

**RECEIVED**

By OCD; Dr. Oberding at 11:07 am, Apr 24, 2015

# Closure Report

**APPROVED**

By OCD; Dr. Oberding at 11:07 am, Apr 24, 2015

## Site Description

Site Name:	Manda B Tract C Tank Battery
Company:	Oxy Permian Ltd.
Legal Description:	U/L C, Section 28, T22S, R37E
County:	Lea County, NM
GPS Coordinates:	N 32.36877° W 103.16985°

## Release Data

Date of Release:	03/17/2014 and 05/20/2014
Type of Release:	Oil and produced water and Produced water
Source of Release:	Tank overflow
Volume of Release:	40 bbls mix and 30 bbls
Volume Recovered:	0 bbls

## Remediation Specifications

Remediation Parameters:	Excavate the areas around SP1, SP2, and SP3 to a depth of 2 feet. Then, place a liner in the excavation. Excavate the area around SP4 to a depth of 4 feet. Backfill the site with clean soil.	
Remediation Activities:	03/23/2015 to 03/27/2015	
Plan Sent to OCD:	10/21/2014	Email from Cliff Brunson to Tomas Oberding
OCD Approval of Plan:	10/22/2014	Email from Tomas Oberding to Cliff Brunson
Plan Sent to BLM:	n/a	n/a
BLM Approval of Plan:	n/a	n/a

## Supporting Documentation

Initial C-141	Signed 04/15/2014 and 06/02//2014
Final C-141	Signed 04/21/2015
Site Diagram	March 2014 and May 2014
Groundwater Plot	50'-100'
TOPO Maps	March 2014
Lab Summary	04/15/2014-04/17/2015, 05/22/2014, and 08/28/2014
Lab Analysis	04/15/2014-04/17/2015, 05/22/2014, and 08/28/2014
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.

04/22/2015

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	Manda B Tract C Tank Battery	Facility Type	Tank Battery
Surface Owner	BLM	Mineral Owner	
		API No.	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	28	22S	37E					Lea County, NM

Latitude N 32.36877°

Longitude W 103.16985°

#### NATURE OF RELEASE

Type of Release	Oil and Produced water	Volume of Release	40 bbls mix	Volume Recovered	0 bbls
Source of Release	Water dump on separator malfunctioned and caused the oil tanks to overflow	Date and Hour of Occurrence	03/17/2014	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking, NMOCD and Jennifer VanCuren, BLM		
By Whom?	Kathy Purvis	Date and Hour	03/17/2014 @ 3:08 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.\*

The water dump on the separator malfunctioned and caused the oil tanks to overflow spilling 40 bbls of oil and produced water onto the ground. No fluids were recovered and the water dump issue was resolved.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is approximately 8' x 80' on location. Remediation will be completed in accordance with a remediation 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: 	<b>OIL CONSERVATION DIVISION</b>		
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: 4-15-14	Phone: (575) 397-8216		

\* Attach Additional Sheets If Necessary

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Name of Company	Oxy Permian Ltd.	Contact	Chancey Summers
Address	1017 W. Stanolind Rd, Hobbs, NM 88240	Telephone No.	(575) 397-8216
Facility Name	Manda B Tract C Tank Battery	Facility Type	Tank Battery
Surface Owner	BLM	Mineral Owner	
		API No.	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	28	22S	37E					Lea County, NM

Latitude N 32.36877° Longitude W 103.16985°

#### NATURE OF RELEASE

Type of Release	Produced water	Volume of Release	30 bbls	Volume Recovered	0 bbls
Source of Release	Trash collected in transfer pump meter and caused it to plug up triggering the tanks to spill over	Date and Hour of Occurrence	05/20/2014	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking and Tomas Oberding, NMOCD		
By Whom?	Kathy Purvis	Date and Hour	05/21/2014 @ 11:57 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.\*

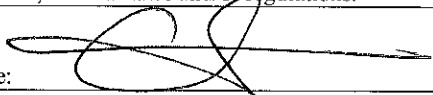
Describe Cause of Problem and Remedial Action Taken.\*

Trash collected in the transfer pump and plugged it up triggering the tanks to spill over and leak 30 bbls of produced water onto the ground. No fluids were recovered and the transfer pump was cleared of debris.

Describe Area Affected and Cleanup Action Taken.\*

The affected area is approximately 35' x 50' on location and down the road. Remediation will be completed in accordance with a remediation 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: 	<b>OIL CONSERVATION DIVISION</b>		
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: 6-2-14	Phone: (575) 397-8216		

\* Attach Additional Sheets If Necessary

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Submit 1 Copy to appropriate District Office in  
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### 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	Manda B Tract C Tank Battery	Facility Type	Tank Battery
Surface Owner	BLM	Mineral Owner	
		API No.	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	28	22S	37E					Lea County, NM

Latitude N 32.36877° Longitude W 103.16985°

#### NATURE OF RELEASE

Type of Release	Oil and Produced water	Volume of Release	40 bbls mix	Volume Recovered	0 bbls
Source of Release	Water dump on separator malfunctioned and caused the oil tanks to overflow	Date and Hour of Occurrence	03/17/2014	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking, NMOCD and Jennifer VanCuren, BLM		
By Whom?	Kathy Purvis	Date and Hour	03/17/2014 @ 3:08 pm		
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The affected area is approximately 8' x 80' on location. Remediation was completed in accordance with the remediation plan approved by Tomas Oberding of NMOCD via email on 10/22/2014.					
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Signature: <b>Chris Jones</b>		OIL CONSERVATION DIVISION			
Printed Name: Christopher Jones		Approved by Environmental Specialist:			
Title: HES Specialist		Approval Date:		Expiration Date:	
E-mail Address: <a href="mailto:Christopher_Jones@oxy.com">Christopher_Jones@oxy.com</a>		Conditions of Approval:		Attached <input type="checkbox"/>	
Date:		Phone: (575) 628-4121			

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#### LOCATION OF RELEASE

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C	28	22S	37E					Lea County, NM

