## **Closure Report**

Site Description				
Site Name:	Anderson 35 #003H			
Company:	Oxy Permian Ltd.			
Legal Description:	U/L L, Section 35, T21S, R32E			
County:	Lea County, NM			
GPS Coordinates:	N 32.43260° W 103.65308°			

## **Release Data**

Date of Release:	10/27/2016
Type of Release:	Oil and produced water
Source of Release:	Stuffing box packing on well head blew out
Volume of Release:	3 bbls oil, 7 bbls produced water
Volume Recovered:	5 bbls total

Remediation Specifications					
Remediation Parameters:	Excavate the entire spill area to a depth of 6 inches, except in the areas of SP1 and SP2—excavate to a depth of 2 ft. Obtain bottom confirmation samples in the areas of SP1 & SP2. Also obtain bottom confirmation samples after 6" removal of contaminated soil @ SP3 and analyze for BTEX, TPH, and Cl.				
Remediation Activities:	06/30/2017 to 0	7/07/2017			
Plan Sent to OCD:	01/28/2017	Email from Cliff Brunson to Kristen Lynch			
OCD Approval of Plan:	03/06/2017 Email from Olivia Yu to Cliff Brunson				
Plan Sent to BLM:	n/a n/a				
BLM Approval of Plan:	n/a	n/a			

Supporting Documentation					
Initial C-141	Signed 11/02/2016				
Final C-141	Upon Completion				
Site Diagram	November 2016				
Groundwater Plot	225'-250'				
TOPO Maps	November 2016				
Lab Summary	11/03/2016 and 07/07/2017				
Lab Analysis	11/03/2016 and 07/07/2017				
Correspondence	Request and approval of remediation plan via email				

## **Request for Closure**

Based on the completion of the remediation plan, Oxy requests closure approval from NMOCD.

Wade Dittrich, Environmental Coordinator

08/14/2017

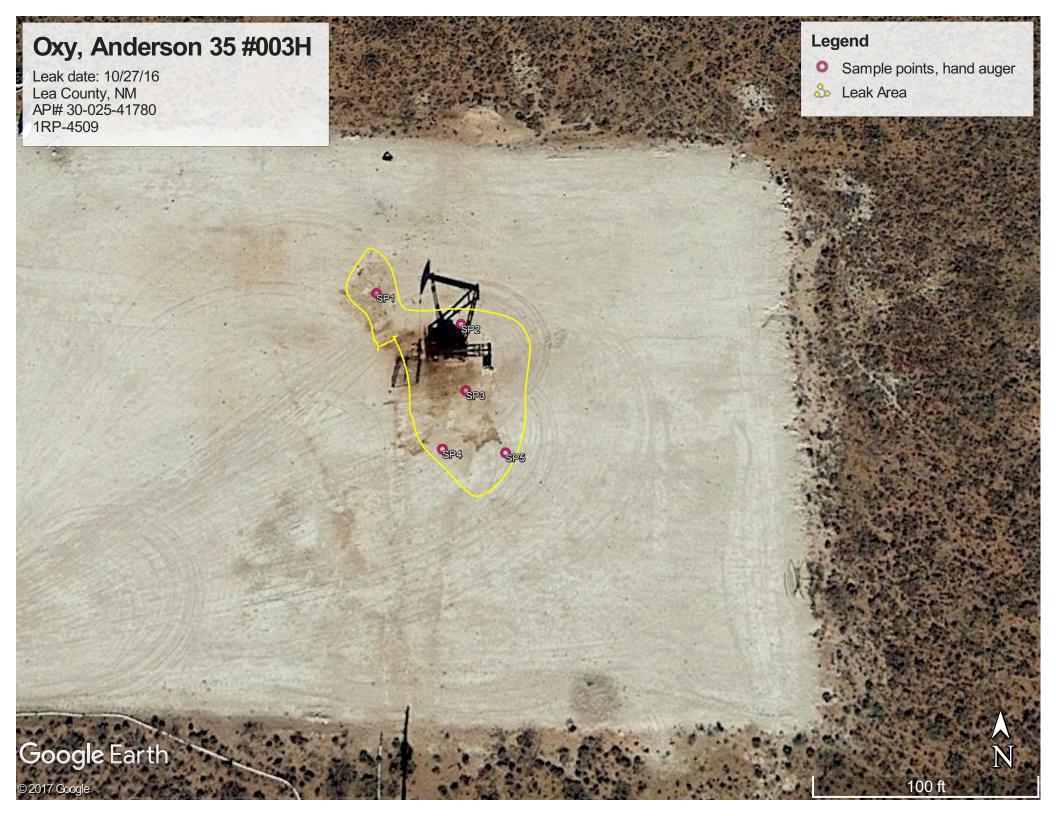
State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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.

