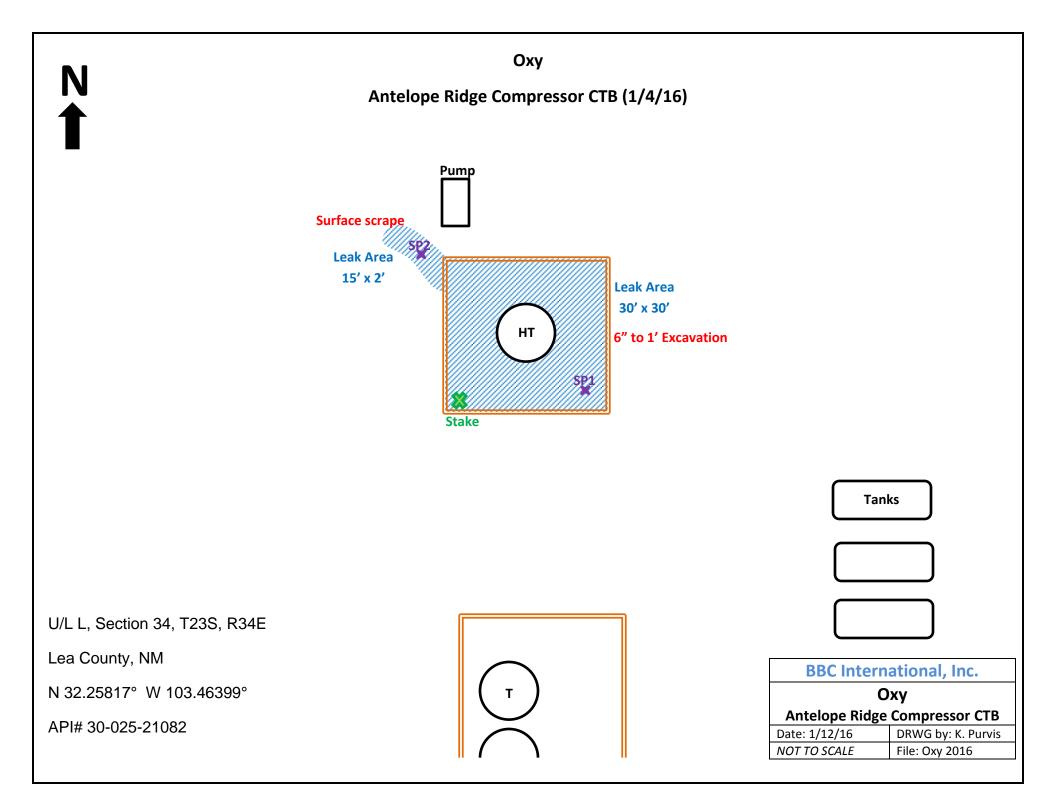


# **OXY – ANTELOPE RIDGE COMPRESSOR CTB**

# **REMEDIATION PLAN**

OXY will excavate the spill area as depicted on the following site diagram. The spill area near sample point SP1 will be excavated to a depth of 6 inches to 1 foot. In the area of sample point SP2 the area will be surface scraped. The entire site will be backfilled with clean soil.

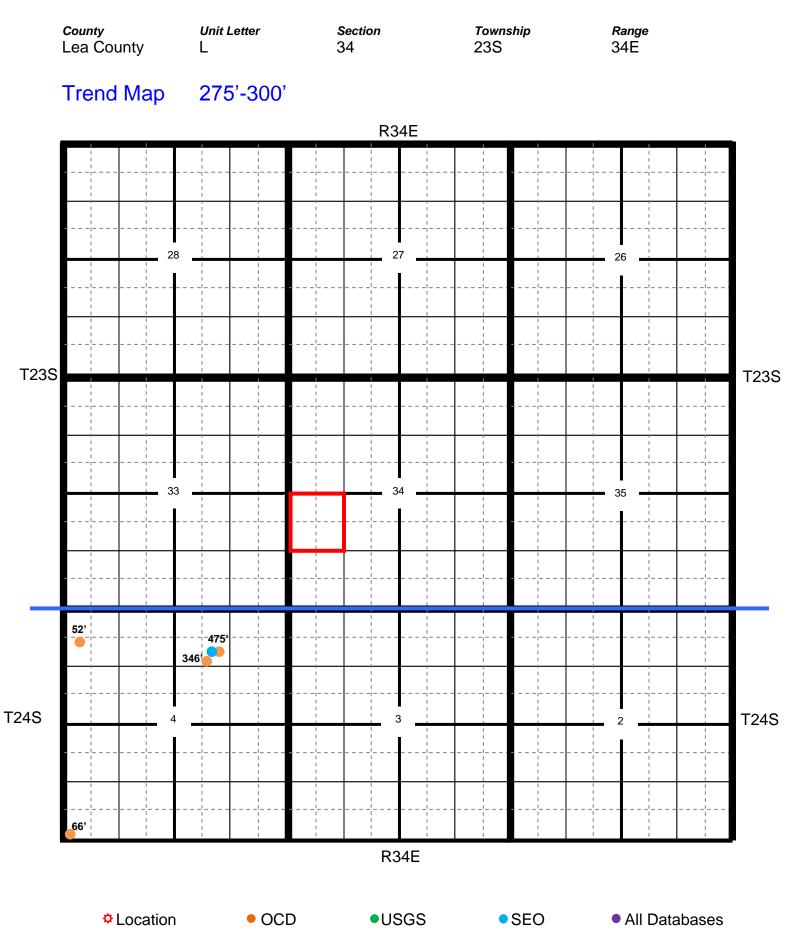
All excavated materials will be disposed of at an NMOCD-approved disposal facility.





**Groundwater Plot** 

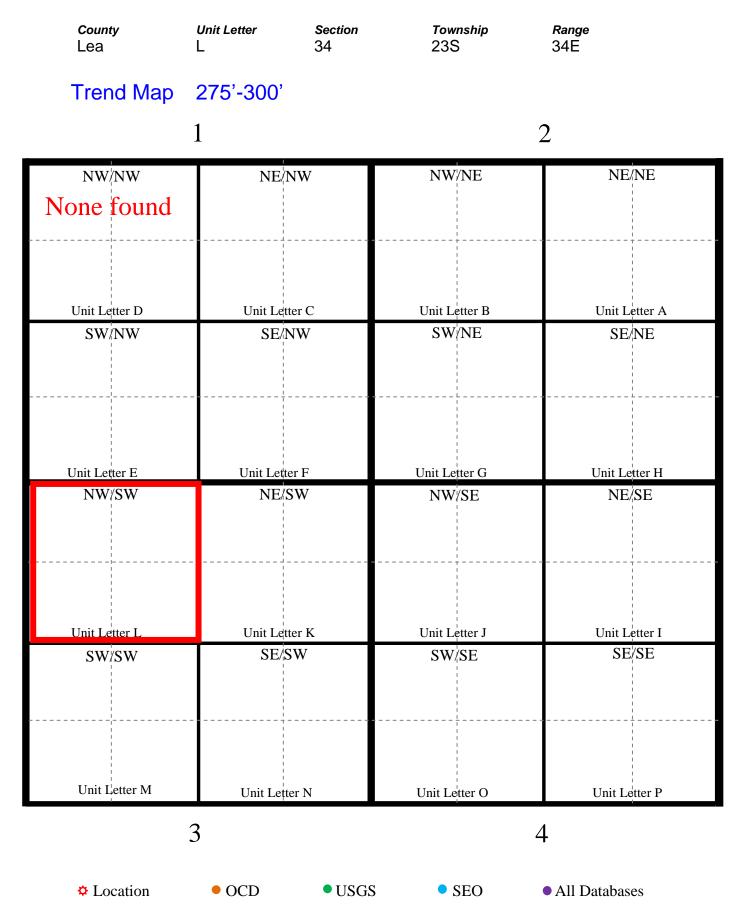
# Oxy Antelope Ridge Compressor CTB





Section Quarters

# Oxy Antelope Ridge Compressor CTB



### Laboratory Analytical Results Summary Antelope Ridge Compressor Battery

		Sample	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'
Analyte	Method	Date	2/10/16	2/10/16	2/10/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		< 0.050	<0.200	< 0.050
Toluene	BTEX 8021B		0.1	<0.200	<0.050
Ethylbenzene	BTEX 8021B		< 0.050	<0.200	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.600	<0.150
Total BTEX	BTEX 8021B		< 0.300	<1.20	<0.300
Chloride	SM4500CI-B		13100	2080	128
GRO	TPH 8015M		<10.0	<10.0	<10.0
DRO	TPH 8015M		25.4	<10.0	<10.0

		Sample	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'
Analyte	Method	Date	2/10/16	2/10/16	2/10/16
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		< 0.050	<0.050	<0.050
Toluene	BTEX 8021B		< 0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		< 0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		< 0.300	<0.300	<0.300
Chloride	SM4500CI-B		864	112	128
GRO	TPH 8015M		<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	10.2	<10.0