Latitude N 32.36877° Longitude W 103.16985°

#### NATURE OF RELEASE

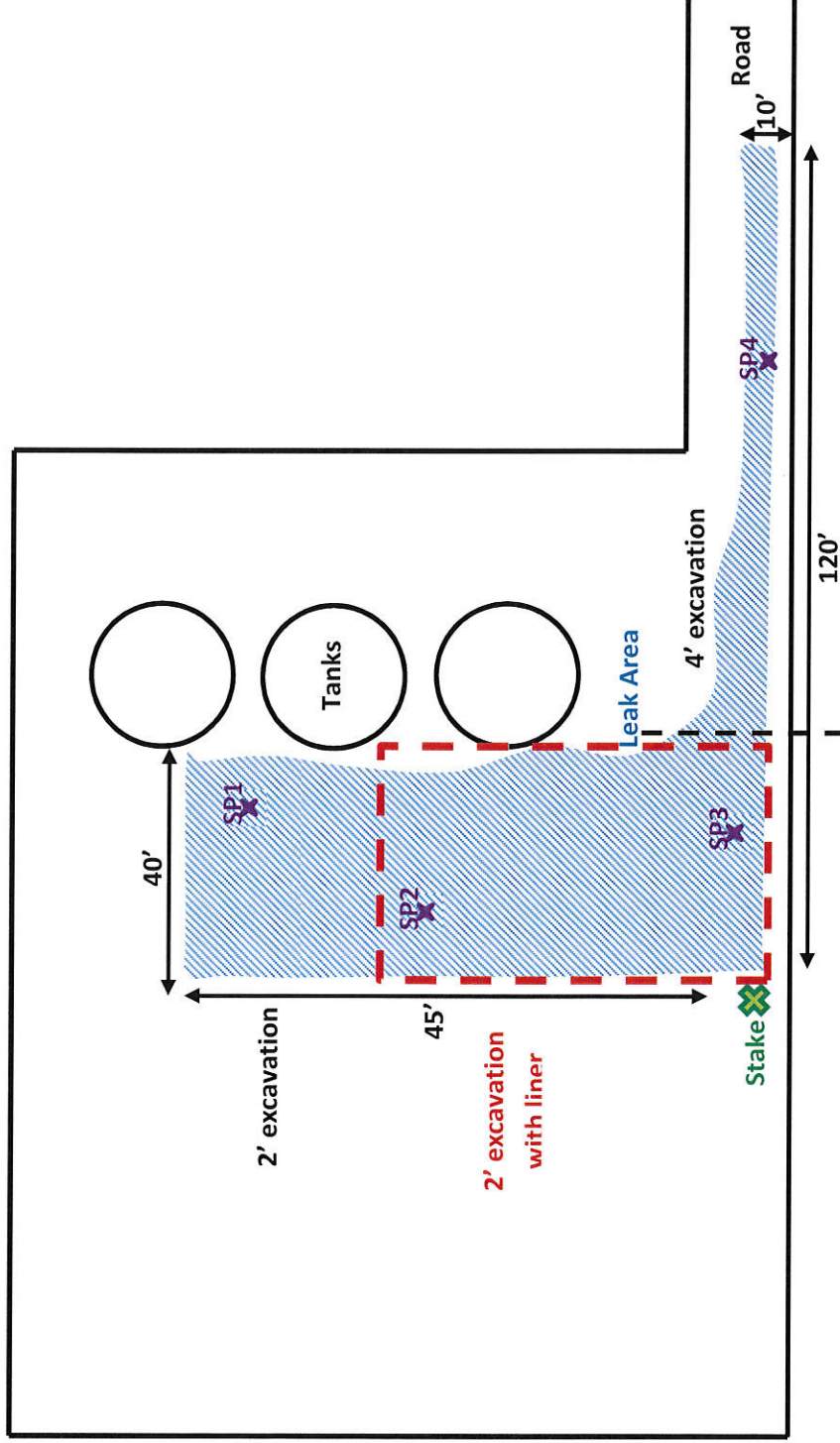
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Signature: <b>Chris Jones</b> <small>Digitally signed by Chris Jones DN: cn=Chris Jones, o, ou, email=ckjones888@yahoo.com, c=US Date: 2015.04.21 11:28:28 -05'00'</small>		<b>OIL CONSERVATION DIVISION</b>			
Printed Name: Christopher Jones		Approved by Environmental Specialist:			
Title: HES Specialist		Approval Date:		Expiration Date:	
E-mail Address: <a href="mailto:Christopher_Jones@oxy.com">Christopher_Jones@oxy.com</a>		Conditions of Approval:		Attached <input type="checkbox"/>	
Date:		Phone: (575) 628-4121			

\* Attach Additional Sheets If Necessary



Oxy

# Manda B Tract C Tank Battery



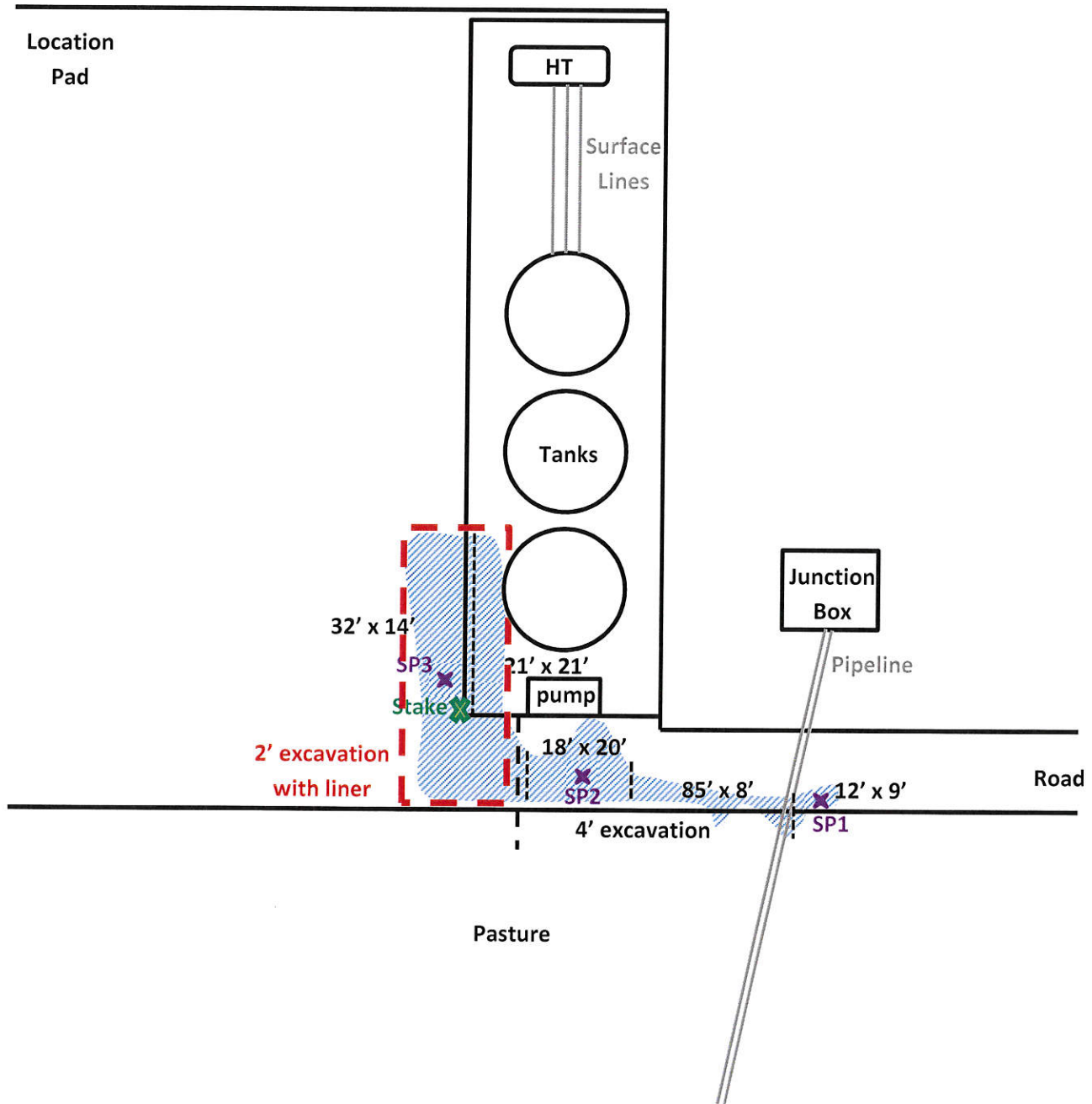
BBC International, Inc.	
Oxy	
Manda B Tract C Tank Battery	
Date: 03/28/14	DRWG by: K. Purvis
NOT TO SCALE	File: Oxy 2014

