

## Bratcher, Mike, EMNRD

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**From:** Cliff P. Brunson <cbrunson@bbcinternational.com>  
**Sent:** Saturday, September 21, 2013 4:23 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** OXY-Harroun 9-1 Battery-Remediation Plan  
**Attachments:** Remediation Packet- Harroun 9-1.pdf

Mike,

This e-mail is to confirm our conversation the other day about the remediation plan for the above referenced site. I have attached the materials that we used in our discussion. As discussed, Oxy will excavate the leak area represented by sample points SP1-SP2 to a depth of 2.5 feet. The area represented by SP3 will be excavated to a depth of 1.5 feet or as practicable. The site will then be backfilled with the appropriate type of clean soil.

If you would please e-mail your concurrence with this remediation 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  
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1324 W. Marland St.  
Hobbs, NM 88240 USA  
Phone: (575) 397-6388  
Fax: (575) 397-0397  
E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)

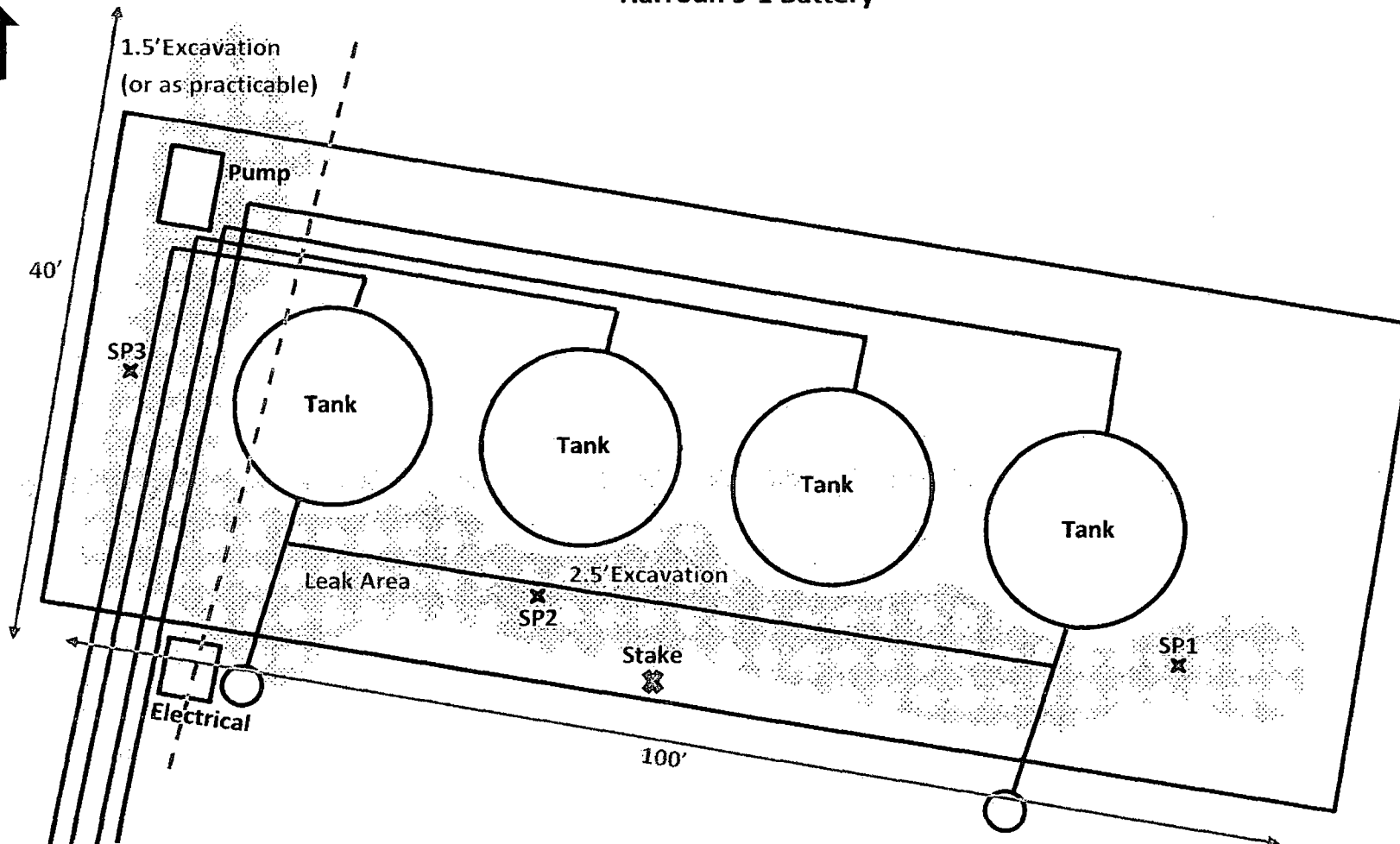
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Oxy  
Harroun 9-1 Battery



