#### Basin Environmental Service Technologies, LLC

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

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



### REMEDIATION SUMMARY & SITE CLOSURE REQUEST

BOPCO, LP
Fenton 7, Federal #1
Eddy County, New Mexico
Unit Letter "E", Section 6, Township 21 South, Range 28 East
Latitude 32.49660° North, Longitude -104.13235° West

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

March 2016

Robbie Runnels Project Manager

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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 & Site Closure Request* for the release site known as Fenton 7, Federal Battery #1. The legal description of the release site is Unit Letter "E", Section 6, Township 21 South, Range 28 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.49660° North latitude and -104.13235° West longitude. The site is located approximately 6.5 miles northeast of Carlsbad, New Mexico in Eddy County, New Mexico. 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 December 10<sup>th</sup>, 2015, BOPCO discovered a release of twenty-five (25) barrels (bbls) of crude oil and seven (7) bbls of produced water from a ruptured flow line. Approximately eighthundred forty (840) square feet (ft²) of pasture was affected by the release as well as two-thousand sixty four (2,064) ft² of well pad. The Bureau of Land Management (BLM) and New Mexico Oil Conservation Division Artesia District Office (NMOCD) were notified of the release on December 10<sup>th</sup>, 2015, and an initial Release Notification and Corrective Action form (C-141) was submitted to NMOCD December 14<sup>th</sup>, 2015, for approval (Appendix A).

#### 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 6, Township 21 South, Range 28 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred ten (110) feet 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 Fenton 7, Federal #1 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 December 10<sup>th</sup>, 2015, BOPCO discovered a release of twenty-five (25) barrels (bbls) of crude oil and seven (7) bbls of produced water from a ruptured flow line. Approximately eight-hundred forty (840) square feet (ft²) of pasture was affected by the release as well as two-thousand sixty four (2,064) ft² of well pad. The Bureau of Land Management (BLM) and New Mexico Oil Conservation Division (NMOCD) were notified of the release on December 10<sup>th</sup>, 2015, and an initial Release Notification and Corrective Action form (C-141) was submitted to NMOCD December 14<sup>th</sup>, 2015, for approval (Appendix A).

Basin personnel were on site beginning December 21<sup>st</sup>, 2015, to begin remediation activities. The impacted area was excavated down to approximately one (1) foot bgs. Three (3) discreet floor soil samples (Floor #1, Floor #2, Floor #3) from different areas were retrieved and submitted to a certified NMOCD approved commercial laboratory for confirmatory analysis of gasoline range organics (GRO), diesel range organics (DRO), extended diesel range organics (oil range organics [ORO]) utilizing method TPH 8015M as well as benzene, toluene, ethylbenzene, and xylenes (BTEX) utilizing method BTEX 8021B.

Numerous discrete wall soil samples (SW #1, SW #2, WW #1, WW #2, WW #3, NW #1, NW #2, NW #3, EW #1, EW #2) were taken at a depth of approximately eight (8) inches and submitted to an approved NMOCD laboratory for concentration analysis of chlorides utilizing method SM4500CL-B and total petroleum hydrocarbons (TPH). Laboratory analysis confirms that the boundaries of the release were encompassed within the excavated area. Laboratory analysis shows the impacted areas of the release met the criteria necessary for closure of the release.

The excavated area was backfilled with clean, non-impacted soils and contoured to the surrounding area. The pasture area will be seeded with a BLM approved seed mix free from noxious weeds at a time when it is conducive for germination.

Soil samples collected from the BOPCO Fenton 7, Federal #1 release site were analyzed by an NMOCD approved laboratory and concentrations of TPH, BTEX, and chloride were below the recommended remediation action level (RRAL) established for the site (Appendix B). Soil exhibiting chloride and TPH concentrations above the RRAL were removed and disposed of at a BLM/NMOCD approved facility. BOPCO via Basin requests site closure to the Fenton 7, Federal #1 release site.

#### 4.0 QA/QC PROCEDURES

#### 4.1 Soil Sampling

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

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method SM 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 Fenton 7, Federal #1 excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were less than the recommended remediation action levels (RRAL) established for the site by the NMOCD. Based on these analytical results, Basin recommends BOPCO provide the NMOCD Artesia District Office and the BLM a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant site closure to the Continental Federal Battery #1 release site.