U/L C, Section 28, T22S, R37E  
Lea County, NM  
N 32.36877° W 103.16985°



Oxy

# Manda B Tract C Tank Battery (5/20/14)



U/L C, Section 28, T22S, R37E

Lea County, NM

N 32.36871° W 103.16980°

BBC International, Inc.

Oxy

Manda B Tract C Tank Battery

Date: 05/23/2014

DRWG by: K. Purvis

NOT TO SCALE

File: Oxy 2014

# Groundwater Plot

## Oxy Manda B Tract C Tank Battery

County  
Lea

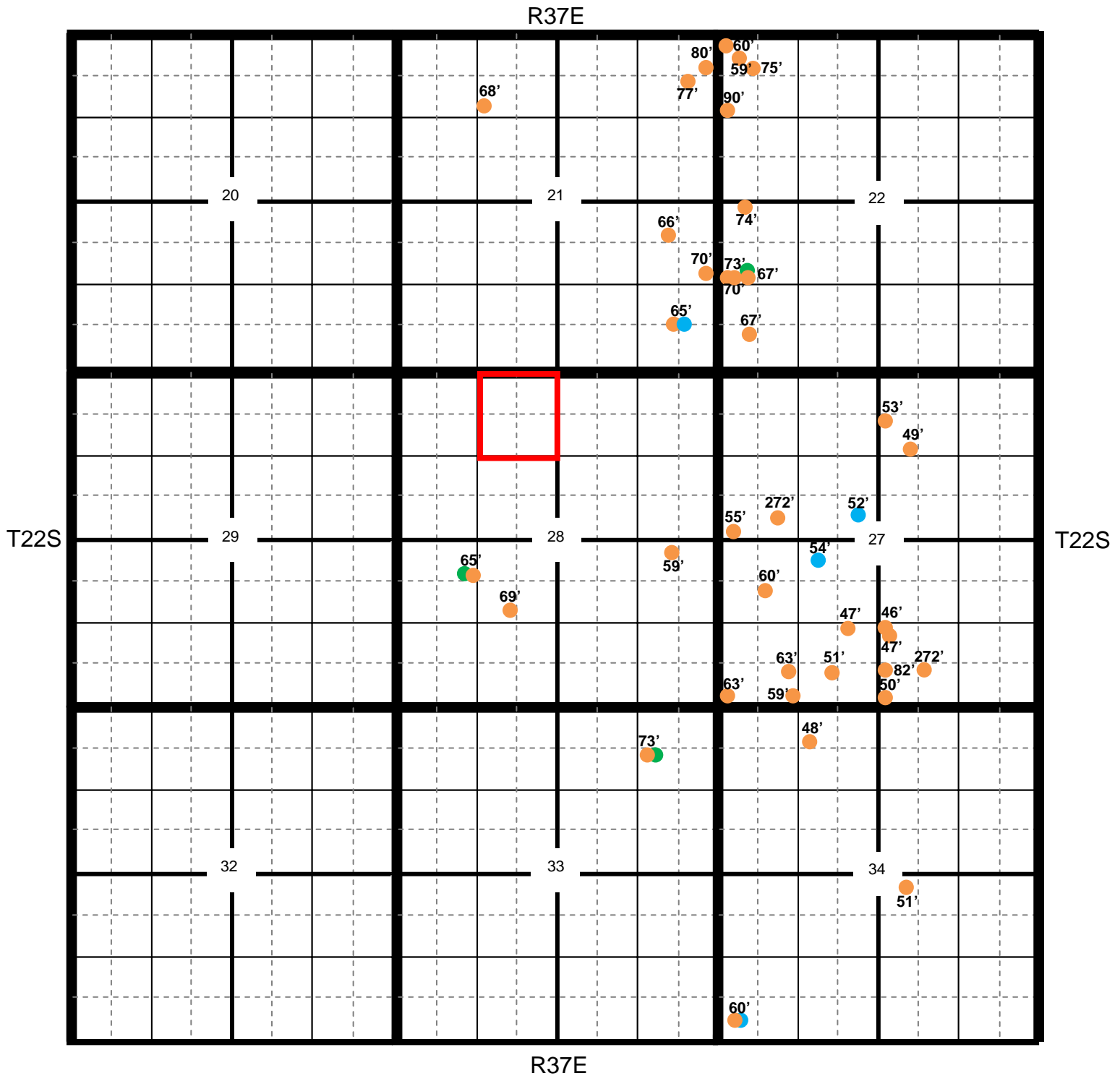
Unit Letter  
C

Section  
28

Township  
22S

Range  
37E

Trend Map 50'-100'



