.3</b>	103	18.0	181	<b>313</b>	4,930	14,400	2,010	<b>21,340</b>	240
Floor #2c	18"	2/13/2015	In-Situ	<0.050	0.161	<0.050	<0.150	<0.300	11.4	22.1	<10.0	33.5	32.0
SP #1 @ 6"	6"	2/13/2015	In-Situ	<0.050	0.059	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64.0
SP #2 @ 6"	6"	2/13/2015	Excavated	8.62	85.8	26.6	125	<b>246</b>	3440	10500	1540	<b>15,480</b>	576
SP #3 @ 8'	8'	2/13/2015	In-Situ	0.263	1.02	0.135	0.549	1.97	16.1	26.7	<10.0	42.8	416
SP #3 @ 9'	9'	2/13/2015	In-Situ	<0.050	0.231	0.076	0.451	0.758	18.6	194	33.7	246	208
SP #3 @ 11'	11'	2/13/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	10.3	111	17.9	139	128
SP #4 @ 1.5'	1.5'	2/13/2015	In-Situ	<0.050	0.052	0.051	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SP #5 @ 4'	4'	2/13/2015	In-Situ	0.766	6.53	1.59	6.95	15.8	121	515	76.0	712	112
SP #3 @ 12.5'	12.5'	2/16/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	11.0	65.7	<10.0	76.7	112
Floor #2b @ 2'	2'	2/16/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32.0
Floor #3 @ 1'	1'	2/16/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0
SP #2 @ 2' bgs	2'	2/24/2015	In-Situ	-	-	-	-	-	603	2,660	370	3,633	112
SP #2 @ 4' bgs	4'	2/24/2015	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
SP #2 @ 6' bgs	6'	2/24/2015	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
<b>NMOCD Criteria</b>				<b>10</b>				<b>50</b>				<b>5,000</b>	<b>1,000</b>

- = Not analyzed.



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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February 25, 2015

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: BEU DI 9 FWKO

Enclosed are the results of analyses for samples received by the laboratory on 02/24/15 13:55.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

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: 02/24/2015  
Reported: 02/25/2015  
Project Name: BEU DI 9 FWKO  
Project Number: NONE GIVEN  
Project Location: BOPCO

Sampling Date: 02/24/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SP #2 @ 2' BGS (H500520-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/25/2015	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	603	10.0	02/24/2015	ND	205	103	200	0.704	
DRO >C10-C28	2660	10.0	02/24/2015	ND	200	99.9	200	0.351	
EXT DRO >C28-C35	370	10.0	02/24/2015	ND					
Surrogate: 1-Chlorooctane	119 %	47.2-157							
Surrogate: 1-Chlorooctadecane	104 %	52.1-176							

**Sample ID: SP #2 @ 4' BGS (H500520-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/25/2015	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	02/24/2015	ND	205	103	200	0.704	
DRO >C10-C28	<10.0	10.0	02/24/2015	ND	200	99.9	200	0.351	
EXT DRO >C28-C35	<10.0	10.0	02/24/2015	ND					
Surrogate: 1-Chlorooctane	82.8 %	47.2-157							
Surrogate: 1-Chlorooctadecane	80.6 %	52.1-176							

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: 02/24/2015  
 Reported: 02/25/2015  
 Project Name: BEU DI 9 FWKO  
 Project Number: NONE GIVEN  
 Project Location: BOPCO

 Sampling Date: 02/24/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP #2 @ 6' BGS (H500520-03)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/25/2015	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	02/24/2015	ND	205	103	200	0.704		
DRO >C10-C28	<10.0	10.0	02/24/2015	ND	200	99.9	200	0.351		
EXT DRO >C28-C35	<10.0	10.0	02/24/2015	ND						
Surrogate: 1-Chlorooctane	89.7 %	47.2-157								
Surrogate: 1-Chlorooctadecane	87.0 %	52.1-176								

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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

Company Name: Basin Environmental Service Technologies, LLC  
Project Manager: Ben J. Arguio

Address: P.O. Box 301

City: Lovington

Phone #: (575) 396-2378

Project #:

Project Name: BEU DI 9 FUKO

Project Location: BEU DI 9

Sampler Name: Teddy Walters

P.O. #:  
Company: BOECO, LP  
Attn: Tony Savoie  
Address: 522 W. Mermod  
City: Carlsbad  
State: NM Zip: 88220  
Phone #: (432) 556-8730  
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

AS00520

1 SP# 2 @ 2' BGS  
2 SP# 2 @ 4' BGS  
3 SP# 2 @ 6' BGS

(G)RAB OR (C)OMP.  
# CONTAINERS

GROUNDWATER  
WASTEWATER  
SOIL  
OIL  
SLUDGE  
OTHER:

ACID/BASE:  
ICE / COOL  
OTHER:

DATE  
TIME

8015M  
HOLD BTEX  
RUSIT  
C1

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Relinquished By:

10/24/15  
Date: 10/24/15  
Time: 1:55  
Received By: Heidi Jensen

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

5.82

Sample Condition  
Cool ☒ Yes ☐ No  
Intact ☒ Yes ☐ No

CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No  
Fax Result: ☐ Yes ☐ No  
Add'l Phone #:   
Add'l Fax #:   
REMARKS:

Please email results to pm@basinenr.com  
& TAsavoie@BasasPet.com

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

February 27, 2015

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: BEU DI 9 FWKO

Enclosed are the results of analyses for samples received by the laboratory on 02/26/15 16:20.

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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: 02/26/2015  
Reported: 02/27/2015  
Project Name: BEU DI 9 FWKO  
Project Number: NONE GIVEN  
Project Location: EDDY, NM

Sampling Date: 02/26/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: STOCK PILE (H500560-01)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>544</b>	16.0	02/27/2015	ND	400	100	400	0.00		
TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>857</b>	50.0	02/27/2015	ND	201	101	200	2.21		
<b>DRO &gt;C10-C28</b>	<b>4920</b>	50.0	02/27/2015	ND	186	92.8	200	4.05		
<b>EXT DRO &gt;C28-C35</b>	<b>738</b>	50.0	02/27/2015	ND						
Surrogate: 1-Chlorooctane	114 %	47.2-157								
Surrogate: 1-Chlorooctadecane	109 %	52.1-176								

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Celey D. Keene, Lab Director/Quality Manager

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