#### 6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Risk-Based 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, New Mexico 88210

Copy 2: James Amos

Bureau of Land Management

602 E. Greene Street

Carlsbad, New Mexico 88220

Copy 3: Amy Ruth

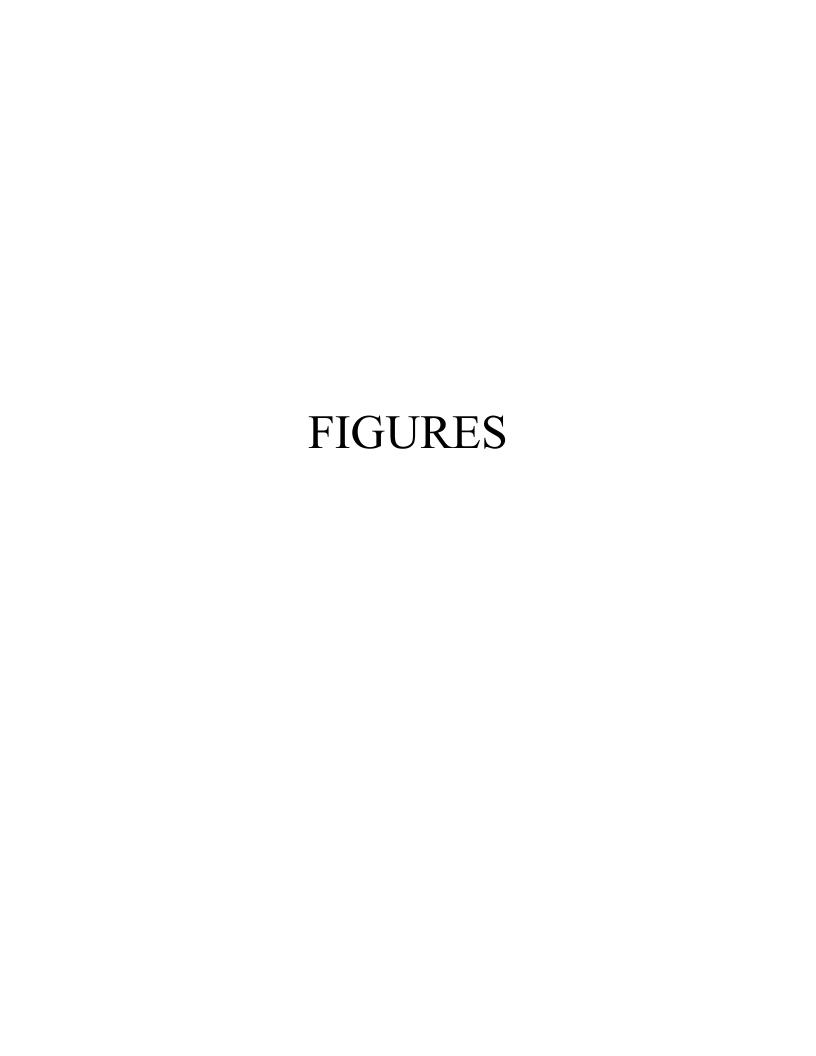
BOPCO, LP

522 W. Mermod, Ste. 704 Carlsbad, New Mexico 88220

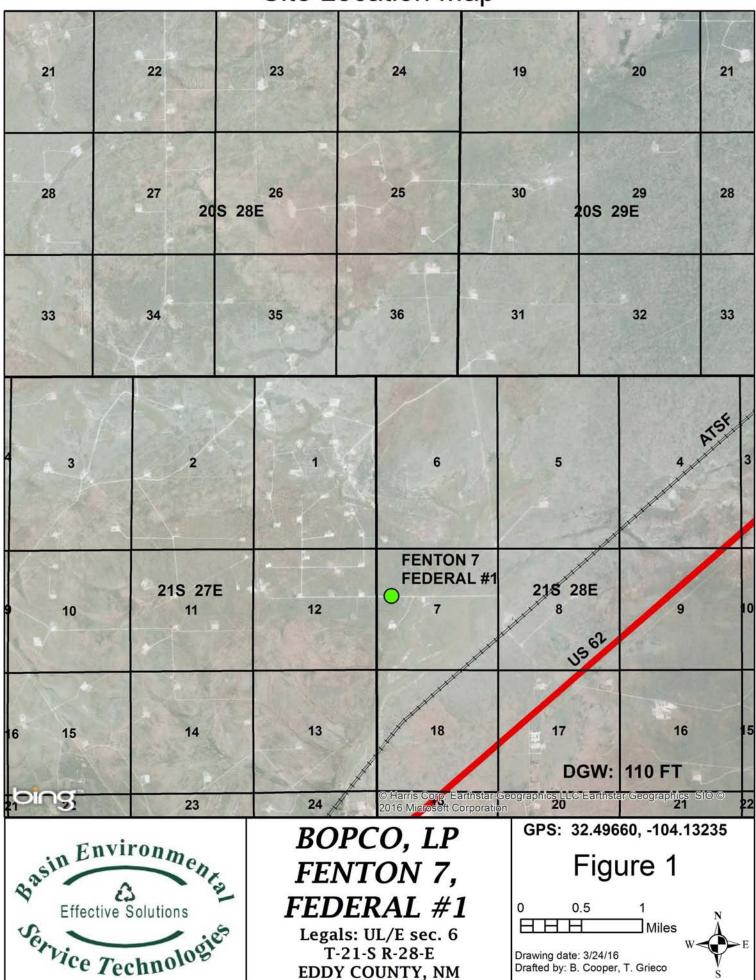
Copy 4: Basin Environmental Service Technologies, LLC