Location

OCD

USGS

SEO

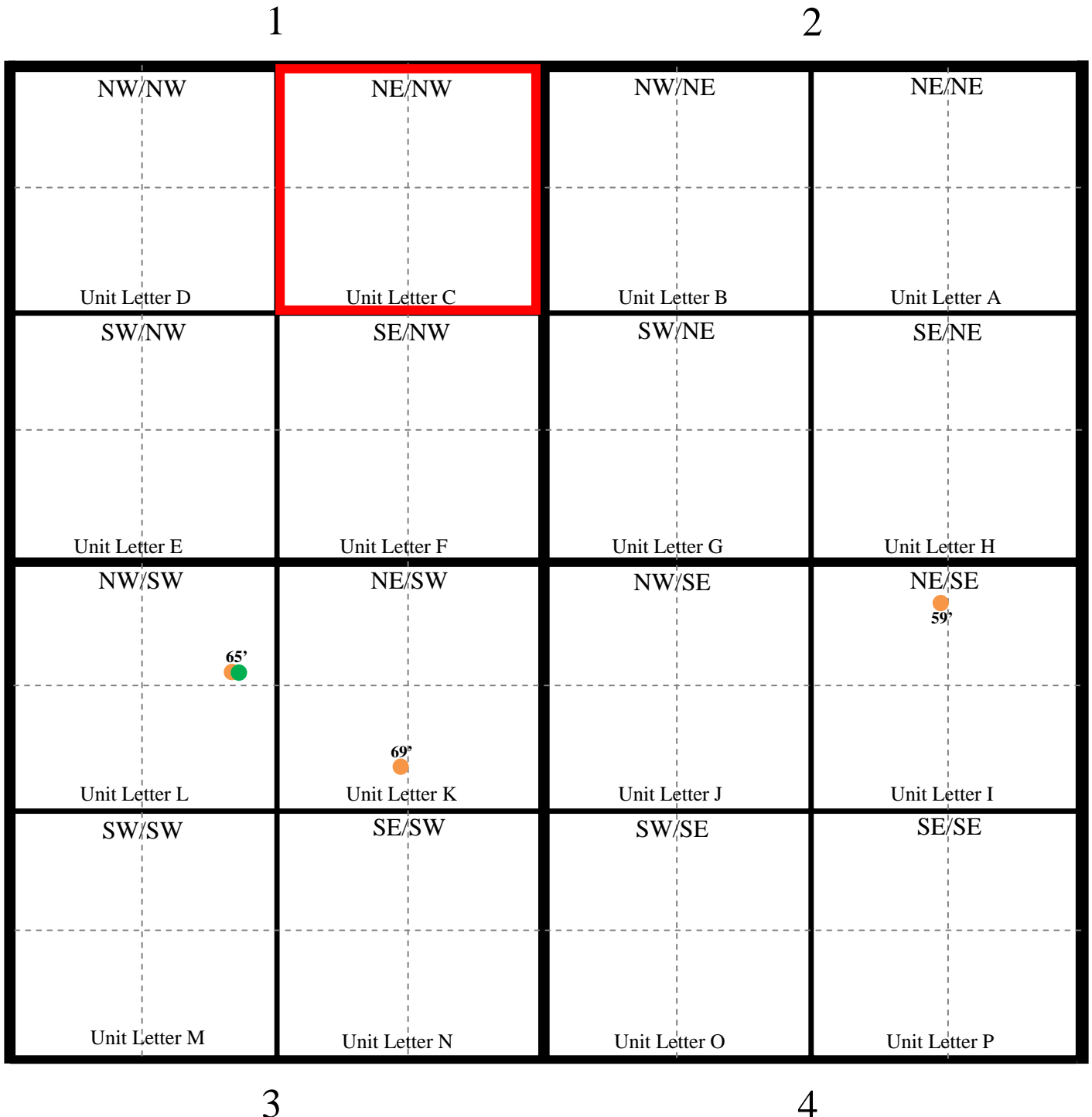
All Databases



## Oxy Manda B Tract C Tank Battery

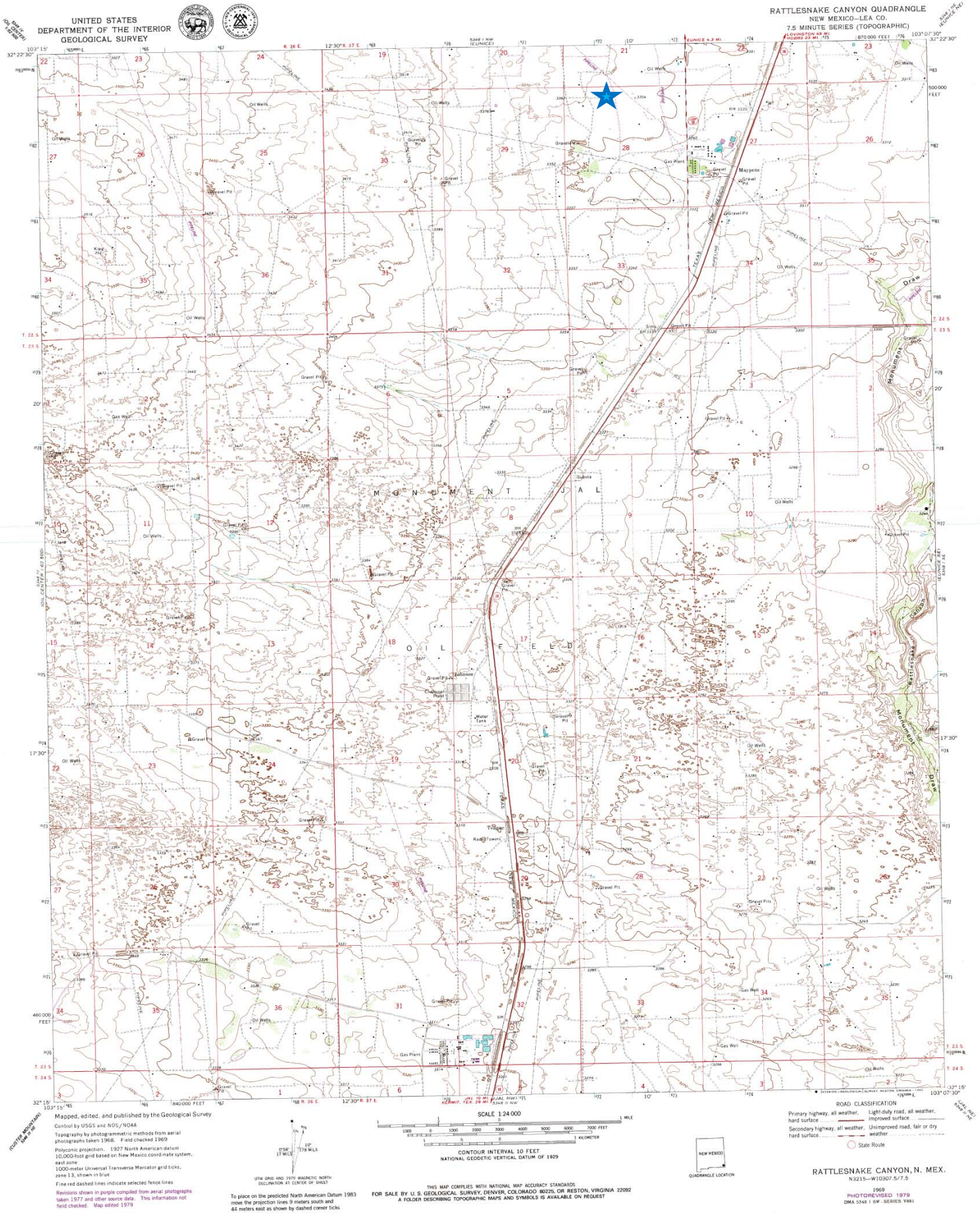
County Lea      Unit Letter C      Section 28      Township 22S      Range 37E

