



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805  
E-MAIL: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)

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## **OXY – MLMU INJECTION STATION**

**1RP - 3571**

### **REMEDIATION PLAN**

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OXY will excavate the spill area as depicted on the following site diagram. The entire spill area will be excavated to a depth of 1 foot. All excavated materials will be disposed of at an NMOCD-approved disposal facility.

This plan will remove the contaminants to NMOCD acceptable levels as agreed upon.

The site will then be backfilled with clean soil.

**APPROVED**

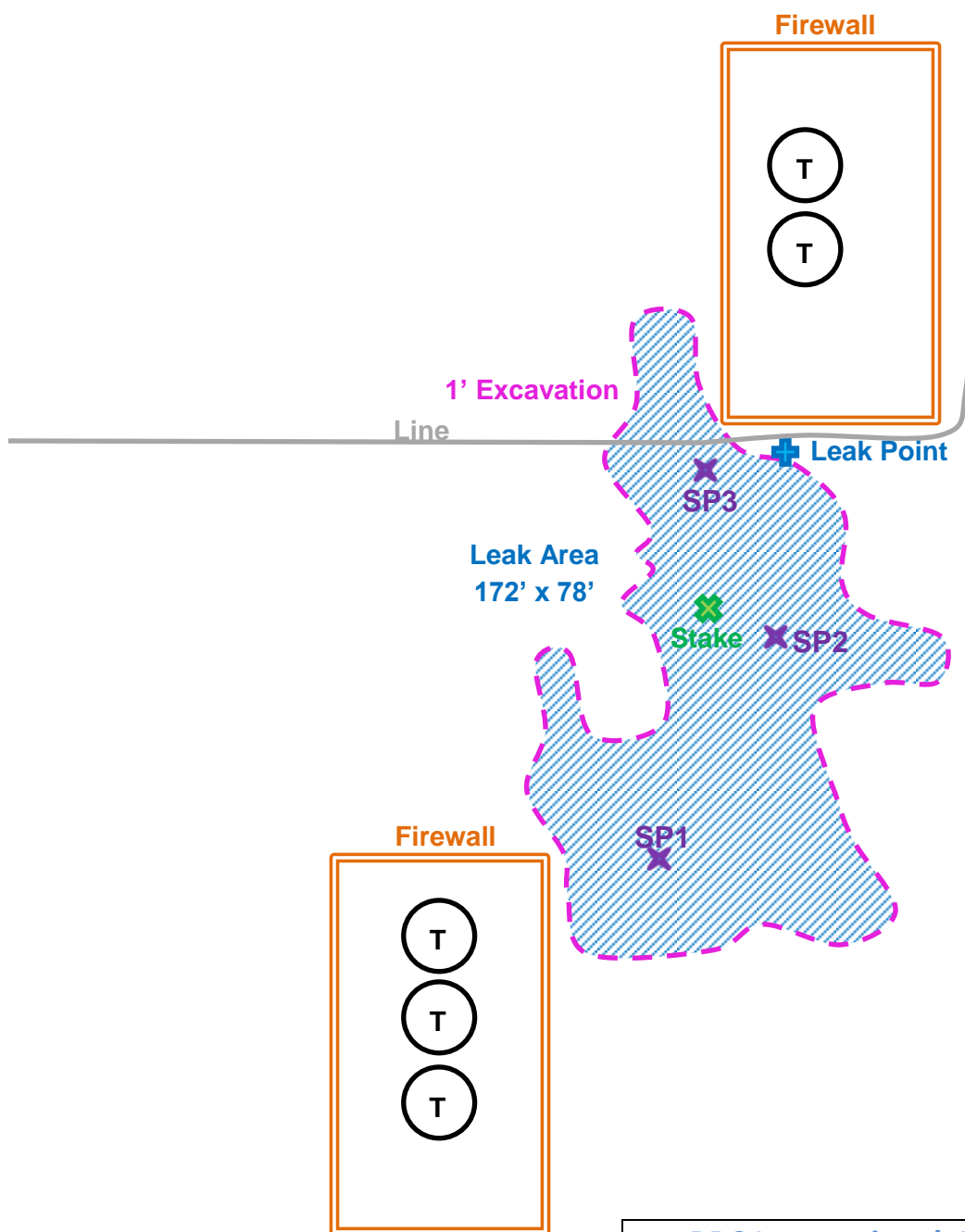
*By OCD District 1 at 1:40 pm, Jul 28, 2015*



Oxy

# MLMU Water Injection Station

Location



BBC International, Inc.

Oxy

MLMU Water Injection Station

Date: 03/16/2015

DRWG by: K. Purvis

NOT TO SCALE

File: Oxy 2015

U/L G, Section 5, T24S, R37E

Lea County, NM

N 32.24724° W 103.18388°

# Groundwater Plot

## Oxy MLMU Water Injection Station

County  
Lea

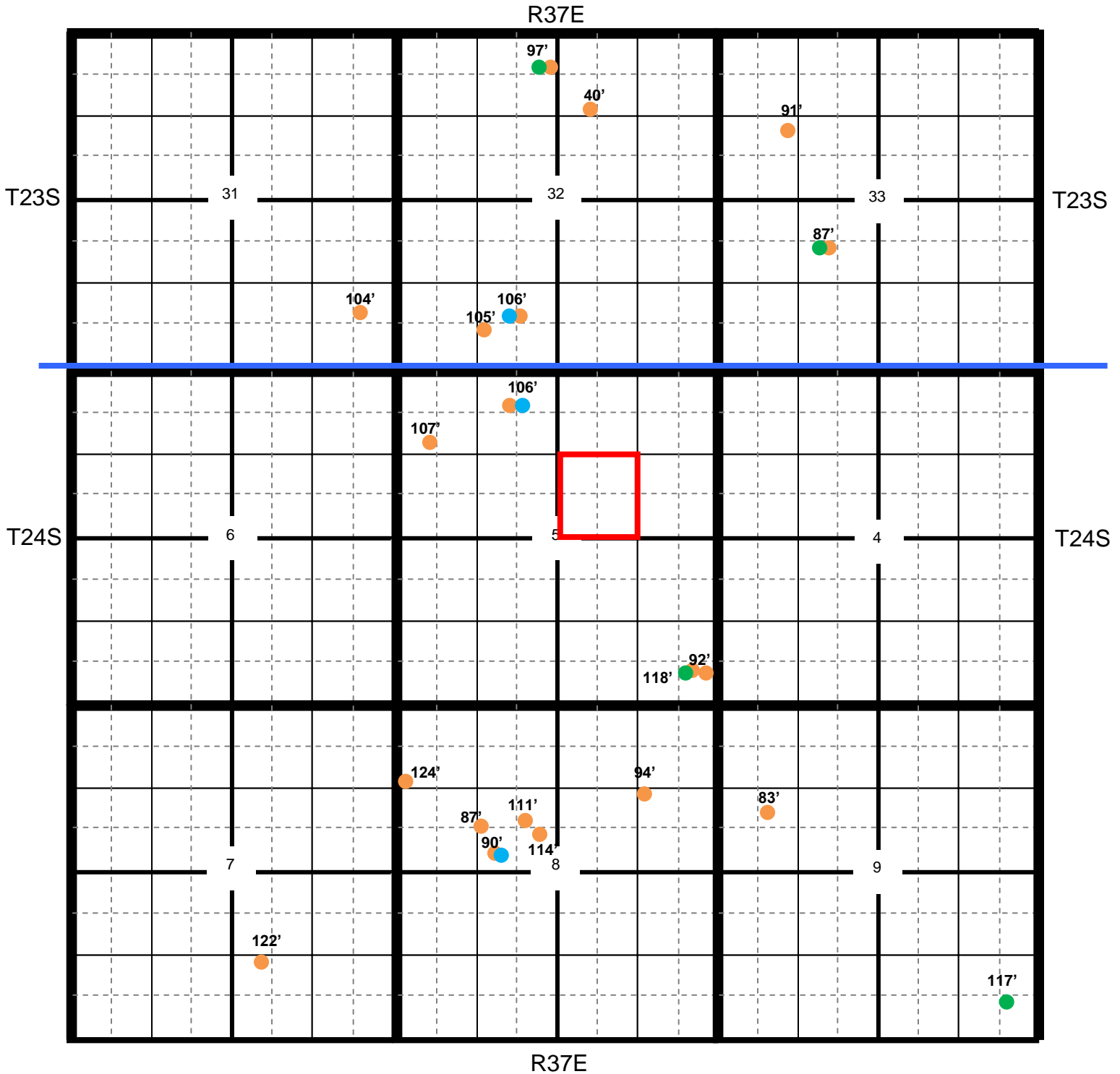
Unit Letter  
G

Section  
5

Township  
24S

Range  
37E

Trend Map 100'



Location

OCD

USGS

SEO

All Databases

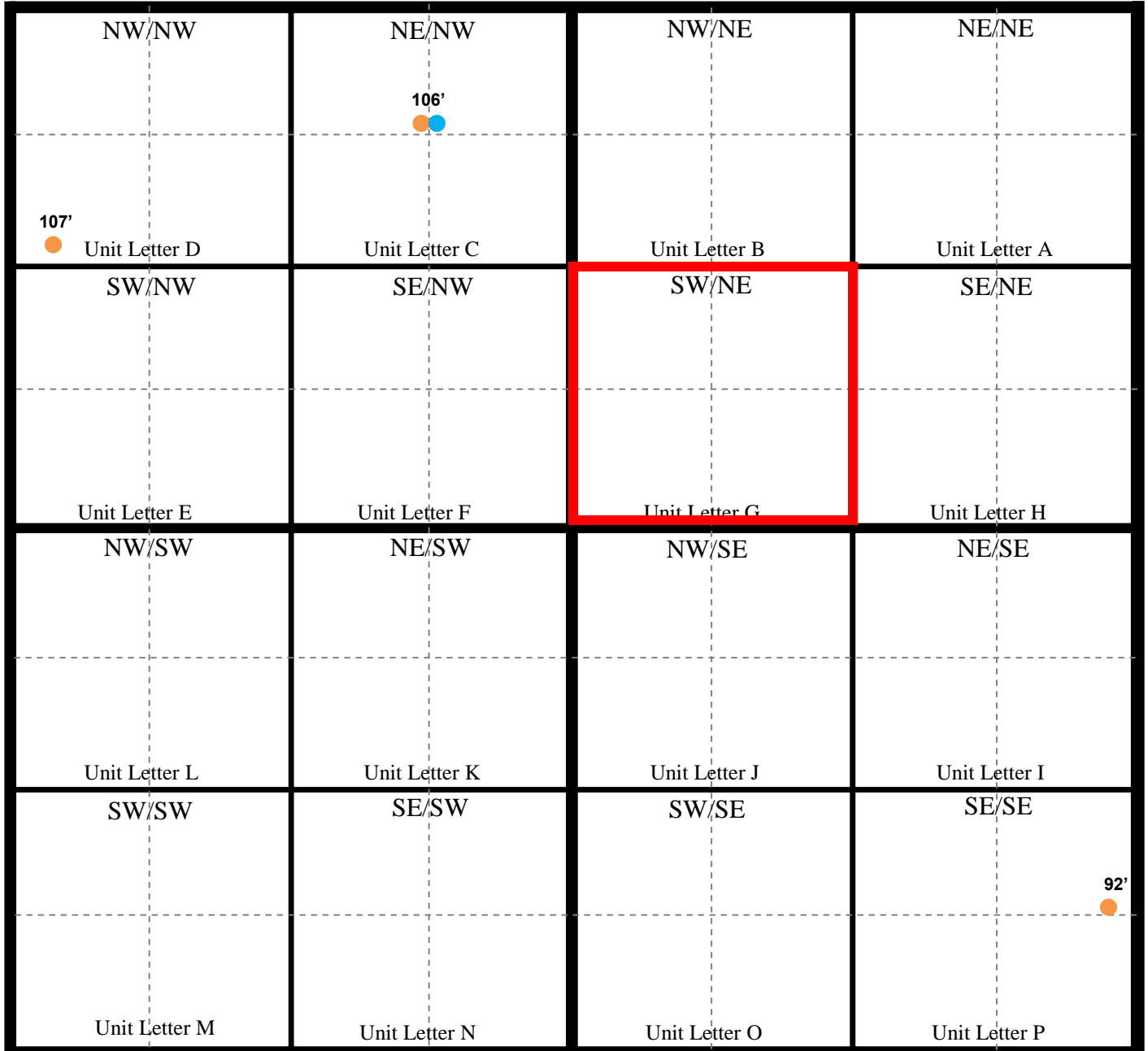
# Oxy MLMU Water Injection Station

County Lea Unit Letter G Section 5 Township 24S Range 37E

Trend Map 100'

1

2



3

4

**Laboratory Analytical Results Summary**  
**MLMU Water Injection Station**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'
Analyte	Method	Date	5/4/15	5/4/15	5/4/15
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	n/a	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	n/a	n/a
<b>Chloride</b>	SM4500Cl-B		<b>272</b>	<16.0	<b>32</b>
<b>GRO</b>	TPH 8015M		<10.0	n/a	n/a
<b>DRO</b>	TPH 8015M		<10.0	n/a	n/a

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'
Analyte	Method	Date	5/4/15	5/4/15	5/4/15
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	n/a	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	n/a	n/a
<b>Chloride</b>	SM4500Cl-B		<b>1140</b>	<b>256</b>	<b>32</b>
<b>GRO</b>	TPH 8015M		<10.0	n/a	n/a
<b>DRO</b>	TPH 8015M		<10.0	n/a	n/a

		Sample	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'
Analyte	Method	Date	5/4/15	5/4/15	5/4/15
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	n/a	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	n/a	n/a
<b>Chloride</b>	SM4500Cl-B		<b>1220</b>	<b>272</b>	<b>96</b>
<b>GRO</b>	TPH 8015M		<10.0	n/a	n/a
<b>DRO</b>	TPH 8015M		<10.0	n/a	n/a



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

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May 12, 2015

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MLMU- WATER INJECTION STATION