P.O. Box 301

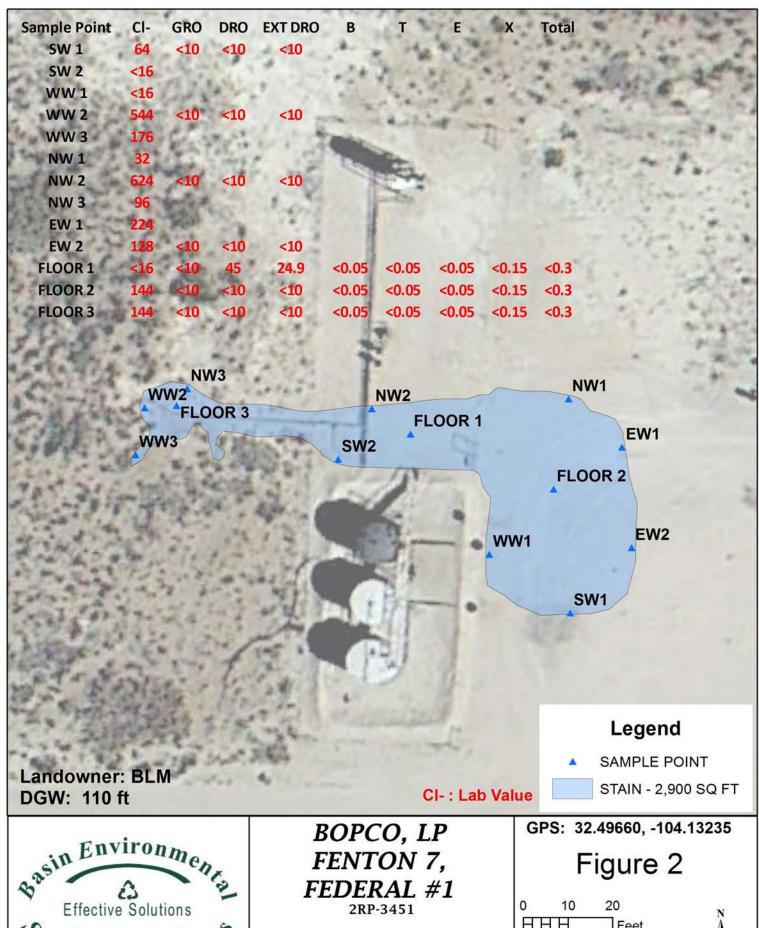
Lovington, New Mexico 88260



#### Site Location Map

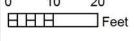


#### Excavation



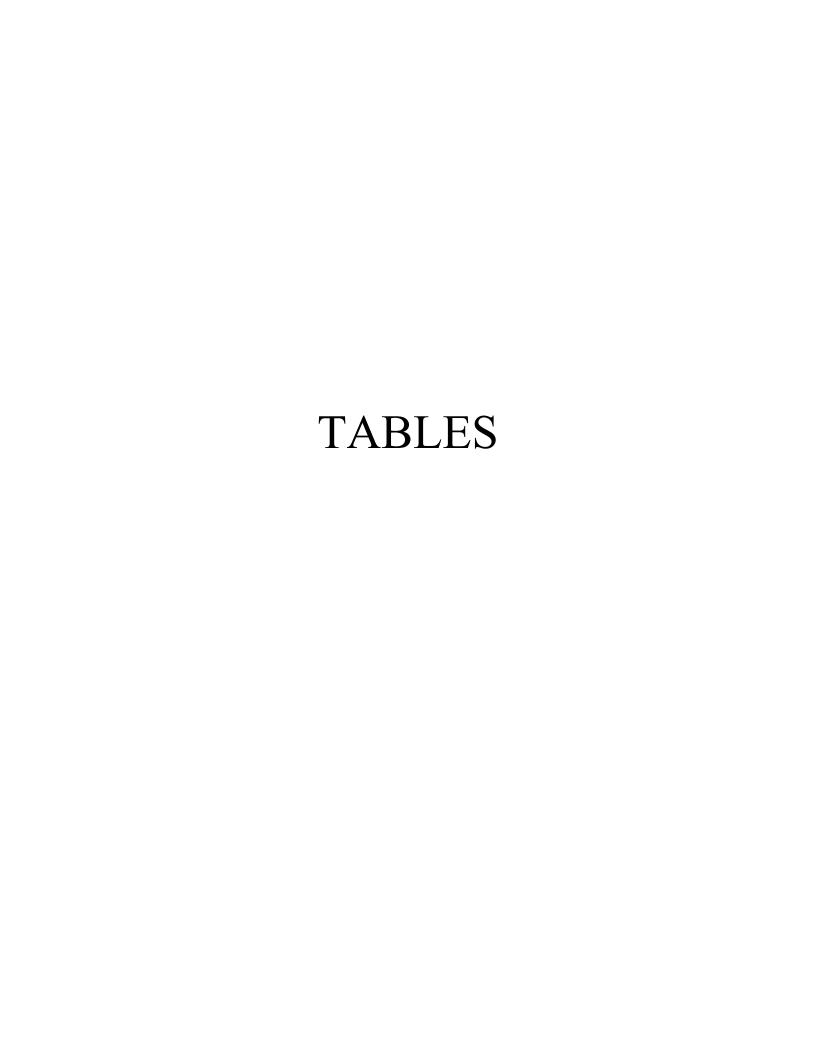


Legals: UL/E sec. 6 T-21-S R-28-E EDDY COUNTY, NM



Drawing date: 3/24/16 Drafted by: M. Grieco



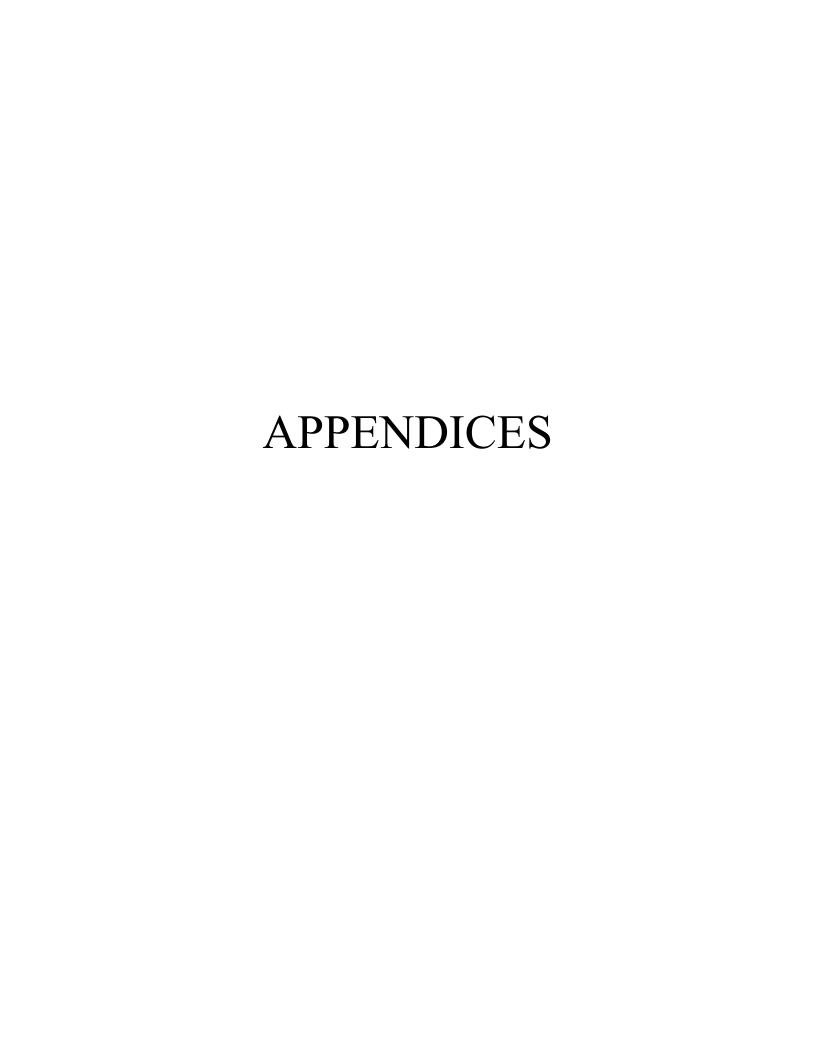


#### TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

#### BOPCO FENTON 7, FEDERAL #1 EDDY COUNTY, NEW MEXICO NMOCD # - 2RP - 3451

	0.4.4401.5				METHOD: E	PA SW 846	-8021B, 503	0	MET	HOD: 80	15M	TDU	4500 CI-B
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	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>10</sub> (mg/Kg)	DRO C <sub>10</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)	CHLORIDE (mg/Kg)
SW #1	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	<10.0	<10.0	<10.0	0	64
SW #2	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	<16.0
WW #1	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	<16.0
WW #2	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	<10.0	<10.0	<10.0	0	544.0
WW #3	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	176.0
NW #1	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	32.0
NW #2	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	<10.0	<10.0	<10.0	0	624.00
NW #3	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	96.0
EW #1	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	NA	NA	NA	0	224.0
EW #2	8"	12/22/2015	In-Situ	NA	NA	NA	NA	NA	<10.0	<10.0	<10.0	0	128.0
Floor #1	1'	12/22/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	45.0	24.9	70	<16.0
Floor #2	1'	12/22/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	0	144.0
Floor #3	1'	12/22/2015	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	0	144.0
NMOCD Recommended Ren	nediation Ad	tion Level		10				50				5000	1,000

NA = Not analyzed.