1220 S. St. Fran	cis Dr., Santa	1 Fe, NM 87505	i			e, NM 875						
Release Notification and Corrective Action												
						<b>OPERA</b>	FOR	X	Initia	al Report		Final Report
Name of Co	mpany	Oxy Permia	n Ltd.		T	Contact Casey Summers						
-		94, Houston	•	10		Telephone No. (575) 513-8289						
Facility Nar	ne Ande	erson 35 #00	<u>3H</u>			Facility Type Well						
Surface Ow	ner Jimn	ny Mills		Mineral C	)wner			I	API No	. 30-025-	41780	
				LOCA	TIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West	t Line	County		
L	35	215	32E							Lea Coun	ty, NM	
				Latitude <u>N 32.4</u>	3260°	Longitu	de W_103.6530	8°				
			-									
NATURE OF RELEASE           Type of Release         Oil and Produced water         Volume of Release 3 bbls oil,         Volume Recovered 5 bbls												
							luced water					
Source of Re			king on we	ell head blew out		10/27/2016		e Da	ate and	Hour of Dis	covery	
Was Immediate Notice Given?			If YES, To Whom? J Kristen Lynch- NMOCD									
By Whom? Kathy@ BBC International, Inc.			Date and Hour 10/28/2016 @ 3:36 pm									
Was a Water	Was a Watercourse Reached?			If YES, Volume Impacting the Watercourse.								
Describe Cau	If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* The stuffing box packing on the well head blew out causing a release of 3 bbls of oil and 7 bbls of produced water. A vacuum truck recovered 5 bbls of							15 bbls of				
fluids and the		-										
Describe Are	a Affected	and Cleanup A	Action Tal	ken.*								
The affected NMOCD.	area is appr	oximately 80	' x 45' on	location around th	ne well l	head. Remed	iation will be com	pleted in ac	cordan	ce with a pl	an appr	oved by
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 CON	SERVA	<u>FION</u>	DIVISIO	<u>)N</u>			
Signature: Printed Name	e: Casey	Summers				Approved by	Environmental S	pecialist:				
Title: NM	Environme	ntal Advisor				Approval Da	le:	Exp	iration	Date:		
E-mail Addro		y_Summers@	oxy.com			Conditions o	f Approval:			Attached		
Date:	-2-1	) (	Dhone	(575) 513-82	980							

\* Attach Additional Sheets If Necessary



Oxy, Anderson 35 #003H

Sample points, hand auger

SP1, N 32.43265 W-103.65307

SP2, N 32.43261 W-103.65293

SP3, N 32.43251 W-103.65292

SP4, N 32.43243 W-103.65296

SP5, N 32.43243 W-103.65286

Oxy, Anderson 35 #003H U/L L, Section 35, T21S, R32E Groundwater: 225'-250'



?

# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

#### UTMNAD83 Radius Search (in meters):

Easting (X): 626736

**Northing (Y):** 3589283

**Radius:** 1700

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/14/17 11:50 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

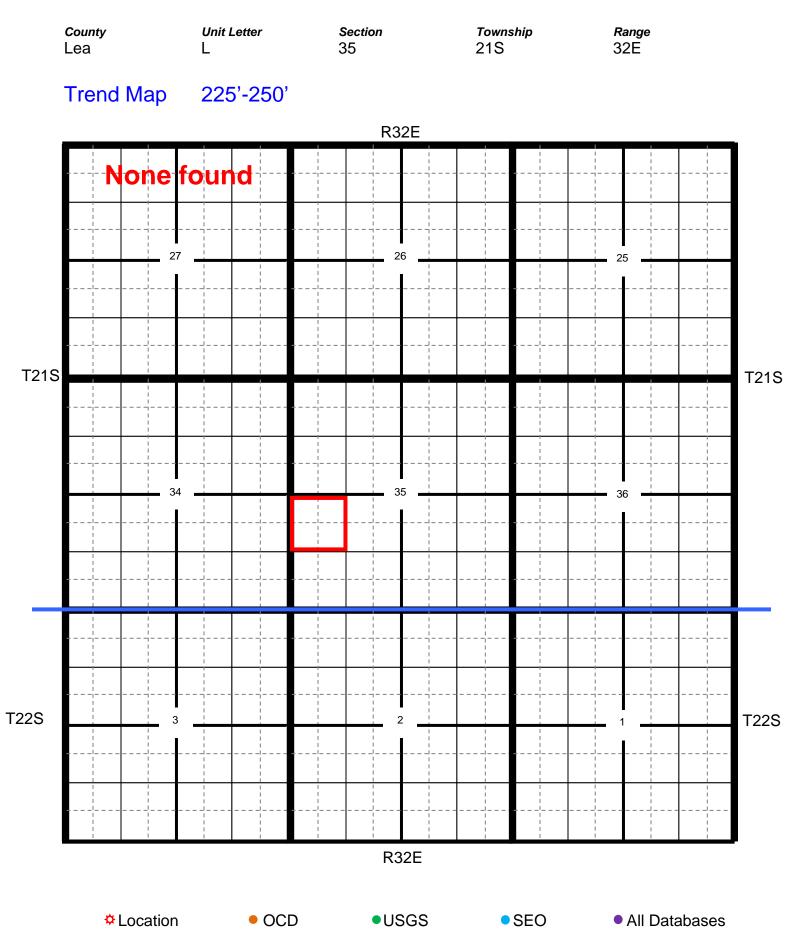
UTM Conversion Tool

		2
	Public Land Survey System (PLSS)	
	Q64: Q16: NW Q4: SW Sec: 35 Tws: 21S Rng: 32E	
2		
	State Plane Coordinate System - NAD27	
	X: ft Y: ft Zone:	
		į
2	State Plane Coordinate System - NAD83	2
	X: ft Y: ft Zone:	l
	Degrees/Minutes/Seconds	
	Degrees/Minutes/Seconds Longitude (X): Degrees: ° Minutes: ' Seconds: "	8
3		
	Latitude (Y): Degrees: ° Minutes: ' Seconds: "	Ś
	UTM - NAD27	
5	Easting (X): mtrs Northing (Y): mtrs Zone:	
	SUBMIT	
	All Conversion Results are displayed as <u>NAD 1983 UTM Zone 13</u>	
2	Easting (X): 626736.0 mtrs Northing (Y): 3589283.0 mtrs	2
	~~ Please keep screen open to copy UTM values for Reports. ~~	
	The action of the shirt all the shirt all the shirt all the	