Enclosed are the results of analyses for samples received by the laboratory on 05/05/15 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

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:	05/05/2015	Sampling Date:	05/04/2015
Reported:	05/12/2015	Sampling Type:	Soil
Project Name:	MLMU- WATER INJECTION STATION	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

**Sample ID: SP 1 @ 1 (H501159-01)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/06/2015	ND	1.97	98.7	2.00	1.90	
Toluene*	<0.050	0.050	05/06/2015	ND	1.78	88.8	2.00	1.93	
Ethylbenzene*	<0.050	0.050	05/06/2015	ND	1.70	85.2	2.00	2.66	
Total Xylenes*	<0.150	0.150	05/06/2015	ND	5.62	93.7	6.00	2.85	
Total BTX	<0.300	0.300	05/06/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	05/06/2015	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/05/2015	ND	197	98.5	200	3.00	
DRO >C10-C28	<10.0	10.0	05/05/2015	ND	203	101	200	2.52	

Surrogate: 1-Chlorooctane 92.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 89.9 % 52.1-176

**Sample ID: SP 1 @ 2 (H501159-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/06/2015	ND	416	104	400	3.77	

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:	05/05/2015	Sampling Date:	05/04/2015
Reported:	05/12/2015	Sampling Type:	Soil
Project Name:	MLMU- WATER INJECTION STATION	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

**Sample ID: SP 1 @ 3 (H501159-03)**

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	05/06/2015	ND	416	104	400	3.77	