Trend Map 50'-100'



# Oxy

## Manda B Tract C TB

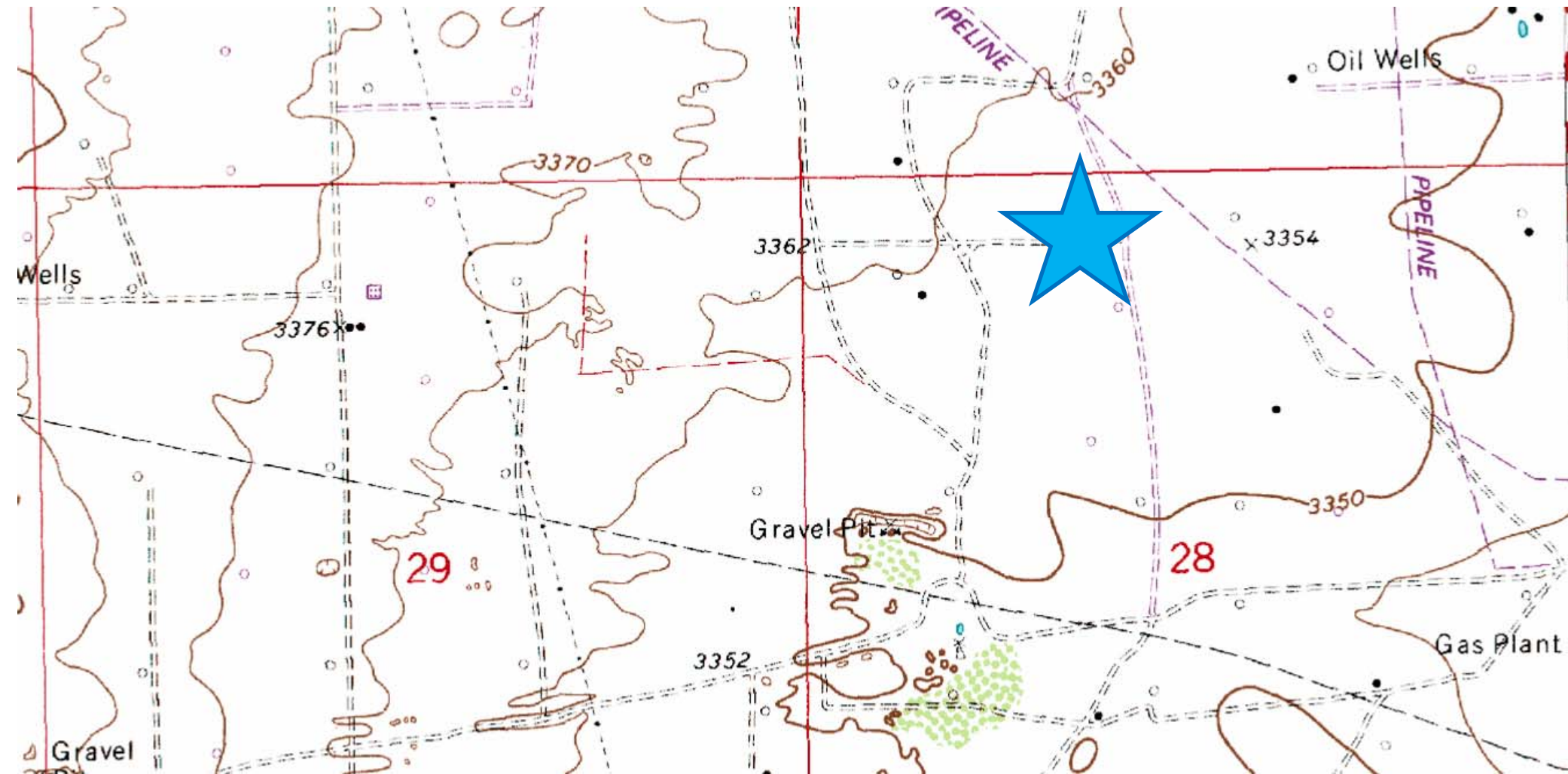




# Oxy

## Manda B Tract C

### Tank Battery



**Laboratory Analytical Results Summary**  
**Manda B Tract C Tank Battery**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 5'
Analyte	Method	Date	4/15/14	4/15/14	4/15/14	4/15/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
<b>Chloride</b>	SM4500CI-B		<b>32</b>	<b>368</b>	<b>640</b>	<b>160</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	<10.0	<10.0
<b>DRO</b>	TPH 8015M		<10.0	<10.0	<10.0	<10.0

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 6'	SP2 @ 9'
Analyte	Method	Date	4/15/14	4/15/14	4/15/14	4/17/14	4/17/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.100	<0.050	<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.100	<0.050	<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<b>0.113</b>	<0.050	<0.050	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<b>0.506</b>	<0.150	<0.150	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<b>0.62</b>	<0.300	<0.300	<0.300	<0.300
<b>Chloride</b>	SM4500CI-B		<b>96</b>	<b>320</b>	<b>528</b>	<b>752</b>	<b>288</b>
<b>GRO</b>	TPH 8015M		<b>14.8</b>	<10.0	<10.0	<10.0	<10.0
<b>DRO</b>	TPH 8015M		<b>492</b>	<b>35.8</b>	<10.0	<10.0	<10.0

		Sample	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 6'	SP3 @ 8'
Analyte	Method	Date	4/17/14	4/17/14	4/17/14	4/17/14	4/17/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300
<b>Chloride</b>	SM4500CI-B		<b>256</b>	<b>736</b>	<b>704</b>	<b>304</b>	<b>192</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0
<b>DRO</b>	TPH 8015M		<10.0	<b>37</b>	<10.0	<b>30.4</b>	<10.0