## APPENDIX A C-141

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

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

Form C-141
Revised August 8, 2011
ait 1 Copy to appropriate District Office in

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

	Release Notification and Corrective Action											
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		OPCO, L.P.	04 Carlol	0737 oad, N.M. 88220		Contact: An						
		n 7 Federal #		au, IV.IVI. 88221			No. 575-887-732 e: Exploration a		uction			
							e. Exploration a	ind i rodi				
Surface Ow	mer: Fede	ral	<del> ,, ,_</del>	Mineral C	)wner:	Unknown	<del></del>		API No	. 30-015-27973		
		<del></del>	<del></del>			N OF RE						
Unit Letter E	Section 7	Township 21S	Range 28E	Feet from the 1980	North North	/South Line	Feet from the 1980	East/We West	est Line	County Eddy		
	.1	<u>.                                    </u>	La	titude <u>32.496</u>	615°	Longitude	-104.132 <u>3</u> 50	• •		]		
					URE	OF REL						
		Oil and Produ	uced Wate	r 			Release 25 bbl o 7 bbl pw	,		Recovered 20 bbl		
Source of Ro							lour of Occurrenc time unknown			Hour of Discovery  15 at 6:45 am	/	
Was Immedi	ate Notice		l Vec	No □ Not R	equired	If YES, To	Whom?	rean (OC	D) lim /	Ames (DI M)		
By Whom?	Amy Ruth		1 103		equireo-	Date and L	Jour 12/10/2015 a	15011 (OC	10 j, Jun 2	JUNION CO	ONSERVATION	
Was a Water							olume Impacting t				IA DISTRICT	
	•		Yes 🗵	No No		N/A				DEC	1 4 2015	
If a Watercon	urse was In	pacted, Descr	ibe Fully.							REC	CEIVED	
		em and Reme e found to hav			time o	ver-night, Pu	mper re-opened th	ne valves t	to direct	fluids to the tanks.		
The leak affe	ected 840 ft	and Cleanup A of pasture we at traffic sprea	est of the t		of well	l pad. Vacuur	n truck recovered	standing	fluids an	d the impacted wel	ll pad area	
regulations a public health should their or or the cnviro	Il operators or the envi operations I nment. In a	are required to ronment. The save failed to	o report a acceptant adequately OCD accep	nd/or file certain in the of a C-141 report investigate and r	elease nort by the emediat	notifications as te NMOCD m te contaminati	nd perform correct arked as "Final Ro on that pose a thro e the operator of a	tive action eport" doc eat to grou responsibi	ns for rel es not rel and water lity for c	suant to NMOCD reases which may e ieve the operator or, surface water, hu ompliance with an	endanger of liability uman health	
Signature:	$\mathcal{M}$ (	Hamilton		' 1 1			OIL CONS	SERV <i>A</i>	TION 1	DIVISION		
Printed Nam	e: Amy	Ruth	·	<del></del> .		Approved by	Environmental Sp	pecialist:	the	1/2		
	nediation S					Approval Da	e: 12 15 1'	<b>5</b> Б	epiration	Date: N/A		
E-mail Addr	ess: AC	Ruth@basspe		hone: 432-661-05			f Approval: ion per O.C.D REMEDIATION					
		ets If Necess		110110. 432-001-0.		LATER TH		u i u			-3451	

## APPENDIX – B Photo Documentation



Fenton 7 Federal #1 – Initial Release



Fenton 7 Federal #1 – Initial Release



Fenton 7 Federal #1 – Excavation



Fenton 7 Federal #1 – Excavation



Fenton 7 Federal #1 - Excavation backfilled



Fenton 7 Federal #1 – Excavation backfilled

## APPENDIX – C Analytical Reports



January 05, 2016

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: FENTON 7 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 12/30/15 14:30.

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

Celey D. Keine

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

12/22/2015



#### Analytical Results For:

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

Received: 12/30/2015 Sampling Date:

Reported: 01/05/2016 Sampling Type: Soil

Project Name: FENTON 7 FED #1 Sampling Condition: Cool & Intact

Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SW #1 (H503331-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/31/2015	ND	416	104	400	3.92	
TPH 8015M mg/kg		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	99.3	% 35-147	7						
Surrogate: 1-Chlorooctadecane	101	% 28-171							

#### Sample ID: SW #2 (H503331-02)

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	12/31/2015	ND	416	104	400	3.92	

#### Sample ID: WW #1 (H503331-03)

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	12/31/2015	ND	416	104	400	3.92	

Cardinal Laboratories \*=Accredited Analyte

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

Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

EDDY COUNTY, NM

Project Name: FENTON 7 FED #1 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Sample ID: WW #2 (H503331-04)

Project Location:

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	12/31/2015	ND	416	104	400	3.92	
TPH 8015M mg/kg			Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	103 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	103 9	% 28-171							

#### Sample ID: WW #3 (H503331-05)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	12/31/2015	ND	416	104	400	3.92	

#### Sample ID: NW #1 (H503331-06)

Chloride, SM4500Cl-B mg/kg		/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/31/2015	ND	416	104	400	3.92	