February 16, 2016

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

**RE: ANTELOPE RIDGE** 

Enclosed are the results of analyses for samples received by the laboratory on 02/10/16 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 1 @ SURFACE (H600314-01)

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	02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	0.100	0.050	02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.050	0.050	02/15/2016	ND	1.83	91.6	2.00	0.717	
Total Xylenes*	<0.150	0.150	02/15/2016	ND	5.64	94.0	6.00	0.0591	
Total BTEX	<0.300	0.300	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	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	13100	16.0	02/15/2016	ND	416	104	400	3.77	
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	02/12/2016	ND	209	104	200	1.45	
DRO >C10-C28	25.4	10.0	02/12/2016	ND	194	96.9	200	3.97	
Surrogate: 1-Chlorooctane	85.7	% 35-147							

### Cardinal Laboratories

\*=Accredited Analyte

Celez 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 1 @ 1' (H600314-02)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	<0.200	0.200	02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.200	0.200	02/15/2016	ND	1.83	91.6	2.00	0.717	
Total Xylenes*	<0.600	0.600	02/15/2016	ND	5.64	94.0	6.00	0.0591	
Total BTEX	<1.20	1.20	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 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	2080	16.0	02/15/2016	ND	416	104	400	3.77	
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	02/12/2016	ND	209	104	200	1.45	
DRO >C10-C28	<10.0	10.0	02/12/2016	ND	194	96.9	200	3.97	
Surrogate: 1-Chlorooctane	88.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	98.2	% 28-171							

### Cardinal Laboratories

\*=Accredited Analyte

Celez 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 1 @ 2' (H600314-03)

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	02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	<0.050	0.050	02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.050	0.050	02/15/2016	ND	1.83	91.6	2.00	0.717	
Total Xylenes*	<0.150	0.150	02/15/2016	ND	5.64	94.0	6.00	0.0591	
Total BTEX	<0.300	0.300	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	6 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	128	16.0	02/15/2016	ND	416	104	400	3.77	
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	02/12/2016	ND	209	104	200	1.45	
DRO >C10-C28	<10.0	10.0	02/12/2016	ND	194	96.9	200	3.97	
Surrogate: 1-Chlorooctane	83.1	35-147							
Surrogate: 1-Chlorooctadecane	92.5	28-171							

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\*=Accredited Analyte

Celez 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 2 @ SURFACE (H600314-04)

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	02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	<0.050	0.050	02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.050	0.050	02/15/2016	ND	1.83	91.6	2.00	0.717	
Total Xylenes*	<0.150	0.150	02/15/2016	ND	5.64	94.0	6.00	0.0591	
Total BTEX	<0.300	0.300	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 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	864	16.0	02/15/2016	ND	416	104	400	3.77	
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	02/12/2016	ND	215	108	200	3.48	
DRO >C10-C28	<10.0	10.0	02/12/2016	ND	196	98.1	200	7.87	
Surrogate: 1-Chlorooctane	80.5	% 35-147							
Surrogate: 1-Chlorooctadecane	89.6	% 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 2 @ 1' (H600314-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	<0.050	0.050	02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.050	0.050	02/15/2016	5/2016 ND		91.6	2.00	0.717	
Total Xylenes*	<0.150	0.150	02/15/2016	/15/2016 ND		94.0	6.00	0.0591	
Total BTEX	<0.300	0.300	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 %	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	112	16.0	02/15/2016 ND		416	104	400	3.77	
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	02/12/2016	ND	215	108	200	3.48	
DRO >C10-C28	10.2	10.0	02/12/2016	ND	196	98.1	200	7.87	
Surrogate: 1-Chlorooctane	80.7	% 35-147	7						
Surrogate: 1-Chlorooctadecane	91.3	% 28-171							

### Cardinal Laboratories

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Celez 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:	02/10/2016	Sampling Date:	02/10/2016
Reported:	02/16/2016	Sampling Type:	Soil
Project Name:	ANTELOPE RIDGE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: SP 2 @ 2' (H600314-06)