		Sample	SP4 @ 1'	SP4 @ 2'	SP4 @ 3'	SP4 @ 5'	SP4 @ 7'
Analyte	Method	Date	4/17/14	4/17/14	4/17/14	4/17/14	4/17/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300
<b>Chloride</b>	SM4500CI-B		<b>5760</b>	<b>9120</b>	<b>8500</b>	<b>240</b>	<b>288</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0
<b>DRO</b>	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0

**Laboratory Analytical Results Summary  
Manda B Tract C Tank Battery**

		Sample	SP1 @ 1'	SP1 @ 3'	SP1 @ 5'	SP1 @ 6'
Analyte	Method	Date	5/22/14	5/22/14	5/22/14	8/28/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500CI-B		<b>7920</b>	<b>1020</b>	<b>608</b>	<b>240</b>

		Sample	SP2 @ 1'	SP2 @ 3'	SP2 @ 4'	SP2 @ 5'
Analyte	Method	Date	5/22/14	5/22/14	5/22/14	8/28/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500CI-B		<b>544</b>	<b>592</b>	<b>368</b>	<b>288</b>

		Sample	SP3 @ 1'	SP3 @ 3'	SP3 @ 5'	SP3 @ 7'	SP3 @ 9'	SP3 @ 10'
Analyte	Method	Date	5/22/14	5/22/14	5/22/14	5/22/14	5/22/14	8/28/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500CI-B		<b>752</b>	<b>528</b>	<b>544</b>	<b>704</b>	<b>336</b>	<b>336</b>



April 28, 2014

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MANDA B TRACT C

Enclosed are the results of analyses for samples received by the laboratory on 04/21/14 16:25.

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,



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:	04/21/2014	Sampling Date:	04/15/2014
Reported:	04/28/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EUNICE, NM		

**Sample ID: SP 1 @ 1 (H401194-01)**

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	04/22/2014	ND	2.29	115	2.00	2.53	
Toluene*	<0.050	0.050	04/22/2014	ND	2.16	108	2.00	2.19	
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	2.14	107	2.00	2.07	
Total Xylenes*	<0.150	0.150	04/22/2014	ND	6.22	104	6.00	1.49	
Total BTX	<0.300	0.300	04/22/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 125 % 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	04/24/2014	ND	416	104	400	0.00	

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	04/22/2014	ND	184	91.9	200	5.44	
DRO >C10-C28	<10.0	10.0	04/22/2014	ND	195	97.7	200	3.58	

Surrogate: 1-Chlorooctane 114 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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\*=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:	04/21/2014	Sampling Date:	04/15/2014
Reported:	04/28/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EUNICE, NM		

**Sample ID: SP 1 @ 2 (H401194-02)**

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	04/22/2014	ND	2.29	115	2.00	2.53		
Toluene*	<0.050	0.050	04/22/2014	ND	2.16	108	2.00	2.19		
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	2.14	107	2.00	2.07		
Total Xylenes*	<0.150	0.150	04/22/2014	ND	6.22	104	6.00	1.49		
Total BTEx	<0.300	0.300	04/22/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 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	04/24/2014	ND	416	104	400	0.00	

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	04/22/2014	ND	184	91.9	200	5.44	
DRO >C10-C28	<10.0	10.0	04/22/2014	ND	195	97.7	200	3.58	

Surrogate: 1-Chlorooctane 106 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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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:	04/21/2014	Sampling Date:	04/15/2014
Reported:	04/28/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EUNICE, NM		

**Sample ID: SP 1 @ 3 (H401194-03)**

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	04/22/2014	ND	2.29	115	2.00	2.53		
Toluene*	<0.050	0.050	04/22/2014	ND	2.16	108	2.00	2.19		
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	2.14	107	2.00	2.07		
Total Xylenes*	<0.150	0.150	04/22/2014	ND	6.22	104	6.00	1.49		
Total BTEx	<0.300	0.300	04/22/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 126 % 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	640	16.0	04/24/2014	ND	416	104	400	0.00		

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	04/22/2014	ND	184	91.9	200	5.44	
DRO >C10-C28	<10.0	10.0	04/22/2014	ND	195	97.7	200	3.58	

Surrogate: 1-Chlorooctane 83.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.6 % 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: 04/21/2014  
 Reported: 04/28/2014  
 Project Name: MANDA B TRACT C  
 Project Number: NONE GIVEN  
 Project Location: EUNICE, NM

 Sampling Date: 04/15/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: SP 1 @ 5 (H401194-04)**

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	04/22/2014	ND	2.29	115	2.00	2.53		
Toluene*	<0.050	0.050	04/22/2014	ND	2.16	108	2.00	2.19		
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	2.14	107	2.00	2.07		
Total Xylenes*	<0.150	0.150	04/22/2014	ND	6.22	104	6.00	1.49		
Total BTEx	<0.300	0.300	04/22/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 126 % 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	160	16.0	04/24/2014	ND	416	104	400	0.00		

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	04/22/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/22/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 93.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 90.6 % 63.6-154

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

Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/15/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 2 @ 1 (H401194-05)**

BTX 8021B		mg/kg	Analyzed By: CK					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	04/22/2014	ND	2.29	115	2.00	2.53	
Toluene*	<0.100	0.100	04/22/2014	ND	2.16	108	2.00	2.19	
Ethylbenzene*	<b>0.113</b>	0.100	04/22/2014	ND	2.14	107	2.00	2.07	
Total Xylenes*	<b>0.506</b>	0.300	04/22/2014	ND	6.22	104	6.00	1.49	
Total BTX	<b>0.620</b>	0.600	04/22/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 149 % 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	<b>96.0</b>	16.0	04/24/2014	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>14.8</b>	10.0	04/22/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<b>492</b>	10.0	04/22/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 120 % 65.2-140

Surrogate: 1-Chlorooctadecane 121 % 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: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/15/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 2 @ 2 (H401194-06)**

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	04/22/2014	ND	2.29	115	2.00	2.53		
Toluene*	<0.050	0.050	04/22/2014	ND	2.16	108	2.00	2.19		
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	2.14	107	2.00	2.07		
Total Xylenes*	<0.150	0.150	04/22/2014	ND	6.22	104	6.00	1.49		
Total BTEx	<0.300	0.300	04/22/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 126 % 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	320	16.0	04/24/2014	ND	416	104	400	0.00	

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	04/22/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	35.8	10.0	04/22/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 112 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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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:	04/21/2014	Sampling Date:	04/15/2014
Reported:	04/28/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	EUNICE, NM		

**Sample ID: SP 2 @ 3 (H401194-07)**

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	04/22/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/22/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/22/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/22/2014	ND	5.08	84.7	6.00	3.50		
Total BTEx	<0.300	0.300	04/22/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 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	528	16.0	04/24/2014	ND	416	104	400	0.00		

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	04/22/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/22/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 97.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.0 % 63.6-154

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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: 04/21/2014  
 Reported: 04/28/2014  
 Project Name: MANDA B TRACT C  
 Project Number: NONE GIVEN  
 Project Location: EUNICE, NM

 Sampling Date: 04/17/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: SP 2 @ 6 (H401194-08)**

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	04/23/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/23/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/23/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/23/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/23/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	752	16.0	04/24/2014	ND	400	100	400	0.00		

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 79.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.4 % 63.6-154

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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: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 2 @ 9 (H401194-09)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	288	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 100 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.9 % 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: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 3 @ 1 (H401194-10)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 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	256	16.0	04/24/2014	ND	400	100	400	0.00		

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Hobbs NM, 88241  
Fax To: (575) 397-0397

Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 3 @ 2 (H401194-11)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTEX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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	736	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	37.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.7 % 63.6-154

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Fax To: (575) 397-0397

Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 3 @ 3 (H401194-12)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTEX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 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	704	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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 Received: 04/21/2014  
 Reported: 04/28/2014  
 Project Name: MANDA B TRACT C  
 Project Number: NONE GIVEN  
 Project Location: EUNICE, NM

 Sampling Date: 04/17/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: SP 3 @ 6 (H401194-13)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	304	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	30.4	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 114 % 65.2-140

Surrogate: 1-Chlorooctadecane 112 % 63.6-154

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 Received: 04/21/2014  
 Reported: 04/28/2014  
 Project Name: MANDA B TRACT C  
 Project Number: NONE GIVEN  
 Project Location: EUNICE, NM

 Sampling Date: 04/17/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: SP 3 @ 8 (H401194-14)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTEx	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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	192	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 96.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.2 % 63.6-154

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Fax To: (575) 397-0397

Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 4 @ 1 (H401194-15)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTEx	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	5760	16.0	04/24/2014	ND	400	100	400	0.00		

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 110 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 4 @ 2 (H401194-16)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTEX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 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	9120	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 105 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 4 @ 3 (H401194-17)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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	8500	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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Received: 04/21/2014  
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Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 4 @ 5 (H401194-18)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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	240	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 98.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 92.0 % 63.6-154

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Received: 04/21/2014  
Reported: 04/28/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 04/17/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 4 @ 7 (H401194-19)**

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	04/24/2014	ND	1.71	85.4	2.00	2.47		
Toluene*	<0.050	0.050	04/24/2014	ND	1.71	85.4	2.00	3.28		
Ethylbenzene*	<0.050	0.050	04/24/2014	ND	1.70	85.1	2.00	2.80		
Total Xylenes*	<0.150	0.150	04/24/2014	ND	5.08	84.7	6.00	3.50		
Total BTX	<0.300	0.300	04/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 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	288	16.0	04/24/2014	ND	400	100	400	0.00	

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	04/23/2014	ND	198	98.8	200	5.58	
DRO >C10-C28	<10.0	10.0	04/23/2014	ND	216	108	200	7.28	

Surrogate: 1-Chlorooctane 94.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 90.5 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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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

---

Cardinal Laboratories

\*=Accredited Analyte

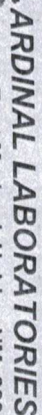
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---

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

# BILL TO

## ANALYSIS REQUEST

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



## APRINA I LABORATORIES

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

## CHAIN-OF-CISTORY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.						P.O. #:	BILL TO																
Project Manager: Cliff Brunson						Company:	ANALYSIS REQUEST																
Address: P.O. Box 805						Attn:																	
City: Hobbs						State: NM	Zip: 88241																
Phone #: 575-397-6388						Fax #:	575-397-0397																
Project #:						Project Owner:	OXY																
Project Name: Manda-B Tract - E						City:	Symco																
Project Location: Empire Ave						State:	Zip:																
Sample Name: H40119A						Phone #:																	
FOR LAB USE ONLY						Fax #:																	
Lab I.D.						(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX		PRESERV.	SAMPLING												
						GROUNDWATER																	
						WASTEWATER																	
						SOIL																	
						OIL																	
						SLUDGE																	
						OTHER :																	
						ACID/BASE:																	
						ICE / COOL																	
						OTHER :																	
H40119A						DATE	TIME																
11.						SP30C2	X	X	X	X	X	X											
12.						C1	X	X	X	X	X	X											
13.						C1	X	X	X	X	X	X											
14.						C1	X	X	X	X	X	X											
15.						SP40C1	X	X	X	X	X	X											
16.						C1	X	X	X	X	X	X											
17.						C1	X	X	X	X	X	X											
18.						C1	X	X	X	X	X	X											
19.						C1	X	X	X	X	X	X											
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Relinquished By: [Signature]																							
Date: 4/10/14																							
Time: [Blank]																							
Received By: [Signature]																							
Date: 4/21/14																							
Time: 4:20																							
Delivered By: (Circle One)																							
Sampler - UPS - Bus - Other:																							
4.4 oc																							
F. Jacobson																							
CHECKED BY: [Signature]																							
REMARKS:																							





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

---

May 29, 2014

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MANDA B TRACT C TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/23/14 16:40.

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 style with a large, stylized 'C' and 'K'.

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:	05/23/2014	Sampling Date:	05/22/2014
Reported:	05/29/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	EUNICE, NM		

**Sample ID: SP 1 @ 1 (H401599-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7920	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 1 @ 3 (H401599-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 1 @ 5 (H401599-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 2 @ 1 (H401599-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	05/29/2014	ND	400	100	400	3.92	

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:	05/23/2014	Sampling Date:	05/22/2014
Reported:	05/29/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	EUNICE, NM		

**Sample ID: SP 2 @ 3 (H401599-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 2 @ 4 (H401599-06)**

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	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 1 (H401599-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 3 (H401599-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 5 (H401599-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	05/29/2014	ND	400	100	400	3.92	

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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:	05/23/2014	Sampling Date:	05/22/2014
Reported:	05/29/2014	Sampling Type:	Soil
Project Name:	MANDA B TRACT C TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	EUNICE, NM		

**Sample ID: SP 3 @ 7 (H401599-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	05/29/2014	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 9 (H401599-11)**

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	05/28/2014	ND	416	104	400	3.77	

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\*=Accredited Analyte

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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



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(505) 393-2326 FAX (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(505) 393-2326 FAX (505) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

State: NM Zip: 88241

Phone #: 575-397-6388

Fax #: 575-397-0397

Project #:

Project Owner: CXY

Project Name: Manti-B Trail-C Tank Battery

Project Location: Elm-ic

Sample Name: JEFF DENEALAY

FOR LAB USE ONLY

Lab I.D. Sample I.D.