**Groundwater Plot** 

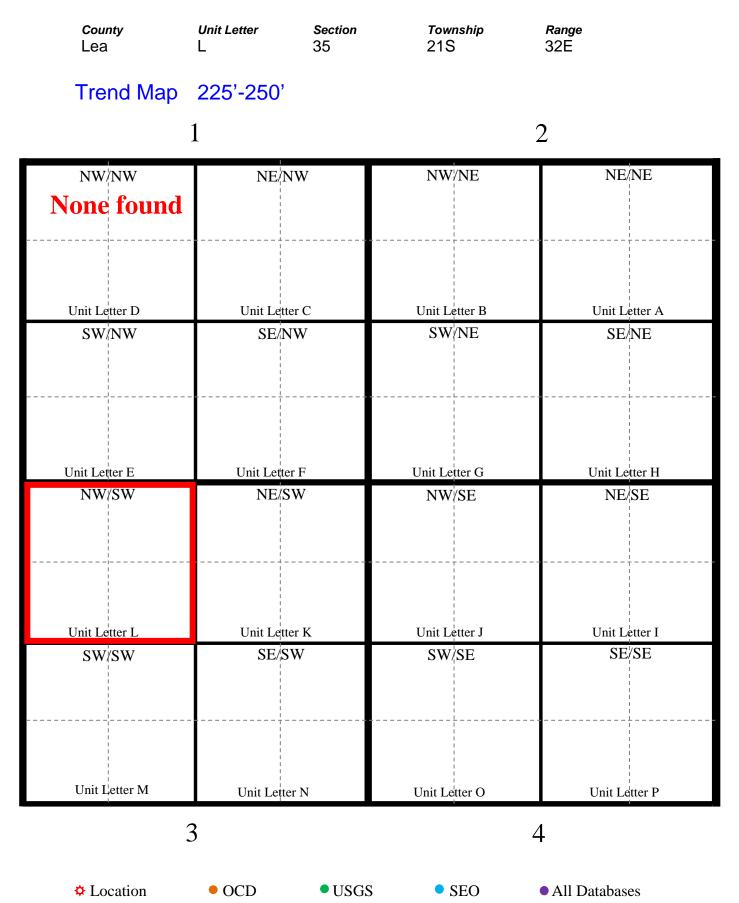
## Oxy Anderson 35 #003H



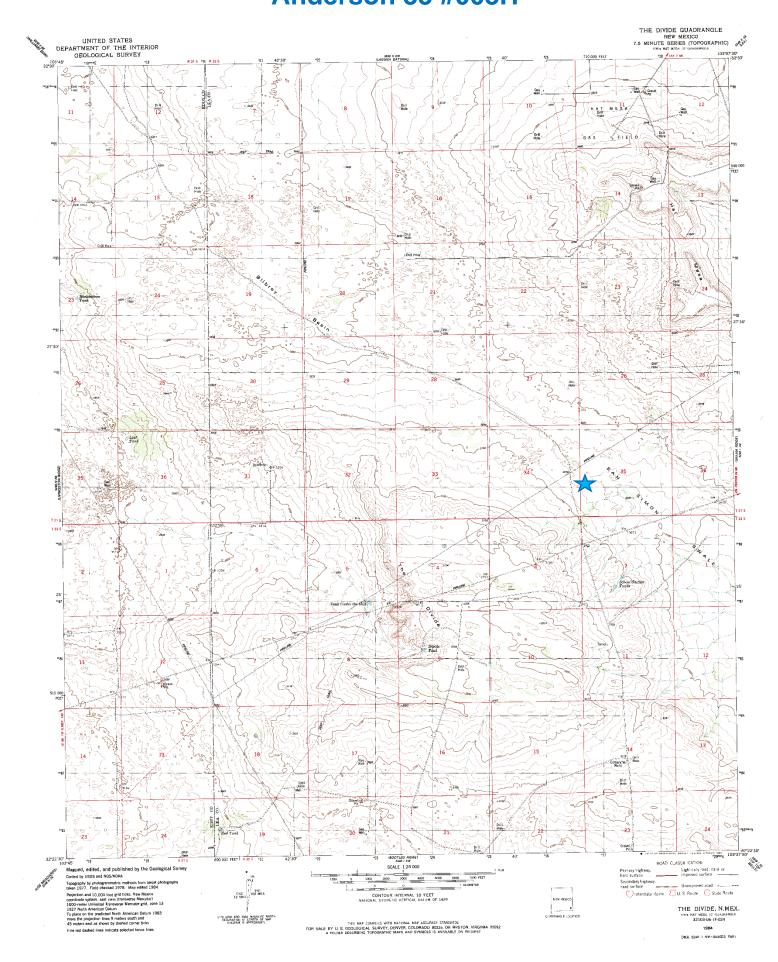


Section Quarters

## Oxy Anderson 35 #003H

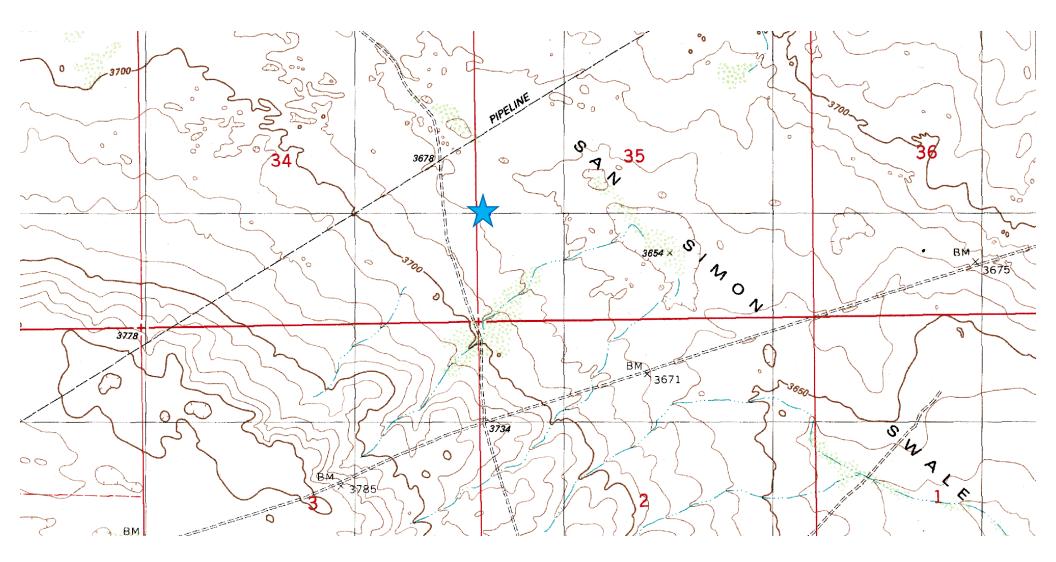


Oxy Anderson 35 #003H





# **Anderson 35 #003H**



#### Laboratory Analytical Results Summary Anderson 35 #003H

		Sample	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'
Analyte	Method	Date	11/3/16	11/3/16	11/3/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a
Chloride	SM4500CI-B		336	256	544
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a

		Sample	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'
Analyte	Method	Date	11/3/16	11/3/16	11/3/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	n/a	n/a
Chloride	SM4500CI-B		304	224	560
GRO	TPH 8015M		<10.0	n/a	n/a
DRO	TPH 8015M		11.7	n/a	n/a

		Sample	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'
Analyte	Method	Date	11/3/16	11/3/16	11/3/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		0.722	<0.050	n/a
Toluene	BTEX 8021B		14.4	0.068	n/a
Ethylbenzene	BTEX 8021B		2.11	<0.050	n/a
Total Xylenes	BTEX 8021B		7.11	<0.150	n/a
Total BTEX	BTEX 8021B		24.3	<0.300	n/a
Chloride	SM4500CI-B		8260	128	128
GRO	TPH 8015M		178	<10.0	n/a
DRO	TPH 8015M		11100	<10.0	n/a

		Sample	SP4 @ SURFACE	SP4 @ 1'	SP4 @ 2'
Analyte	Method	Date	11/3/16	11/3/16	11/3/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		< 0.050	n/a	n/a
Toluene	BTEX 8021B		< 0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		< 0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	n/a	n/a
Chloride	SM4500CI-B		80	128	64
GRO	TPH 8015M		<10.0	n/a	n/a
DRO	TPH 8015M		369	n/a	n/a

		Sample	SP5 @ SURFACE	SP5 @ 1'	SP5 @ 2'
Analyte	Method	Date	11/3/16	11/3/16	11/3/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		< 0.050	<0.050	n/a
Toluene	BTEX 8021B		< 0.050	< 0.050	n/a
Ethylbenzene	BTEX 8021B		< 0.050	< 0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		< 0.300	< 0.300	n/a
Chloride	SM4500CI-B		96	128	64
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		355	<10.0	n/a

#### Laboratory Analytical Results Summary Anderson 35 #003H

		Sample	SP1 @ BOTTOM
Analyte	Method	Date	7/7/17
			mg/Kg
Chloride	SM4500CI-B		16

		Sample	SP2 @ BOTTOM
Analyte	Method	Date	7/7/17
			mg/Kg
Chloride	SM4500CI-B		32

			SP3 @
		Sample	BOTTOM
Analyte	Method	Date	7/7/17
			mg/Kg
Benzene	BTEX 8021B		< 0.050
Toluene	BTEX 8021B		< 0.050
Ethylbenzene	BTEX 8021B		<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500CI-B		64
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0



November 10, 2016

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: ANDERSON 35 #3H

Enclosed are the results of analyses for samples received by the laboratory on 11/04/16 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 1 @ SURFACE (H602494-01)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	11/07/2016	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	11/08/2016	ND	178	89.2	200	0.976	
DRO >C10-C28	<10.0	10.0	11/08/2016	ND	177	88.6	200	4.03	
Surrogate: 1-Chlorooctane	72.1 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	77.3 9	28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 1 @ 1' (H602494-02)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	73.6-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	<10.0	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	91.1	% 35-147	7						

## Sample ID: SP 1 @ 2' (H602494-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	11/07/2016	ND	400	100	400	0.00	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 2 @ SURFACE (H602494-04)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	11.7	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	92.8	% 35-147	7						
Surrogate: 1-Chlorooctadecane	95.1	% 28-171							

## Sample ID: SP 2 @ 1' (H602494-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	11/07/2016	ND	400	100	400	0.00	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 2 @ 2' (H602494-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	11/07/2016	ND	400	100	400	0.00	

### Sample ID: SP 3 @ SURFACE (H602494-07)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.722	0.100	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	14.4	0.100	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	2.11	0.100	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	7.11	0.300	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	24.3	0.600	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	120	% 73.6-14	0						
Chloride, SM4500CI-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8260	16.0	11/07/2016	ND	400	100	400	0.00	

TPH 8015M	mg	mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	178	50.0	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	11100	50.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	122	% 35-147	7						
Surrogate: 1-Chlorooctadecane	428	% 28-171							

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 3 @ 1' (H602494-08)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	0.068	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	<10.0	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	99.2 %	35-147							

## Sample ID: SP 3 @ 2' (H602494-09)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/07/2016	ND	400	100	400	0.00	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 4 @ SURFACE (H602494-10)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	369	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	105 %	6 35-147	7						
	113 %	6 28-171							

### Sample ID: SP 4 @ 1' (H602494-11)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/07/2016	ND	400	100	400	0.00	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 4 @ 2' (H602494-12)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/07/2016	ND	400	100	400	0.00	

## Sample ID: SP 5 @ SURFACE (H602494-13)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 %	6 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	355	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	93.5	% 35-147	,						
Surrogate: 1-Chlorooctadecane	102	% 28-171							

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	11/04/2016	Sampling Date:	11/03/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	ANDERSON 35 #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MILLS RANCH		