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		02/15/2016	ND	2.08	104	2.00	0.742	
Toluene*	<0.050 0.050		02/15/2016	ND	2.02	101	2.00	0.253	
Ethylbenzene*	<0.050 0.050		02/15/2016	2016 ND		91.6	2.00	0.717	
Total Xylenes*	<0.150	0.150	02/15/2016	02/15/2016 ND		94.0	6.00	0.0591	
Total BTEX	<0.300	0.300	02/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	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	128	16.0	02/15/2016 ND		416	104	400	3.77	
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	02/12/2016	ND	215	108	200	3.48	
DRO >C10-C28	<10.0	10.0	02/12/2016	ND	196	98.1	200	7.87	
Surrogate: 1-Chlorooctane	81.7	% 35-147							
Surrogate: 1-Chlorooctadecane	79.6	% 28-171							

## **Cardinal Laboratories**

## \*=Accredited Analyte

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

#### Cardinal Laboratories

### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Mate:     Index:     Referred By:       Relinquished By:     Time:     Time:       Date:     Date:     Received By:       Delivered By:     (Circle One)     Time:       Sampler - UPS - Bus - Other:     D. 80     Sample Condition       + Carrinal connection     Other:     D. 80	Damages. Cardinal's liability and client those for negligence and any other ca- trinal te liable for inclination crosses out of or related to the performance of	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sp2 D Surface		1 / 7 2	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE DTHER : ACID/BASE: CE / COOL DTHER :	MATRIX PRESERV.	Project Location: / / / Phone #:	State.	5-397-0397	State: NM Zip: 88241	O. Box 805	Unson P.o. #	
Phone Result:     Yes     No     Add'l Phone #:       Fax Result:     Yes     No     Add'l Fax #:       REMARKS:	louri paid by the client for the applicable formed by client, las subsidiaries,	1715 / / / / / / / / / / / / / / / / / / /		6.1		DATE TIME CL- TPH BTEX	SAMPLING							ANAI VSIS

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.

Release Notification and Corrective Action														
OPERATOR									🛛 Initial Report 🔲 Final Re					
Name of Co	mpany	Oxy Permia		Contact Casey Summers										
		ive, Midland		Telephone No. (575) 513-8289										
Facility Name Antelope Ridge Compressor CTB						Facility Type Battery								
Surface Owner State Mineral Owner									API No	. 30-025-	2 <u>1</u> 082			
		LEASE												
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/\	West Line					
L	34	23\$	34E						Lea County, NM					
	-		]	Latitude <u>N 32.2</u>	25817 <sup>9</sup>	Longitu	de <u>W 103.4639</u>	9°						
						OF REL		<u> </u>						
Type of Rele	ase Oil a	nd produced v	vater		UKE	-	Release 1 bbl o	il,	Volume F	Recovered				
		-					duced water		45 bbls					
Source of Re	lease Fro	zen 4" steel li	ne to heat	er treater		Date and H	lour of Occurrenc	e	Date and	Hour of Dis	соvегу	( 		
Was Immedi	ate Notice (			No 🗌 Not R	equired	If YES, To Kellie Ione	Whom? es, Jamie Keyes-N	мост						
By Whom?	Jennifer G	ilkey @ BBC					lour 01/05/201							
Was a Water		ched?					olume Impacting							
		pacted, Descr	Yes 🛛											
	steel line to			n Taken.* I 1 bb1 of oil and 1	59 bbls o	of produced w	vater onto the gro	und. A	vacuum tru	ck recovere	d 45 bł	ols of fluids		
	-	-	Action Tol	· *										
Describe Area Affected and Cleanup Action Taken.* The affected area is approximately 30' x 30' centrally located around the heater treater on the pad. Remediation will be completed in accordance with a remediation plan approved by NMOCD.										nce with a				
regulations a public health should their o or the enviro	Il operators or the envi operations f nment. In a	are required to ronment. The nave failed to	o report a acceptan adequately OCD accep	e is true and comp nd/or file certain ce of a C-141 rep y investigate and ptance of a C-141	release no ort by the remediate	otifications a e NMOCD m e contaminati	nd perform correct arked as "Final R ion that pose a the re the operator of	ctive act leport" ( reat to g respons	tions for rel does not rel round wate ibility for c	eases which ieve the ope r, surface w compliance y	may e rator o ater, hu with an	ndanger of liability uman health		
	1 //						<u>OIL CON</u>	SERV	ATION	DIVISIO	<u>DN</u>			
Signature:	174													
Printed Nam	e: Casey	Summers				Approved by	Environmental S	pecialis	st: 					
Title: NM	Environme	ntal Advisor				Approval Da	te:		Expiration	Date:				
E-mail Addre	ess: <u>Case</u>	y_Summers@	oxy.com			Conditions o	f Approval:							
Date:	14-10	<u> </u>	Phone	: (575) 513-8	289	22								

\* Attach Additional Sheets If Necessary