HWS94

	DATE	TIME	(G)RAB OR (C)OMP.						# CONTAINERS	MATRIX						PRESERV	SAMPLING
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :		ACID/BASE:	ICE / COOL	OTHER :					
1	5-12	1610	X						X								X
2		1111	X						X								X
3		1249	X						X								X
4		2335	X						X								X
5		2256	X						X								X
6		3003	X						X								X
7		3225	X						X								X
8		341	X						X								X
9		401	X						X								X

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Relinquished By:

Date: 5-23-94

Time: 4:40

Received By:

REMARKS:

Delivered By: (Circle One)

Date:

Time:

Received By:

Sample Condition

CHECKED BY: (Initials)

Sampler - UPS - Bus - Other:

0.8.C.H.S.

Cool Intact Yes No

Yes No





# CARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		P.O. #:		BILL TO												ANALYSIS REQUEST																									
Project Manager: Cliff Brunson		Company:																																							
Address: P.O. Box 805		Attn:																																							
City: Hobbs		State: NM Zip: 88241																																							
Phone #: 575-397-6388		Address:																																							
Fax #: 575-397-0397		City:																																							
Project #: 011		State:																																							
Project Name: Made B Tract C Tank Buttery		Zip:																																							
Project Location: Enise		Phone #:																																							
Fax #:																																									
Sampler Name: Cliff Brunson		PRESERV																																							
FOR LAB USE ONLY		SAMPLING																																							
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME													
H101599		Sp309		G-1		1		X																		5:22		430		CC -											



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

---

September 05, 2014

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MANDA B TRACT C

Enclosed are the results of analyses for samples received by the laboratory on 08/28/14 16:50.

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: 08/28/2014  
Reported: 09/05/2014  
Project Name: MANDA B TRACT C  
Project Number: NONE GIVEN  
Project Location: EUNICE, NM

Sampling Date: 08/28/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP 1 @ 6 (H402670-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/04/2014	ND	432	108	400	3.77	

**Sample ID: SP 2 @ 5 (H402670-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	09/04/2014	ND	432	108	400	3.77	

**Sample ID: SP 3 @ 10 (H402670-03)**

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	09/04/2014	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

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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

---

Cardinal Laboratories

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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**

Company Name: BBC International, Inc.  
Project Manager: Cliff Brunson  
Address: P.O. Box 805  
City: Hobbs  
Phone #: 575-397-6388  
State: NM Zip: 88241  
Fax #: 575-397-0397

P.O. #:

Company:

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax #:

Project Name:

Project Location:

Sample Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

(G)RAB OR (C)OMP

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

REMARKS

**ANALYSIS REQUEST**

Phone Result: ☐ Yes ☐ No Add'l Phone #:  
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

Relinquished By: *Cliff Brunson*

Delivered By: (Circle One)

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



## Kathy Purvis

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**From:** Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>  
**Sent:** Wednesday, October 22, 2014 7:44 AM  
**To:** Cliff P. Brunson  
**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** RE: OXY - Manda B Tract C Tank Battery - Remediation Plan

Aloha Cliff et al,

Thank you for the meeting yesterday.

Based on the documentation provided OCD approves the remediation plan as written.

I appreciate you help in maintaining a clear paper trail of our logic for others to follow.

Have a great day and be safe out there everyone.

Mahalo

-Doc

Tomáš 'Doc' Oberding, PhD  
Environmental Specialist – New Mexico Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
1625 N. French Dr.  
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(O): (575) 393-6161 ext 111  
(C): 575-370-3180  
(F): (575) 393-0720  
E-Mail: [tomas.oberding@state.nm.us](mailto:tomas.oberding@state.nm.us)  
Website: <http://www.emnrd.state.nm.us/ocd/>

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**From:** Cliff P. Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Tuesday, October 21, 2014 5:50 PM  
**To:** Oberding, Tomas, EMNRD  
**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** Re: OXY - Manda B Tract C Tank Battery - Remediation Plan

Tomas,

After our meeting this morning, I have altered the remediation plan to reflect our discussion and agreement. Please find attached a revised remediation plan and site drawing that depicts the changes.

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

Thanks, Cliff

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**From:** "Tomas J. Oberding" <[tomas.oberding@state.nm.us](mailto:tomas.oberding@state.nm.us)>

**Date:** Monday, October 20, 2014 at 1:40 PM

**To:** Cliff Brunson <[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)>

**Cc:** C J Summers <[Chancey\\_Summers@oxy.com](mailto:Chancey_Summers@oxy.com)>, Ken Swinney <[kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)>, Jennifer Gilkey <[jgilkey@bbcinternational.com](mailto:jgilkey@bbcinternational.com)>, Kathy Purvis <[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)>

**Subject:** RE: OXY - Manda B Tract C Tank Battery - Remediation Plan

Aloha Mr Brunson et al,

Thank you for sending in this document.

There are serious concerns with the impact and impact at depth. Particularly on the west side- the high contaminant levels are not even addressed in the first 2 feet. In addition no mention of a liner to account for deeper contamination is mentioned.

As written the OCD does NOT approve the full plan proposed.

The southern section, does appear to begin to address the contaminants at depth, though SP3 in the second set remains above allowable limits even at 7'. (Depth to groundwater according to our source is 50'-100' in this area). Please address these concerns. Feel free to contact me for further discussion.

I appreciate your help with this.

-Doc

Tomáš 'Doc' Oberding, PhD

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**From:** Cliff P. Brunson [<mailto:cbrunson@bbcinternational.com>]

**Sent:** Monday, October 20, 2014 12:01 PM

**To:** Oberding, Tomas, EMNRD

**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis

**Subject:** OXY - Manda B Tract C Tank Battery - Remediation Plan

Tomas,

This e-mail is to confirm our conversation on September 22, 2014 about the remediation plan for the above referenced site. I have attached the materials that we used in our discussion. The agreed upon remediation plan is on the first page of the attachment along with the RP number per your previous request. This site is a State only jurisdiction location.

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

Thanks, Cliff

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