#### Sample ID: SP 5 @ 1' (H602494-14)

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	11/10/2016	ND	2.14	107	2.00	0.796	
Toluene*	<0.050	0.050	11/10/2016	ND	2.19	110	2.00	1.56	
Ethylbenzene*	<0.050	0.050	11/10/2016	ND	2.12	106	2.00	2.04	
Total Xylenes*	<0.150	0.150	11/10/2016	ND	6.45	108	6.00	1.98	
Total BTEX	<0.300	0.300	11/10/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/07/2016	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	11/08/2016	ND	172	86.2	200	0.228	
DRO >C10-C28	<10.0	10.0	11/08/2016	ND	179	89.4	200	0.918	
Surrogate: 1-Chlorooctane	80.6 9	% 35-147							
		28-171							

### Sample ID: SP 5 @ 2' (H602494-15)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/07/2016	ND	400	100	400	0.00	

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by 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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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Company Name: BBC International, Project Manager: Cliff Brunson	nal, Inc.	P.O. #:	ANALTOIS	
Address: P.O. Box 805		Company:	1	
city: Hobbs	State: NM Zip: 88241	Attn: Lunner		
Phone #: 575-397-6388	Fax #: 575-397-0397	Address:		
Project #:	Project Owner: OXY	City:		
Project Name: Annih Do A	\$35 #3H	State: Zip:		• •
Project Location: Mill E	Such	Phone #:	14	
Sampler Name: 1/10			EO,1.	
FOR LAB USE ONLY	, MATRIX	PRESERV. SAMPLING		
Lab I.D. Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : DATE	<i>B</i> ;	
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PLEASE NOTE: Liability and Damages. Cardinal's liability and canages cardinal strateging and any othe analyses. All claims including those for negligence and any othe service. In no event shall Cardinal be liable for incidental or con-	rands liability and clients exclusive reliable deemed valved unless mode in writing and received by Cardinal within 30 days after completion of the applicable (gence and any other cause writischever shall be deemed valved unless mode in writing and received by Cardinal within 30 days after completion of the applicable for incidental or consequential damages, including without limitation, business interruptions, loss of use of profits incurred by client, its subsidiares. for incidental or consequential damages, including without limitation, business interruptions, loss of use of profits incurred by client, its subsidiares.	corp to any cause using viscous made in writing and received by Candinal within 30 days after completion of the a shall be deemed worked unless made in writing and received by Candinal within 30 days after completion of the including without limitation, business interruptions, loss of use, or loss of profits incurate participations to the including without limitation, business interruptions, loss of use, or loss of profits incurate participations of the attraction of the attract participations of the attraction of the attract	rithe applicable cliaries.	
Affiliates or successory arising out of or related to the performance Relinquished By:	Date: 1. Received By:	Phone Result: Fax Result:	esult:	v#:
Relinquished By:	Time 30 1000 J	LONDON REMARKS:		
	Time:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	- 5.46 Sample Condition	ition CHECKED BY:		
† Cardinal cannot accept verba	Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476	n 505-393-2476	Contraction of the second	

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Page 11 of 12

shall Cardinal b rys arising out of By: d By: JPS - Bt		101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476 Company Name: RRC International Inc
Adding without limitation, business interruptions, loss of uses, or loss of points including without limitations or otherwise.	Iff Brunson     P.O. #:       805     State: NM Zp: 88241     Attmmy       3388     Fax #: 575-397-0397     Address:       Project Owner:     V     City       Project Owner:     V     State:       Sample I.D.     Bost     Fax #:       Sample I.D.     GROUNDWATER     Phone #:       Project Owner:     V     State:       Z     Project Owner:     V       Sample I.D.     GROUNDWATER     Fax #:       Sample I.D.     GROUNDWATER     Fax #:       Sample I.D.     City     Patter       Q     H     GROUNDWATER       SoliL     SLUDGE     DATE       TIME     Q     H       SoliL     SLUDGE     DATE       Z     Q     H       SoliL     SLUDGE     DATE       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q     H       Z     Q       Z     Q	88240 2476
ors or otherweat Phone Result: <u>Yes</u> <u>No</u> Add'I Phone #: Fax Result: <u>Yes</u> <u>No</u> Add'I Fax #: REMARKS:	G B B B B B B B B B B B B B B B B B B B	ANALYSIS REQUEST