Cardinal Laboratories \*=Accredited Analyte

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



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

Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

Project Name:FENTON 7 FED #1Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: NW #2 (H503331-07)

hloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	12/31/2015	ND	416	104	400	3.92	
TPH 8015M	mg/kg		Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	106	% 35-147	,						
Surrogate: 1-Chlorooctadecane	103	% 28-171							

#### Sample ID: NW #3 (H503331-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	12/31/2015	ND	416	104	400	3.92	

#### Sample ID: EW #1 (H503331-09)

Chloride, SM4500Cl-B mg/kg		/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	12/31/2015	ND	416	104	400	3.92	

Cardinal Laboratories \*=Accredited Analyte

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

Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

Project Name:FENTON 7 FED #1Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: EW #2 (H503331-10)

Chloride, SM4500CI-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	12/31/2015	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	110 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	108 9	% 28-171							

Cardinal Laboratories \*=Accredited Analyte

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Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

Project Name: FENTON 7 FED #1 Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: FLOOR #1 (H503331-11)

BTEX 8021B	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/31/2015	ND	1.93	96.3	2.00	0.310	
Toluene*	<0.050	0.050	12/31/2015	ND	1.96	98.0	2.00	0.759	
Ethylbenzene*	<0.050	0.050	12/31/2015	ND	1.81	90.6	2.00	0.615	
Total Xylenes*	<0.150	0.150	12/31/2015	ND	5.81	96.9	6.00	0.872	
Total BTEX	<0.300	0.300	12/31/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.4	% 73.6-14	0						
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	12/31/2015	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	45.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	24.9	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	110 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	109 9	% 28-171	,						

Surrogate: 1-Chlorooctadecane 109 % 28-171

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Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

Project Name:FENTON 7 FED #1Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi HensonProject Location:EDDY COUNTY, NM

#### Sample ID: FLOOR #2 (H503331-12)

BTEX 8021B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/31/2015	ND	1.93	96.3	2.00	0.310	
Toluene*	<0.050	0.050	12/31/2015	ND	1.96	98.0	2.00	0.759	
Ethylbenzene*	<0.050	0.050	12/31/2015	ND	1.81	90.6	2.00	0.615	
Total Xylenes*	<0.150	0.150	12/31/2015	ND	5.81	96.9	6.00	0.872	
Total BTEX	<0.300	0.300	12/31/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.1	% 73.6-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	12/31/2015	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	108	% 35-147	,						
Surrogate: 1-Chlorooctadecane	110	% 28-171							

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Received: 12/30/2015 Sampling Date: 12/22/2015

Reported: 01/05/2016 Sampling Type: Soil

Project Name:FENTON 7 FED #1Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi HensonProject Location:EDDY COUNTY, NM

#### Sample ID: FLOOR #3 (H503331-13)

BTEX 8021B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/31/2015	ND	1.93	96.3	2.00	0.310	
Toluene*	<0.050	0.050	12/31/2015	ND	1.96	98.0	2.00	0.759	
Ethylbenzene*	<0.050	0.050	12/31/2015	ND	1.81	90.6	2.00	0.615	
Total Xylenes*	<0.150	0.150	12/31/2015	ND	5.81	96.9	6.00	0.872	
Total BTEX	<0.300	0.300	12/31/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.0	% 73.6-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	12/31/2015	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/31/2015	ND	200	99.8	200	2.36	
DRO >C10-C28	<10.0	10.0	12/31/2015	ND	198	98.8	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	12/31/2015	ND					
Surrogate: 1-Chlorooctane	105	% 35-147	,						
Surrogate: 1-Chlorooctadecane	103	% 28-171							