**Sample ID: SP 2 @ 1 (H501159-04)**

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/06/2015	ND	1.97	98.7	2.00	1.90	
Toluene*	<0.050	0.050	05/06/2015	ND	1.78	88.8	2.00	1.93	
Ethylbenzene*	<0.050	0.050	05/06/2015	ND	1.70	85.2	2.00	2.66	
Total Xylenes*	<0.150	0.150	05/06/2015	ND	5.62	93.7	6.00	2.85	
Total BTEx	<0.300	0.300	05/06/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	05/06/2015	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/05/2015	ND	197	98.5	200	3.00	
DRO >C10-C28	<10.0	10.0	05/05/2015	ND	203	101	200	2.52	

Surrogate: 1-Chlorooctane 92.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 90.4 % 52.1-176

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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:	05/05/2015	Sampling Date:	05/04/2015
Reported:	05/12/2015	Sampling Type:	Soil
Project Name:	MLMU- WATER INJECTION STATION	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

**Sample ID: SP 2 @ 2 (H501159-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	05/06/2015	ND	416	104	400	3.77		

**Sample ID: SP 2 @ 3 (H501159-06)**

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	05/06/2015	ND	416	104	400	3.77		

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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:	05/05/2015	Sampling Date:	05/04/2015
Reported:	05/12/2015	Sampling Type:	Soil
Project Name:	MLMU- WATER INJECTION STATION	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

**Sample ID: SP 3 @ 1 (H501159-07)**

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/08/2015	ND	1.84	92.1	2.00	3.61		
Toluene*	<0.050	0.050	05/08/2015	ND	1.66	82.8	2.00	3.22		
Ethylbenzene*	<0.050	0.050	05/08/2015	ND	1.58	79.1	2.00	3.86		
Total Xylenes*	<0.150	0.150	05/08/2015	ND	5.23	87.1	6.00	4.27		
Total BTX	<0.300	0.300	05/08/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	05/06/2015	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/05/2015	ND	197	98.5	200	3.00	
DRO >C10-C28	<10.0	10.0	05/05/2015	ND	203	101	200	2.52	

Surrogate: 1-Chlorooctane 93.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 91.5 % 52.1-176

**Sample ID: SP 3 @ 2 (H501159-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	05/06/2015	ND	416	104	400	3.77	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	05/05/2015	Sampling Date:	05/04/2015
Reported:	05/12/2015	Sampling Type:	Soil
Project Name:	MLMU- WATER INJECTION STATION	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

**Sample ID: SP 3 @ 3 (H501159-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	05/06/2015	ND	416	104	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company	Oxy Permian Ltd.	Contact	Christopher Jones
Address	1502 W. Commerce Dr., Carlsbad, NM	Telephone No.	(575) 628-4121
Facility Name	MLMU Water Injection Station	Facility Type	Injection Station
Surface Owner	Jimmy Doom	Mineral Owner	
		API No.	Lease 91-103817

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	5	24S	37E					Lea

Latitude N 32.24724° Longitude W 103.18388°

**NATURE OF RELEASE**

Type of Release	Produced water	Volume of Release	180 bbls	Volume Recovered	0 bbls
Source of Release	Middle injection pump plunger broke due to vibration	Date and Hour of Occurrence	03/04/2015	Date and Hour of Discovery	
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Tomas Oberding- NMOCD, Sol Hughes-BLM		
By Whom?	Jennifer Gilkey, BBC International	Date and Hour	03/12/2015 @ 1:30 pm		
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.\*

Vibration caused a middle injection pump plunger to break and spill 180 bbls of produced water onto the ground. No fluids were recovered and the plunger was replaced.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is approximately 100'x 100' on location. The leak stayed within the facility. Remediation will be completed in accordance with a remediation plan approved by both 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.

**OIL CONSERVATION DIVISION**

Signature: <b>Chris Jones</b> <small>Digitally signed by Chris Jones DN: cn=Chris Jones, o, ou, email=ckjones888@yahoo.com, c=US Date: 2015.03.23 10:37:20 -05'00'</small>	Approved by District Supervisor:		
Printed Name: Christopher Jones			
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: Christopher_jones@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <u>3/23/15</u>	Phone: (575) 628-4121		

\* Attach Additional Sheets If Necessary