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HTS



July 10, 2017

Cliff Brunson BBC International, Inc. P.O. Box 805

Hobbs, NM 88241

RE: ANDERSON #35

Enclosed are the results of analyses for samples received by the laboratory on 07/10/17 10:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	07/10/2017	Sampling Date:	07/07/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	ANDERSON #35	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MILLS RANCH		

#### Sample ID: SP 1 @ BOTTOM (H701766-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/10/2017	ND	448	112	400	3.64	

#### Sample ID: SP 2 @ BOTTOM (H701766-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/10/2017	ND	448	112	400	3.64	

### Sample ID: SP 3 @ BOTTOM (H701766-03)

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	07/10/2017	ND	2.27	114	2.00	1.10	
Toluene*	<0.050	0.050	07/10/2017	ND	2.11	106	2.00	1.07	
Ethylbenzene*	<0.050	0.050	07/10/2017	ND	2.15	108	2.00	0.727	
Total Xylenes*	<0.150	0.150	07/10/2017	ND	6.42	107	6.00	0.145	
Total BTEX	<0.300	0.300	07/10/2017	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 72-148							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/10/2017	ND	448	112	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	07/10/2017	Sampling Date:	07/07/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	ANDERSON #35	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MILLS RANCH		

#### Sample ID: SP 3 @ BOTTOM (H701766-03)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	BS % Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/10/2017	ND	194	97.1	200	1.53	
DRO >C10-C28	<10.0	10.0	07/10/2017	ND	200	100	200	4.15	
Surrogate: 1-Chlorooctane	91.6	% 28.3-16	4						
Surrogate: 1-Chlorooctadecane	89.1	% 34.7-15	7						

#### **Cardinal Laboratories**

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Celez D. Keine

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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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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Yu, Olivia, EMNRD	
Cliff Brunson; Casey_Summers@oxy.com; Jennifer_Hudgens@oxy.com	
<u>Oberding, Tomas, EMNRD; "Jennifer Gilkey"; Ken Swinney; "Kathy Purvis"</u>	
RE: OXY - Anderson 35 #003H - Remediation Plan	
Monday, March 6, 2017 8:24:30 AM	

Dear Mr. Brunson:

Please address these concerns regarding the delineation workplan for 1RP-4509.

- 1) According to the unscaled drawing, the reported 10 bbls release covered a larger area than expected given the analytical results. Please confirm dimensions of contaminated area on scaled digital map.
- 2) There appears to be pooling at SP 1 and SP2. Chloride levels increase back up at 2ft. bgs. Excavate to 2 ft. bgs at SP1 and SP2 and obtain bottom confirmation samples.
- 3) Obtain bottom confirmation samples after 6" removal of contaminated soil at SP3 for BTEX, TPH, and chlorides.

Olivia Yu Environmental Specialist NMOCD, District I <u>Olivia.yu@state.nm.us</u> 575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Cliff Brunson
Sent: Saturday, January 28, 2017 6:45:00 PM (UTC-07:00) Mountain Time (US & Canada)
To: Lynch, Kristen, EMNRD
Cc: Casey Summers; Jennifer Hudgens; Ken Swinney; Jennifer Gilkey; Kathy Purvis
Subject: OXY - Anderson 35 #003H - Remediation Plan

Kristen,

This e-mail is to confirm our discussion concerning the remediation plan for the OXY Anderson 35 #003H release. I have attached the information packet that we used in our discussion on 2/25/17 with a cover page describing the remediation plan that we agreed upon.

If you would please reply back via e-mail with your concurrence on this plan, it would be greatly appreciated.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS President BBC International, Inc. World-Wide Environmental Specialists Mailing Address: P. O. Box 805 Hobbs, NM 88241-0805 USA Shipping Address: 1324 W. Marland St. Hobbs, NM 88240 USA Phone: (575) 397-6388 Fax: (575) 397-0397 E-Mail: cbrunson@bbcinternational.com



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