U/L P, Section 9, T24S, R29E  
530' FSL and 330' FEL  
Eddy County, NM  
N 32.22675° W 103.98229°  
API# 30-015-34997

BBC International, Inc.	
Oxy	
Harroun 9-1 Battery	
Date: 07/03/2013	DRWG by: K. Purvis
NOT TO SCALE	File: Oxy 2013



# Groundwater Plot

## Oxy Harroun 9-1 Battery

County  
Eddy

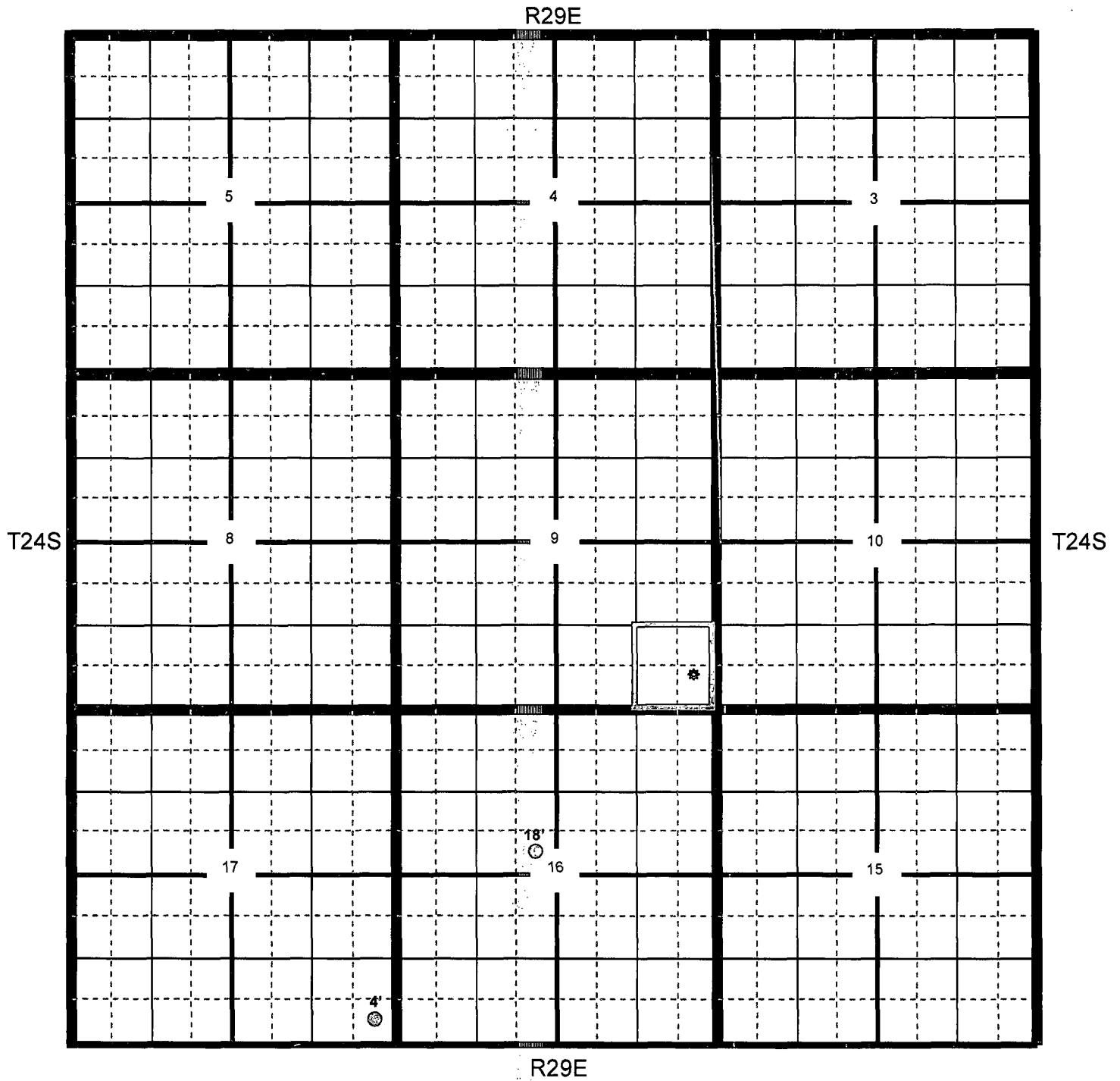
Unit Letter  
P

Section  
9

Township  
24S

Range  
29E

Trend Map 75'





Section Quarters

Oxy Harroun 9-1 Battery

County  
Eddy

Unit Letter  
P

Section  
9

Township  
24S

Range  
29E

Trend Map 75'

1

2

NW/NW NONE	NE/NW	NW/NE	NE/NE
Unit Letter D	Unit Letter C	Unit Letter B	Unit Letter A
SW/NW	SE/NW	SW/NE	SE/NE
Unit Letter E	Unit Letter F	Unit Letter G	Unit Letter H
NW/SW	NE/SW	NW/SE	NE/SE
Unit Letter L	Unit Letter K	Unit Letter J	Unit Letter I
SW/SW	SE/SW	SW/SE	SE/SE
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P

3

4

⊛ Location

⊙ OCD

○ USGS

⊙ SEO

● All Databases

**Laboratory Analytical Results Summary**  
**Harroun 9-1**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 4'
Analyte	Method	Date	7/9/13	7/9/13	7/9/13
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.100	<0.050
<b>Toluene</b>	BTEX 8021B		0.072	0.166	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		0.607	1.14	<0.050
<b>Total Xylenes</b>	BTEX 8021B		0.655	2.04	<0.150
<b>Total BTEX</b>	BTEX 8021B		1.33	3.35	<0.300
<b>Chloride</b>	SM4500Cl-B		368	928	48
<b>GRO</b>	TPH 8015M		52.6	107	<10.0
<b>DRO</b>	TPH 8015M		3060	3710	65

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 4'
Analyte	Method	Date	7/9/13	7/9/13	7/9/13
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.100	<0.050
<b>Toluene</b>	BTEX 8021B		0.109	0.138	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		0.618	0.776	<0.050
<b>Total Xylenes</b>	BTEX 8021B		1.37	1.76	<0.150
<b>Total BTEX</b>	BTEX 8021B		2.1	2.67	<0.300
<b>Chloride</b>	SM4500Cl-B		368	928	32
<b>GRO</b>	TPH 8015M		43.2	79.2	<10.0
<b>DRO</b>	TPH 8015M		2370	3640	31.6

		Sample	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'
Analyte	Method	Date	7/9/13	7/9/13	7/9/13
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.100	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		0.251	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		1.68	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		2.39	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		4.32	<0.300	<0.300
<b>Chloride</b>	SM4500Cl-B		336	48	32
<b>GRO</b>	TPH 8015M		67.1	<10.0	<10.0
<b>DRO</b>	TPH 8015M		3970	50.9	19



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

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July 15, 2013

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: HARROUN 9-1

Enclosed are the results of analyses for samples received by the laboratory on 07/11/13 11:40.

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

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 1 FT (H301621-01)**

BTEX 8021B		mg/kg		Analyzed By: DW				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/13/2013	ND	2.00	100	2.00	0.794	
Toluene*	0.072	0.050	07/13/2013	ND	1.97	98.3	2.00	0.379	
Ethylbenzene*	0.607	0.050	07/13/2013	ND	2.00	100	2.00	0.131	
Total Xylenes*	0.655	0.150	07/13/2013	ND	5.94	99.1	6.00	0.169	
Total BTEX	1.33	0.300	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 192 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	07/15/2013	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
GRO C6-C10	52.6	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	3060	10.0	07/12/2013	ND	219	109	200	0.277	

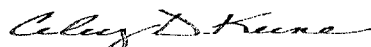
Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 137 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 2 FT (H301621-02)**

BTEX 80218		mg/kg	Analyzed By: DW					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/13/2013	ND	2.00	100	2.00	0.794	
Toluene*	0.166	0.100	07/13/2013	ND	1.97	98.3	2.00	0.379	
Ethylbenzene*	1.14	0.100	07/13/2013	ND	2.00	100	2.00	0.131	
Total Xylenes*	2.04	0.300	07/13/2013	ND	5.94	99.1	6.00	0.169	
Total BTEX	3.35	0.600	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 165 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	07/15/2013	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
GRO C6-C10	<b>107</b>	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	<b>3710</b>	10.0	07/12/2013	ND	219	109	200	0.277	

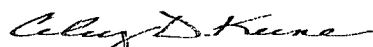
Surrogate: 1-Chlorooctane 111 % 65.2-140

Surrogate: 1-Chlorooctadecane 146 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HAROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 1 @ 4 FT (H301621-03)**

BTEX 8021B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2013	ND	2.00	100	2.00	0.794		
Toluene*	<0.050	0.050	07/13/2013	ND	1.97	98.3	2.00	0.379		
Ethylbenzene*	<0.050	0.050	07/13/2013	ND	2.00	100	2.00	0.131		
Total Xylenes*	<0.150	0.150	07/13/2013	ND	5.94	99.1	6.00	0.169		
Total BTEX	<0.300	0.300	07/13/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2013	ND	400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						

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	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	65.0	10.0	07/12/2013	ND	219	109	200	0.277	

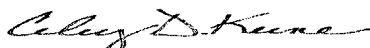
Surrogate: 1-Chlorooctane 90.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.3 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 1 FT (H301621-04)**

BTEX 8021B		mg/kg		Analyzed By: DW				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/13/2013	ND	2.00	100	2.00	0.794	
Toluene*	0.109	0.050	07/13/2013	ND	1.97	98.3	2.00	0.379	
Ethylbenzene*	0.618	0.050	07/13/2013	ND	2.00	100	2.00	0.131	
Total Xylenes*	1.37	0.150	07/13/2013	ND	5.94	99.1	6.00	0.169	
Total BTEX	2.10	0.300	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 169 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	07/15/2013	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
GRO C6-C10	43.2	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	2370	10.0	07/12/2013	ND	219	109	200	0.277	

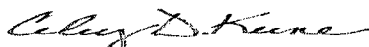
Surrogate: 1-Chlorooctane 98.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 127 % 63.6-154

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 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 2 FT (H301621-05)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/13/2013	ND	2.22	111	2.00	1.52	
Toluene*	0.138	0.100	07/13/2013	ND	2.16	108	2.00	2.45	
Ethylbenzene*	0.776	0.100	07/13/2013	ND	2.19	109	2.00	2.43	
Total Xylenes*	1.76	0.300	07/13/2013	ND	6.52	109	6.00	2.37	
Total BTEX	2.67	0.600	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 157 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	07/15/2013	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
GRO C6-C10	79.2	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	3640	10.0	07/12/2013	ND	219	109	200	0.277	

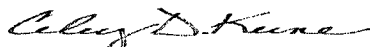
Surrogate: 1-Chlorooctane 108 % 65.2-140

Surrogate: 1-Chlorooctadecane 149 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 4 FT (H301621-06)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2013	ND	2.22	111	2.00	1.52		
Toluene*	<0.050	0.050	07/13/2013	ND	2.16	108	2.00	2.45		
Ethylbenzene*	<0.050	0.050	07/13/2013	ND	2.19	109	2.00	2.43		
Total Xylenes*	<0.150	0.150	07/13/2013	ND	6.52	109	6.00	2.37		
Total BTEX	<0.300	0.300	07/13/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 111 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/15/2013	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
GRO C6-C10	<10.0	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	31.6	10.0	07/12/2013	ND	219	109	200	0.277	

Surrogate: 1-Chlorooctane 87.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.3 % 63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 3 @ 1 FT (H301621-07)**

BTEX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/13/2013	ND	2.22	111	2.00	1.52	
Toluene*	0.251	0.100	07/13/2013	ND	2.16	108	2.00	2.45	
Ethylbenzene*	1.68	0.100	07/13/2013	ND	2.19	109	2.00	2.43	
Total Xylenes*	2.39	0.300	07/13/2013	ND	6.52	109	6.00	2.37	
Total BTEX	4.32	0.600	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 216 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/15/2013	ND	400	100	400	0.00	
TPH 8015M		mg/kg	Analyzed By: MS						

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	67.1	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	3970	10.0	07/12/2013	ND	219	109	200	0.277	

Surrogate: 1-Chlorooctane 95.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 143 % 63.6-154

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**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 3 @ 2 FT (H301621-08)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/13/2013	ND	2.22	111	2.00	1.52		
Toluene*	<0.050	0.050	07/13/2013	ND	2.16	108	2.00	2.45		
Ethylbenzene*	<0.050	0.050	07/13/2013	ND	2.19	109	2.00	2.43		
Total Xylenes*	<0.150	0.150	07/13/2013	ND	6.52	109	6.00	2.37		
Total BTEX	<0.300	0.300	07/13/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 111 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2013	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
GRO C6-C10	<10.0	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	50.9	10.0	07/12/2013	ND	219	109	200	0.277	

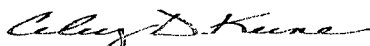
Surrogate: 1-Chlorooctane 86.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.5 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/11/2013  
 Reported: 07/15/2013  
 Project Name: HARROUN 9-1  
 Project Number: NONE GIVEN  
 Project Location: MALAGA, NM

 Sampling Date: 07/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 3 @ 3 FT (H301621-09)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/13/2013	ND	2.22	111	2.00	1.52	
Toluene*	<0.050	0.050	07/13/2013	ND	2.16	108	2.00	2.45	
Ethylbenzene*	<0.050	0.050	07/13/2013	ND	2.19	109	2.00	2.43	
Total Xylenes*	<0.150	0.150	07/13/2013	ND	6.52	109	6.00	2.37	
Total BTX	<0.300	0.300	07/13/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 105 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/15/2013	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
GRO C6-C10	<10.0	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	19.0	10.0	07/12/2013	ND	219	109	200	0.277	


Surrogate: 1-Chlorooctane 90.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.0 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

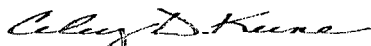
- S-04            The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND             Analyte NOT DETECTED at or above the reporting limit
- RPD            Relative Percent Difference
- \*\*              Samples not received at proper temperature 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





# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240  
(505) 393-2326 FAX (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 12 of 12

Company Name: BBC International, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: Cliff Brunson				P.O. #:				<div style="display: flex; justify-content: space-around; font-size: 2em;"> <span>GL</span> <span>TPH</span> <span>B-TEX</span> </div>											
Address: P.O. Box 805				Company:															
City: Hobbs		State: NM Zip: 88241		Attn:															
Phone #: 575-397-6388		Fax #: 575-397-0397		Address:															
Project #:		Project Owner: Oxy		City: <i>Same</i>															
Project Name: Harroun 9-2				State: Zip:															
Project Location: Malaga				Phone #:															
Sampler Name: Gary RAY				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(G/RAB OR C) JUMP	# CONTAINERS	MATRIX				PRESERV				SAMPLING							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME					
H3D1621																			
	1 SP1@ 2Ft	6	2			X				X			7-9-13	11:50	X	X	X		
	2 SP1@ 2Ft	6	2			X				X			7-9-13	1:15	X	X	X		
	3 SP1@ 4Ft	6	2			X				X			7-9-13	1:40	X	X	X		
	4 SP2@ 2Ft	6	2			X				X			7-9-13	2:10	X	X	X		
	5 SP2@ 2Ft	6	2			X				X			7-9-13	2:21	X	X	X		
	6 SP2@ 4Ft	6	2			X				X			7-9-13	2:42	X	X	X		
	7 SP3@ 1Ft	6	2			X				X			7-9-13	3:15	X	X	X		
	8 SP3@ 2Ft	6	2			X				X			7-9-13	3:23	X	X	X		
	9 SP3@ 3Ft	6	2			X				X			7-9-13	3:35	X	X	X		

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Relinquished By:	Date: 7/11/13	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 11:40		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One)	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

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

#54

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Oxy Permian Ltd.	Contact	Chancey Summers
Address	1017 W. Stanolind Rd, Hobbs, NM 88240	Telephone No.	(575) 397-8216
Facility Name	Harroun 9-1	Facility Type	Well location
Surface Owner	BLM	Mineral Owner	API No. 30-015-34997

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	9	24S	29E	530	South	330	East	Eddy

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release	Oil	Volume of Release	40 bbls oil	Volume Recovered	0 bbls oil
Source of Release	Mechanical error sent oil down a gas line causing tank to overflow	Date and Hour of Occurrence	06/13/2013	Date and Hour of Discovery	06/13/2013
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher-NMOCD; Jennifer Van Curen, James Amos- BLM		
By Whom?	Chancey Summers	Date and Hour	06/17/2013 @ 8:03 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken.*					
A mechanical error sent oil down the gas line causing the tank to overflow and leak 40 bbls of oil to leak onto the ground. No fluids were recovered and mechanical error was corrected.					
Describe Area Affected and Cleanup Action Taken.*					
A mechanical error sent oil down the gas line causing the tank to overflow and leak 40 bbls of oil to leak onto the ground. No fluids were recovered and mechanical error was corrected. Remediation will be conducted in accordance with a plan approved by NMOCD and the BLM.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Signature: 		OIL CONSERVATION DIVISION			
Printed Name: Chancey Summers		Approved by Environmental Specialist:			
Title: HES Specialist		Approval Date:		Expiration Date:	
E-mail Address: Chancey.Summers@oxy.com		Conditions of Approval:		Attached <input type="checkbox"/>	
Date: 6-24-13 Phone: (575) 397-8216					

\* Attach Additional Sheets If Necessary