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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 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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4RDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Technologies, LLC	hnolog	les.	티		- 1	- 1	- 1		****		b	75				1			
Project Manager:	Robbie Runnels								O	PO#	٦,	t			1	1	1	1	ANALYSIS REQUEST	
Address: P.O. Box 301	ox 301								2				3		1					
City: Lovington	State: NM	Zip:	9	88260	8				Attn.	Attn.	2	4		ספילט, נדי						
Phone #: (575)39	(575)396-2378 Fax #: (575)396-1429	)396-1	429	A.S. Carrie					> 1	Address	5		FOO W. I					_		_
Project #:	Project Owner:	ner:	ВС	BOPCO, LP	ŏ	5			? ?	: :	0		VAA 770	OZZ W. Manand						_
Project Name: F	Fenton 7 Fed #1								State	Y			Carisbad	ad	9	И)	B)			
Project Location:	Eddy Co., NM								1 00	ordie:		N	ZIP:	88220	ide	151	21			_
Sampler Name: M	a# Taylor								Ph	Phone #:	*	Г	(432)66	(432)661-0571	ori	80	(80			
4	Matt Taylor			1					Fax #:	#					Chle	H (8	EX (			_
FOR LAB USE ONLY				П		MATRIX	찆			PR	ESE	PRESERV	SAMPLING	LING	C	TPI	ЗТЕ			
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H50333		(G)RAB				SOIL	OIL	SLUDGI	OTHER	ACID/BA	CE/CC	THER	DATE	TIME						
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PLEASE NOTE: Liability and Dan	nages, Cardinal's liability and client's Sectionius and	G	-		-	×	H				×		12/22/15	1115	×	×		1		1
analyses. All claims including those service. In no event shall Cardinal affiliates or successors arising out	analyses. All claims including those for negligence and any other cause whatsoever shall be derived whether based in contract or tort, shall be limited to the amount paid by the client for the service. In no event shall cardinal be liable for incidental or consequental damages, including without limitation, business made in writing and received by Cardinal within 30 days after completion of the applicable affiliation or successors arising out of or related to the performance of services because of cardinal properties of users.	deemed we without lin	sived unitation	im arte	w gais	hethe writin	g and lons, I	rece oss o	conti ved t	act o y Ca or b	r ton	with:	ill be limited to t in 30 days after of is incurred by clin	the amount paid by completion of the apart, its subsidiaries.	y the clie plicable	nt for the		1		L
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Mill - Wall	Time:		X	2/1	C	V	1	Usac	8	X	A			Fax Result: REMARKS:		□ Yes		No	Add'l Fax #:	
Relinquished By:	Date:	Rec	Recaived Rv	N P	5		1	•	T											_

Cool Intact
Wes Wes Sample Condition

CHECKED BY:

Please email results to Ben Arguijo, Tony Savoie, Jody Walters & Amy Ruth

Sampler - UPS - Bus - Other:

Revision 1.0

Delivered By: (Circle One)

gived By:

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 883

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

anager:	Robbie Runnels	# C #	a state of the sta				ANALYSIS REQUEST
						1	
Address: P.O. Box 301		Company	anv: BOBCO I B	9			
City: Lovington	State: NM Zip: 88260	Attn:	An	į			
Phone #: (5/5)396-2378	Fax #: (575)396-1429	Address:	cn	rland			
Project #:	Project Owner: BOPCO, LP			T. C. C.			
Project Name: Fenton 7 Fed #1			Cariso		1)	В)	
ž		State:	NM Zip: 8	88220 e	_	211	
1 7		Phone #:	<b>#</b> : (432)661-0571	orid	301	802	
Sampler Name: Matt Taylor		Fax #:			_	X (	
FOR LAB USE ONLY		MATRIX DDG	DDECEDY		_	ΓE	
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER	SLUDGE OTHER:	OTHER:	TIME	Т	В	
11 FLOOR# 1	#1 G 1			1230 x	×	<	
FLOOR# 2	#2 G 1	×	X 12/22/15	+	× ;	< >	
FLOOR# 3	G 1	×	X 12/22/15	-	×	×	

Sample Condition
Cool Intact
Tyes 2 Yes
No No

CHECKED BY:

Please email results to Ben Arguijo, Tony Savoie, Jody Walters & Amy Ruth

Sampler - UPS - Bus - Other:

Revision 1.0

Delivered By: (Circle One)

Relinquished By

Date: 12-30-5

Phone Result: Fax Result: REMARKS:

□ Yes

O No

Add'l Phone #: Add'l Fax #:

Received By:

Relinquished By: