# **Closure Report**

1



OCT 17 2013

	Site Description	NMOCD ARTESIA
Site Name:	Harroun 9-1	
Company:	Oxy Permian Ltd.	
Legal Description:	U/L P, Section 9, T24S, R29E	
County:	Eddy County, NM	
GPS Coordinates:	N 32.22675° W 103.98229°	

	Release Data
Date of Release:	06/13/2013
Type of Release:	Oil
Source of Release:	Mechanical error sent oil down a gas line, tank overflow
Volume of Release:	40 bbls
Volume Recovered:	0 bbls

Remediation Specifications							
Remediation Parameters:	Excavate the leak area represented by sample points SP1 and 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. Then, backfill the site with the appropriate clean soil.						
Remediation Activities:	09/16/2013 to 1	0/07/2013					
Plan Sent to OCD: OCD Approval of Plan:	09/21/2013 Email from Cliff Brunson to Mike Bratcher 10/04/2013 Email from Mike Bratcher to Cliff Brunson						
Plan Sent to BLM:	Not required	Not required Not required					
BLM Approval of Plan:	Not required	Not required					

	Supporting Documentation
Initial C-141	Signed 06/24/2013
Final C-141	Signed 10/15/2013
Site Diagram	July 2013
Groundwater Plot	75'
TOPO Maps	July 2013
Lab Summary	07/09/2013
Lab Analysis	07/09/2013
Correspondence	Request and approval of remediation plan via email

Request for Closure

Based on the completion of the remediation plan as agreed upon, BBC International requests closure approval from NMOCD.

Cliff Brunson, President of BBC International Inc.

10/15/2013

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Form C-141 Revised August 8, 2011 .

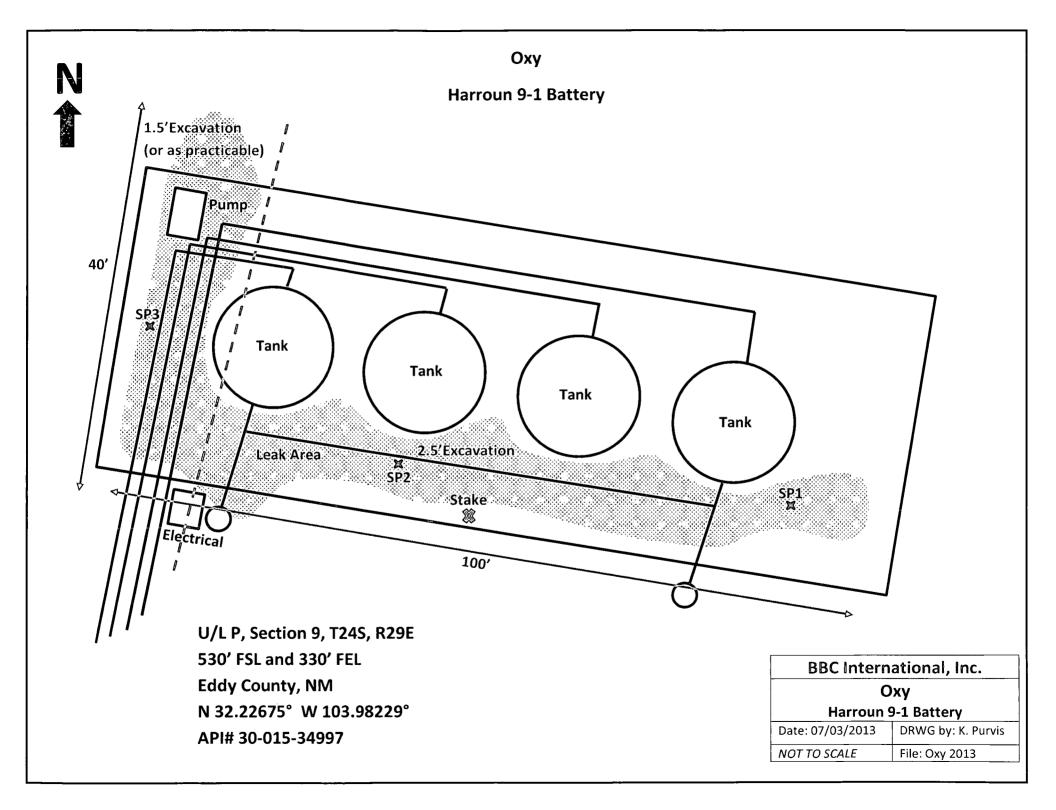
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rel	ease Notifi	catio	on and Co	orrective A	ction				
						OPERATOR Init:				al Report		Final Report
Name of Co	mpany	Oxy Permia	n Ltd.			Contact Chancey Summers						
Address	1017 W. S	tanolind Rd,	Hobbs, I	NM 88240		Telephone No. (575) 397-8216						
Facility Na	ne Harr	oun 9-1		·····		Facility Typ		ion				
Surface Ow	ner BLN			Mineral C	Juner		· · · · · · · · · · · · · · · · · · ·		APINO	o. <u>30-01</u> .	5_3400	)7
		vi							AITM	5. 50-01.	<u>-J-J-</u>	
	Custing	Taurahia	Dunn	LOCA Fect from the		N OF RE		L C	V t in .	C		
Unit Letter	Section	Township	Range	Feet from the	Nort	h/South Line	Feet from the	East	Vest Line	County		
Р	9	24S	29E	530	L	South	330		East	Eddy		
			Latitu	de		Long	itude		_			
				NAT	TURI	E OF REL	EASE					
Type of Rele	ase Oil	***				Volume of	Release 40 bb	ls oil	Volume	Recovered	0 bbl	s oil
Source of Re		chanical error	r sent oil d	own a gas line ca	using		lour of Occurrent	ce		Hour of Dis	scovery	/
tank to overf						06/13/201			06/13/20	13		
Was Immedi	ate Notice (		Yes 🗌	] No 🔲 Not R	equire	If YES, To Mike Brate	Whom? her-NMOCD; Jc	ennifer V	'an Curen,	James Amo	s- BLN	4
By Whom?	Chancey S	Summers				Date and F	lour 06/17/201	3 @ 8:0	3 am			
Was a Water		ched?		· · ·		If YES, Vo	olume Impacting					
1			Yes 🛛	No								
	l error sent			n Taken.* using the tank to	overflo	ow and leak 40	bbls of oil to leak	c onto th	e ground.	No fluids w	ere rec	overed and
Describe Are	a Affected	and Cleanup /	Action Tal	.en.*								
mechanical e	rror was co	rrected. Rem	ediation w	using the tank to o ill be conducted i	n acco	rdance with a p	lan approved by	NMOCI	) and the E	BLM.		
regulations a public health should their o	Il operators or the envir operations h ament. In <u>a</u>	are required t conment. The ave failed to a ddition, NMC	o report ar acceptance dequately CD accept	is true and comp id/or file certain r e of a C-141 repo investigate and r tance of a C-141	elease ort by t emedia	notifications a he NMOCD m ite contaminati	nd perform correct arked as "Final R on that pose a thr	etive acti leport" d eat to gr	ions for rel oes not rel ound wate	eases which ieve the ope r, surface w	may e rator o ater, hu	ndange <del>r</del> f liability 1man health
			<	)		-	OIL CON	SERV	ATION	DIVISIO	<u>DN</u>	
Signature:	$\sim$		$\gg$	$\leq$								
Printed Name: Chancey Summers					Approved by	Environmental S	pecialis	:				
Title: HES	Specialist					Approval Dat	e:		Expiration	Date:		
E-mail Addre		cey.Summers		2		Conditions of	`Approval:			Attachec		
Date:	Date: 6-242013 Phone: (575) 397-8216											

\* Attach Additional Sheets If Necessary

1025 N. French Dr., Hobbs, NM 88240	of New Mexico als and Natural R	' 1	OCT 17 201	Form C-141 Revised August 8, 2011			
District III Oil Con	Submit 1 Copy to appropriate District Office in NMOCD ARTESTARE with 19.15.29 NMAC.						
	outh St. Francis 1 a Fe, NM 87505						
			ction	<u></u>			
Release Notificat	OPERATO		_	al Report 🛛 Final Report			
Name of Company Oxy Permian Ltd.		ncey Summer					
Address 1017 W. Stanolind Rd, Hobbs, NM 88240	Telephone No. (575) 397-8216						
Facility Name Harroun 9-1	Facility Type	Well location	m				
Surface Owner State/Private Mineral Own	er		API No	. 30-015-34997			
LOCATI	ON OF RELE	ASE					
Unit Letter Section Township Range Feet from the No	orth/South Line Fe	eet from the	East/West Line	County			
P 9 24S 29E 530	South	330	East	Eddy			
Latitude	Longitu	de	<u></u>	<u> </u>			
NATU	RE OF RELEA						
Type of Release Oil	Volume of Rel	ease 40 bbls					
Source of Release Mechanical error sent oil down a gas line causing tank to overflow	g Date and Hour 06/13/2013	of Occurrence	Date and 06/13/201	Hour of Discovery			
Was Immediate Notice Given?	If YES, To Wh		1 00/15/201	<u> </u>			
Yes No Not Requi			<u> </u>				
By Whom? Chancey Summers Was a Watercourse Reached?	Date and Hour         06/17/2013 @ 8:03 am           If YES, Volume Impacting the Watercourse.						
🗌 Yes 🛛 No							
Describe Cause of Problem and Remedial Action Taken.*		·					
A mechanical error sent oil down the gas line causing the tank to overfunction mechanical error was corrected.	flow and leak 40 bbls	of oil to leak	onto the ground. 1	No fluids were recovered and			
Describe Area Affected and Cleanup Action Taken.*							
A mechanical error sent oil down the gas line causing the tank to overf mechanical error was corrected. Remediation was completed in accord on 10/04/2013.	low and leak 40 bbls dance with the remed	of oil to leak oliation plan app	onto the ground. A proved by Mike Br	No fluids were recovered and ratcher of NMOCD via email			
I hereby certify that the information given above is true and complete tregulations all operators are required to report and/or file certain releas public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remote or the environment. In addition NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	e notifications and per the NMOCD marke liate contamination the	erform correct d as "Final Re hat pose a three	ve actions for rele port" does not relie at to ground water,	ases which may endanger eve the operator of liability , surface water, human health			
Signature:	<u>(</u>	<u>DIL CONS</u>	ERVATION	DIVISION			
Printed Name: Chancey Summers	Approved by Env	ironmental Sp	ecialist:				
Title: HES Specialist	Approval Date:		Expiration E	Date:			
E-mail Address: <u>Chancey.Summers@oxy.com</u> Date: /0/15/13 Phone: (575) 397-8216	Conditions of Approval:			Attached			
Attach Additional Sheets If Necessary				۰			

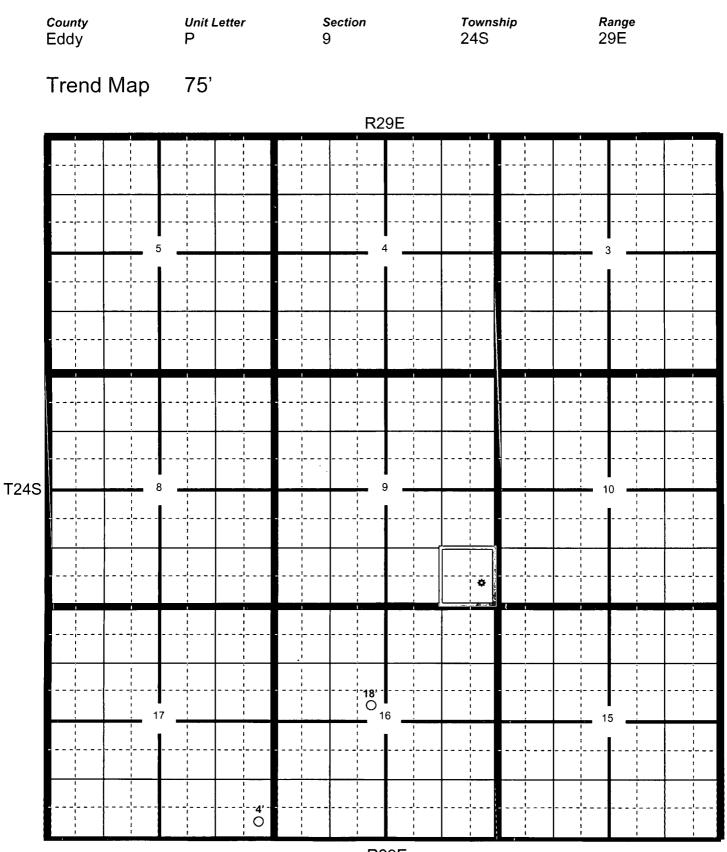
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# Groundwater Plot

# Oxy Harroun 9-1 Battery

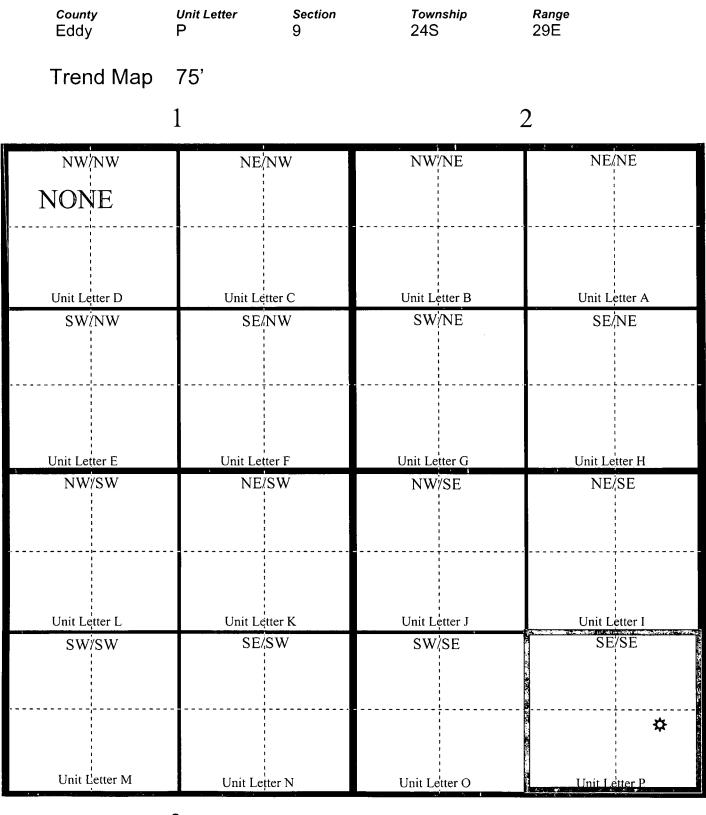


T24S



Section Quarters

# Oxy Harroun 9-1 Battery

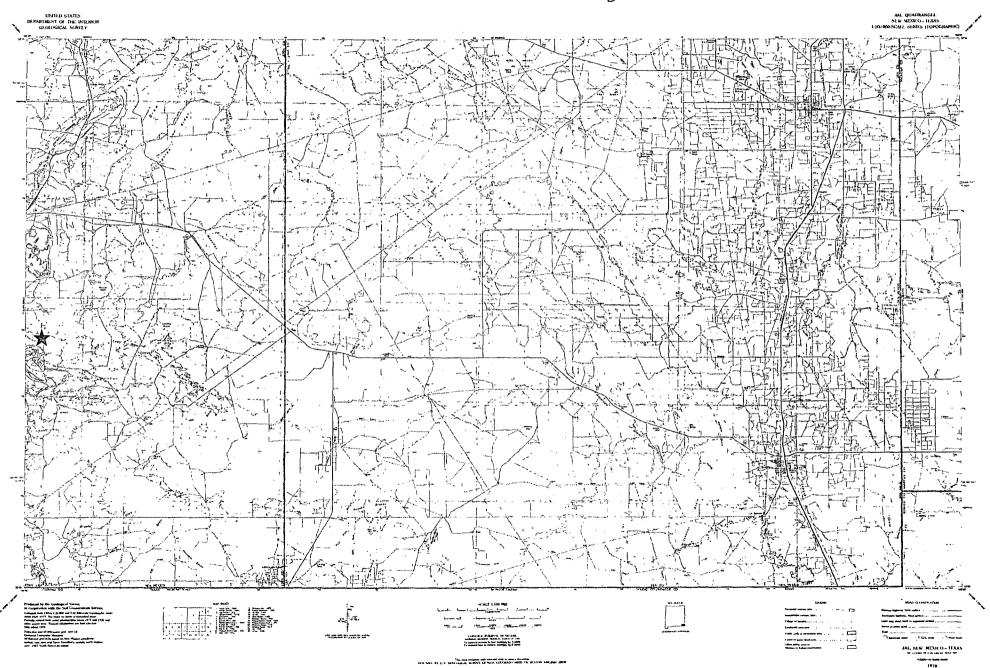


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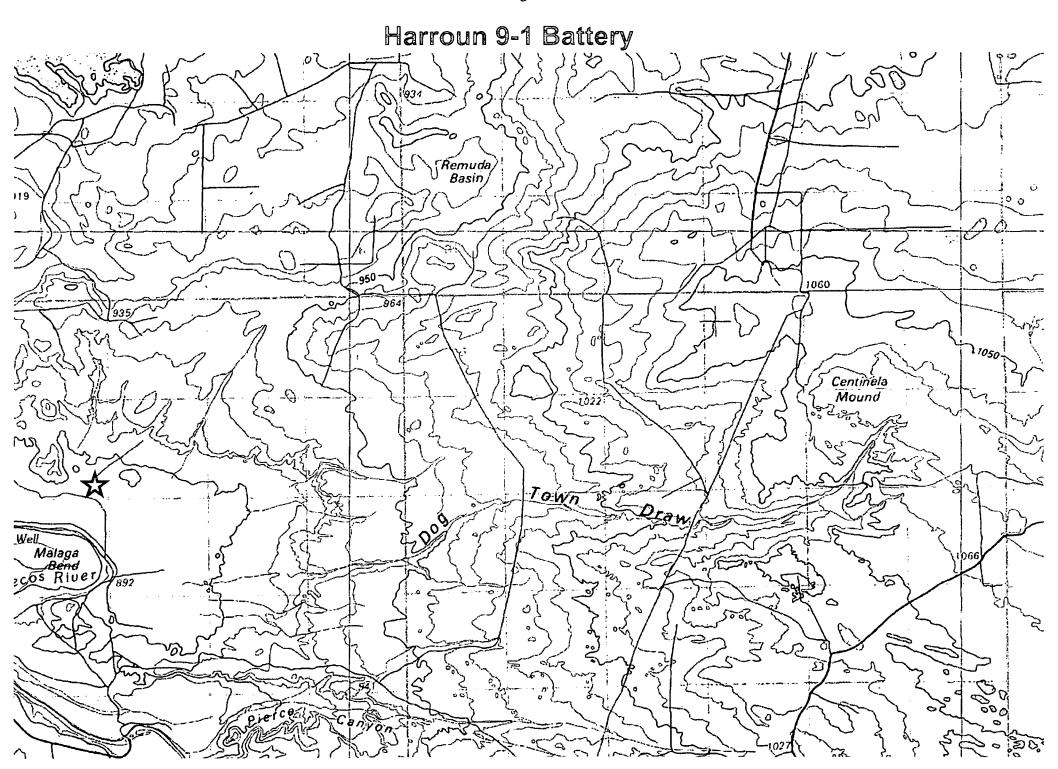
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# Harroun 9-1 Battery



Oxy



# Laboratory Analytical Results Summary Harroun 9-1

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		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
Benzene	BTEX 8021B		< 0.050	<0.100	< 0.050
Toluene	BTEX 8021B		0.072	0.166	<0.050
Ethylbenzene	BTEX 8021B		0.607	1.14	<0.050
Total Xylenes	BTEX 8021B		0.655	2.04	<0.150
Total BTEX	BTEX 8021B		1.33	3.35	< 0.300
Chloride	SM4500CI-B		368	928	48
GRO	TPH 8015M		52.6	107	<10.0
DRO	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
Benzene	BTEX 8021B		<0.050	<0.100	<0.050
Toluene	BTEX 8021B		0.109	0.138	<0.050
Ethylbenzene	BTEX 8021B		0.618	0.776	<0.050
Total Xylenes	BTEX 8021B		1.37	1.76	<0.150
Total BTEX	BTEX 8021B		2.1	2.67	<0.300
Chloride	SM4500CI-B		368	928	32
GRO	TPH 8015M		43.2	79.2	<10.0
DRO	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
Benzene	BTEX 8021B		<0.100	<0.050	< 0.050
Toluene	BTEX 8021B		0.251	< 0.050	<0.050
Ethylbenzene	BTEX 8021B		1.68	< 0.050	<0.050
Total Xylenes	BTEX 8021B		2.39	<0.150	<0.150
Total BTEX	BTEX 8021B		4.32	< 0.300	<0.300
Chloride	SM4500CI-B		336	48	32
GRO	TPH 8015M		67.1	<10.0	<10.0
DRO	TPH 8015M		3970	50.9	19



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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited 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.

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,

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	192 \$	% 89.4-12	6	· · · · · · · · · · · · · · · · · · ·					
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	262	16.0	07/15/0010	ND	400	100	400	0.00	

Chloride	368	16.0	07/15/2013	ND	400	100	400	0.00	
TPH 8015M	mg,	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	% 65.2-14	0						

Surrogate: 1-Chlorooctadecane 137 % 63.6-154

### **Cardinal Laboratories**

### \*=Accredited Analyte

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Celey D. Keene

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	′kg	Analyze	d 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 (PIL	165 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	107	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	3710	10.0	07/12/2013	ND	219	109	200	0.277	
Surrogate: 1-Chlorooctane	111 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	146	63.6-15	4						

### **Cardinal Laboratories**

### \*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Page 3 of 12



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

Received:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	110 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	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	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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.3	% 63.6-15	4						

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### \*=Accredited Analyte

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Celey Di Kune

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIC	169 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	127 9	63.6-15	4						

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### \*=Accredited Analyte

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Celeg D. Kerne

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	157 9	% 89. <b>4-1</b> 2	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	65.2-14	0			• •			
Surrogate: 1-Chlorooctadecane	149 \$	63.6-15	4						

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### \*=Accredited Analyte

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Celeg D. Kune

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

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	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 (PIL	111 9	% 89.4-12	6	1					
Chloride, SM4500CI-B	mg/	'kg	Analyze	d 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	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	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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.3	% 63.6-15	4						

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Celey D. Keene

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	2169	89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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	65.2-14	0						
Surrogate: 1-Chlorooctadecane	143 9	63.6-15	4						

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Celey Di Kune

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

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	07/13/2013	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 (PIL	111 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	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	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	50. <del>9</del>	10.0	07/12/2013	ND	219	109	200	0.277	
Surrogate: 1-Chlorooctane	86.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	87.5	% 63.6-15	4						

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Celey Di Kune

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

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	07/13/2013	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 (PIL	105 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	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	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	65.2-14	0		·				
Surrogate: 1-Chlorooctadecane	91.0	63.6-15	4						

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Celey Di Kune

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 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

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Celey Di Kune

Celey D. Keene, Lab Director/Quality Manager

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

of 12

Page 12 (

RDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476 Company Name: BBC International, Inc. ANALYSIS REQUEST 12/14/26720 Project Manager: Cliff Brunson P.O. #: Address: P.O. Box 805 Company: State: NM Zip: 88241 city: Hobbs Attn: Phone #: 575-397-6388 Fax #: 575-397-0397 Address: Project Owner: OKY Project #: City: Project Name: Harrown 9-1 State: Žip: Project Location: Malaga Phone #: Sampler Name: Gary RAY Fax #: FOR LAB USE ONLY MATRIX PRESERV. SAMPLING (c)ome. **GROUNDWATE** WASTEWATER CONTAINE Sample I.D. G)RAB OR Lab I.D. ACID/BASI SLUDGE ĝ OTHER **[**] H301621 Ш R DATE TIME SP1C 2FF 7-9-13 11:50 6 6 10 1Ft 1 v 7-9-13 1:15 2 6 4F+ 1 1 Y 1:40 7-9-12 2F+ 20 X 7-9-13 7:10 つ 2F+ 6 1 V  $\bigcirc$ 1 X 4Pt 6 2 7-9-13 666 1 Ft 7-9-13 7:15 X 2Ft χ 7-9-13 0 23 8 3: X 7-9-13 0 75

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+ Cardinal connet accort verbal	ebanges Blasse far un	itten ebongen in EOE (	102-2476				· . · · ·			-

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

# **Kathy Purvis**

From:	Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us></mike.bratcher@state.nm.us>
Sent:	Friday, October 04, 2013 9:08 AM
То:	Cliff P. Brunson
Cc:	C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis
Subject:	RE: OXY-Harroun 9-1 Battery-Remediation Plan

Reference: OXY USA \* Harroun 9-1 \* 30-015-34997 \* P-9-24s-29e \* Eddy County, New Mexico OCD Tracking Number: 2RP-1699 \* Date of release: 6/13/2013

Cliff,

Your proposal for remediation of the above referenced produced fluid release is approved. Please notify the OCD District 2 office prior to commencement of remedial activities. OCD records and email correspondence from BLM indicate that this site is situated on private owned surface. In the event the proposed excavation depths are not achieved, contact me prior to backfilling.

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.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher NMOCD District 2 811 S. First Street Artesia, NM 88210 O: 575-748-1283 X108 C: 575-626-0857 F: 575-748-9720

From: Cliff P. Brunson [mailto: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

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 backfiled with the appropriate type of clean soil.

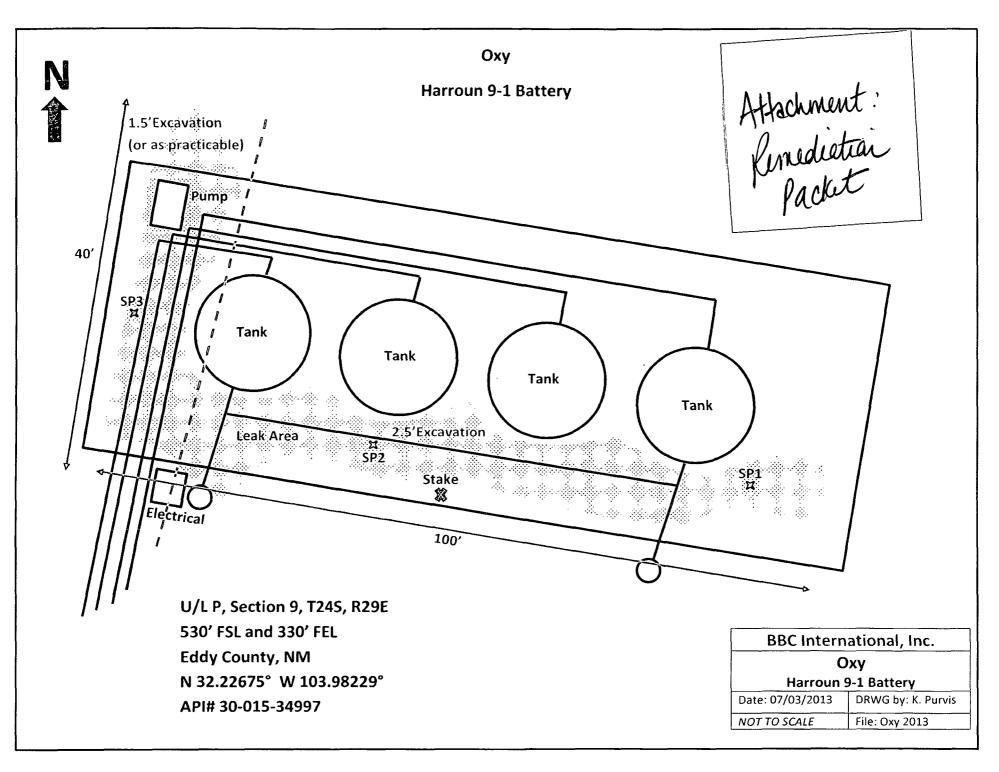
If you would please e-mail your concurrence with this remediation plan, it would be greatly appreciated.

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 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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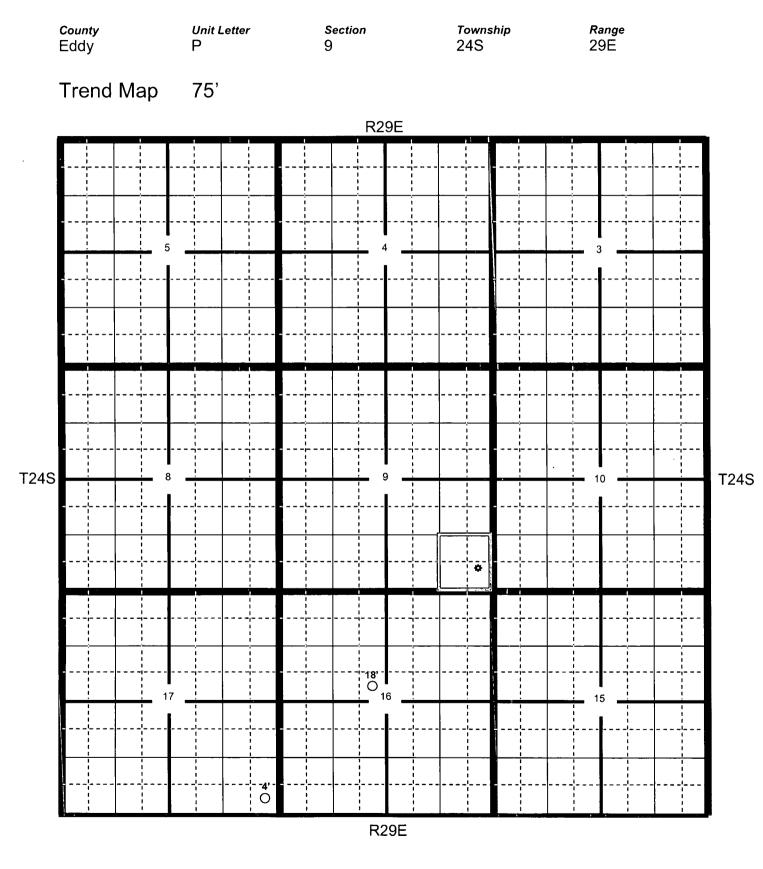
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# Groundwater Plot

# Oxy Harroun 9-1 Battery

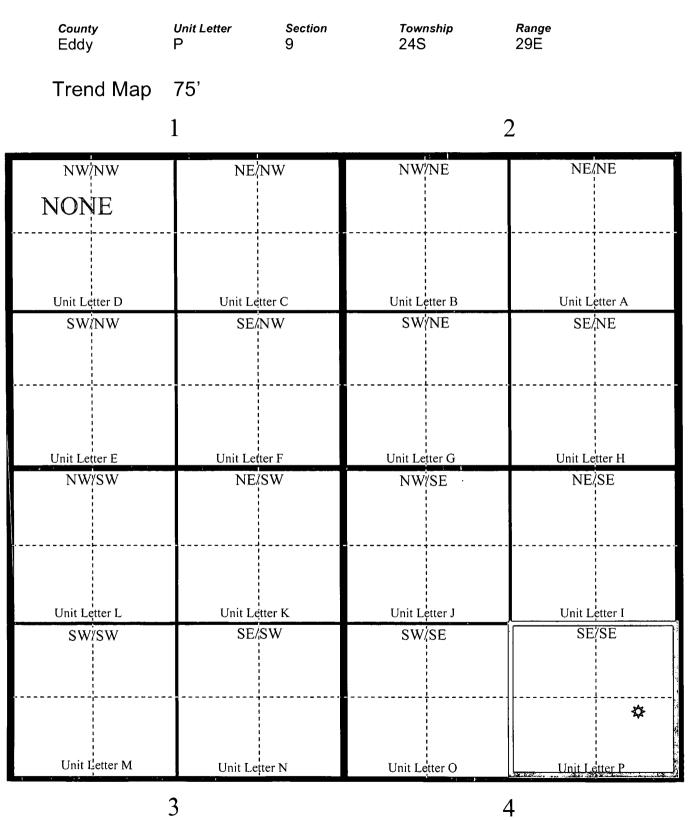


Location



Section Quarters

# Oxy Harroun 9-1 Battery



O SEO

# 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
Benzene	BTEX 8021B		<0.050	<0.100	<0.050
Toluene	BTEX 8021B		0.072	0.166	<0.050
Ethylbenzene	BTEX 8021B		0.607	1.14	<0.050
<b>Total Xylenes</b>	BTEX 8021B		0.655	2.04	<0.150
Total BTEX	BTEX 8021B		1.33	3.35	<0.300
Chloride	SM4500CI-B		368	928	48
GRO	TPH 8015M		52.6	107	<10.0
DRO	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
Benzene	BTEX 8021B		<0.050	<0.100	<0.050
Toluene	BTEX 8021B		0.109	0.138	<0.050
Ethylbenzene	BTEX 8021B		0.618	0.776	<0.050
Total Xylenes	BTEX 8021B		1.37	1.76	<0.150
Total BTEX	BTEX 8021B		2.1	2.67	<0.300
Chloride	SM4500CI-B		368	928	32
GRO	TPH 8015M		43.2	79.2	<10.0
DRO	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
Benzene	BTEX 8021B		<0.100	<0.050	<0.050
Toluene	BTEX 8021B		0.251	< 0.050	<0.050
Ethylbenzene	BTEX 8021B		1.68	< 0.050	<0.050
Total Xylenes	BTEX 8021B		2.39	<0.150	<0.150
Total BTEX	BTEX 8021B		4.32	< 0.300	<0.300
Chloride	SM4500CI-B		336	48	32
GRO	TPH 8015M		67.1	<10.0	<10.0
DRO	TPH 8015M		3970	50.9	19



July 15, 2013

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

RE: HARROUN 9-1

Hobbs, NM 88241

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/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.

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,

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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	192 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	
ТРН 8015М	mg/	kg	Analyze	d 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 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	137 %	63.6-15	4						

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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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	165 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	107	10.0	07/12/2013	ND	210	105	200	1.01	
DRO >C10-C28	3710	10.0	07/12/2013	ND	219	109	200	0.277	
Surrogate: 1-Chlorooctane	111 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	146 9	63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/11/2013	Sampling Date:	07/09/2013
	07/15/2013	1 5	Soil
Reported:		Sampling Type:	
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d By: DW	<u></u>				
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 (PIL	110 9	6 89.4-12	6			·			
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP		<u> </u>			
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	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	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 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.3 \$	63.6-15	4						

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Received:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	169 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	127 9	63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIE	157 5	% 89.4-12	6					,	
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	65.2-14	0				·		
Surrogate: 1-Chlorooctadecane	149 \$	63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

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	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 (PIL	111 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	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	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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.3	63.6-15							

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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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

# 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 (PIL		% 89.4-12	6						
Chloride, SM4500CI-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	Analyze	d 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	% 65.2-14	0				· · ·		
Surrogate: 1-Chlorooctadecane	143	% 63.6-15	4						

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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:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

# 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 (PIL	111 9	6 89.4-12	6						
Chloride, SM4500CI-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	Analyze	d By: MS			<u>_</u>		
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	65.2-14	0						
Surrogate: 1-Chlorooctadecane	87.5	63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/11/2013	Sampling Date:	07/09/2013
Reported:	07/15/2013	Sampling Type:	Soil
Project Name:	HARROUN 9-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA, NM		

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

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 (PIL	105 %	6 89.4-12	6						
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	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	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 9	65.2-14	0						·····
Surrogate: 1-Chlorooctadecane	91.09	63.6-15	4						

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### **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 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

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(505) 393-2326 FAX	(505) 393-2476
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ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476	<u>CHAIN</u>	N-OF-CUSTODY AND ANALYSIS REQUEST
ompany Name: BBC International, Inc.	E BRATEL	ANALYSIS REQUEST
oject Manager: Cliff Brunson	P.O. #:	
idress: P.O. Box 805	Company:	┓
ty: Hobbs State: NM Zip: 88241	Attn:	
one #: 575-397-6388 Fax #: 575-397-0397	Address:	·]······
oject #: Project Owner: OXY	city: SAM	]
oject Name: Harrovn 9-1	State: Zip:	
oject Location: Malaga	Phone #:	]
mpler Name: Gory IZA 4	Fax #:	
DR LAB USE ONLY MATRIX		
Tap I'D' Partier (C)OMP	SLUDGE OTHER : ACID/BASE: ICE / COOL ICE / COOL ICE / COOL	LPH 10-1-10-1-10-1-10-1-10-1-10-1-10-1-10-
301921 MASTEL OIL		
1 SP1@ 2FF 62 X	X 7-9-13 11:50	
25P2@2F+ 62 X	X 7-9-13 2:15	
35P 2 4F+ 62 X	X 7-9-13 1:40	
4 SP 2@ 2F4 62 X	X 7-9-13 7 10	
5 SP 2@ 2F+ 62 X	X 7-9-13 2:21	
6 SP 2@ 4F+ 62 8	X 7-9-13 2:42	
7 SP 3@ 1F+ 6Z X	X 1-9-13 3:15	
8 5P3@ 2F+ G2 X	X 7-9-13 3:23	
9 SP3@ 3F+ 62 X	X 7-9-13 3:35	

PLEASE NOTE: Liability and Damages. Certinate liability and cleret's exclusive remedy for any claim ensing whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within 30 days after completion of the applicable service, In no event shall Cardinal be Table for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, . . . adas bu Continut a - Hann of subother such shales to be and a

annales of accessors ansing der of diretated to the perioritatice	OF BELVICES HEICHINGET DY C	atumat, regardleas of whomen adont	claim is based opon any of the above stat	d reasons of otherwise.	-			
Relinguished By:	Dateriling	Received By:	11	Phone Result:	🗆 Yes	🗆 No	Add'l Phone #:	
			In the	Fax Result:	□ Yes	🗆 No	Add'l Fax #:	 
ZDF)	Timle j GP	and I	enson	REMARKS:				 
Relinquished By:	Date:	Received By:		· .				
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Delivered By: (Circle One)		Sample Cor	ndition CHECKED BY:	-1				
Sampler - UPS - Bus - Other:	í C	10 Cool Inta	ict (Initials)					
Sampler - UP3 - Bus - Other.	·	FU INOT	No LAN			· · · ·	•	
† Cardinal cannot accept verbal	changes. Please	fax written changes	to 505-393-2476					

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.

				Sa	anta F	e, NM 875	05						
			Rel	ease Notifi	catio	n and Co	orrective A	ction	ı				
						<b>OPERATOR</b> Initial Repo					<b>Fina</b>	l Repor	
Name of Co	ompany	Oxy Permia	ın Ltd.			Contact Chancey Summers							
Address	1017 W. S	tanolind Rd.	, Hobbs, l	NM 88240		Telephone 1	No. (575) 397	7-8216					
Facility Na	ne Harr	oun 9-1				Facility Typ	e Well locati	ion					
Surface Ow	mer BL	M		Mineral	Dwner				APINC	. 30-015	-34997		
L						NORDE					·····		
Unit Letter	Section	Township	Range	Feet from the		N OF REI	LEASE Feet from the	East/	West Line	County			
Unit Letter	Section	rownsnip	Kange	Feet from the	INOTU	V South Line	reet from the	Easu	west Line	County			
Р	9	24S	29E	530		South	330		East	Eddy	·		
			Latitu	de		Long	itude						
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T CD I				NAT	URE	OFREL	· · · · · · · · · · · · · · · · · · ·				0.1.1.1		
Type of Rele Source of Re		chanical error	r sent oil d	own a gas line ca	using	Volume of	Release 40 bb			Recovered Hour of Dis	0 bbls oil		
tank to overf	ow					06/13/2013	3		06/13/20				
Was Immedi	ate Notice (				,	If YES, To					DI 14		
				No 🗌 Not R	equirea		her-NMOCD; Je			James Amos			
By Whom? Was a Water							lour 06/17/201 dume Impacting						
			]Yes 🛛	No		11 125, 10	nume impacting	ure war	· · · · · · · · · · · · · · · · · · ·			1	
If a Watercou	urse was Im	pacted, Descr	ibe Fully.*	k					<u>}</u> [	1EVE	EIVED	<u></u>	
										0CT <b>1</b>	7 2013	Ì	
										UCI I	• 2010		
									N	MOCD	ARTES	A	
Describe Cau	se of Probl	em and Reme	dial Action	n Taken.*					ىلىنە <del>جىر</del> ىرى			di	
A mechanica	l error sent	oil down the	oas line ca	using the tank to	overflor	w and leak 40	bbls of ail to leak	onto th	e ground	No fluids w	re recovered	and	
mechanical e			gas mie ea	using the tank to	overno	w and reak 40	obla of off to leak		ie grouna.	ino nunos wi		anu	
Describe Are	a Affected	and Cleanup A	Action Tak	.en.*									
A mechanica	error sent	oil down the g	gas line ca	using the tank to	overflov	w and leak 40	bbls of oil to leak	onto th	e ground.	No fluids we	re recovered	and	
mechanical e	rror was col	rrected. Reme	ediation w	ill be conducted is	n accor	dance with a p	lan approved by	NMOCI	D and the B	LM.			
I hereby certi	fy that the i	nformation gi	iven above	is true and comp	lete to t	he best of my	knowledge and u	ndersta	nd that purs	uant to NM	OCD rules ar	nd	
regulations al	operators	are required to	o report an	d/or file certain r	elease r	notifications ar	nd perform correc	tive act	ions for rele	eases which	may endange	er	
				e of a C-141 repo									
or the enviror	perations n	ddition NMC	CD accen	investigate and retained of a C-141	emeciai report (	loes not relieve	on that pose a thr	eat to gr	bility for c	, surface wa	ter, numan n	ealth	
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			_	)			OIL CON	SERV	ATION	DIVISIC	<u>N</u>		
Signature:			$\geq$	$\leq$									
						Approved by	Environmental S	pecialis	t:				
Printed Name	: Chance	y Summers											
Title: HES	Specialist					Approval Date	e:		Expiration I	Date:			
		······					-·						
E-mail Addre	ss: <u>Chan</u>	cev.Summers	@oxy.con	]	<u>`                                    </u>	Conditions of	Approval:			Attached			
Date:	6-29	妻13	Phone:	(575) 397-821	6								
	-		1 10/10.	(373) 377-021	~					-l			

\* Attach Additional Sheets If Necessary