

Closure Report

Site Description

Site Name:	Martha Creek Gas Com Battery
Company:	Oxy Permian Ltd.
Legal Description:	SE ¼, Section 30, T21S, R24E
County:	Eddy County, NM
GPS Coordinates:	N 32.44785° W 104.53339°

Release Data

Date of Release:	05/26/2015
Type of Release:	Oil
Source of Release:	Blowout of a gasket on the manway of the heater
Volume of Release:	15 bbls
Volume Recovered:	0 bbls

Remediation Specifications

Remediation Parameters:	Excavate to a depth of 4.5 feet in the areas around SP1, SP2, and SP5. Excavate to a depth of 3 feet in the areas of SP3, and SP4. Backfill the site with clean soil.
Remediation Activities:	February 2016

Plan Sent to OCD:	11/22/2015	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	11/25/2015	Email from Mike Bratcher to Cliff Brunson
Plan Sent to BLM:	11/22/2015	Email from Cliff Brunson to Shelly Tucker
BLM Approval of Plan:	11/23/2015	Email from Shelly Tucker to Cliff Brunson

Supporting Documentation

Initial C-141	Signed 06/04/2015
Final C-141	Signed 02/23/2016
Site Diagram	June 2015
Groundwater Plot	25'-50'
TOPO Maps	June 2015
Lab Summary	07/07/2015, 07/08/2015, and 09/01/2015
Lab Analysis	07/07/2015, 07/08/2015, and 09/01/2015
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.

02/26/2016

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	6 Desta Drive, Midland, TX 79705	Telephone No.	(432) 685-5824
Facility Name	Martha Creek Gas Com Battery	Facility Type	Gathering
Surface Owner	BLM	Mineral Owner	API No. 30-15-10323

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
SE ¼	30	21S	24E					Eddy County, NM

Latitude N 32.44785° Longitude W 104.53339°

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	15 bbls	Volume Recovered	0 bbls
Source of Release	Blowout of a gasket on the manway of the heater treater	Date and Hour of Occurrence	05/26/2015	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?	Mike Bratcher, Heather Patterson- NMOCD; James Amos- BLM		
By Whom?	Kathy Purvis, BBC International	Date and Hour	05/29/2015 @ 10:46am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A blowout of the gasket on the manway of the heater treater caused 15 bbls of oil to leak onto ground. No fluids were recovered and the gasket was replaced.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 200' x 250' 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.

OIL CONSERVATION DIVISION

Signature:

Printed Name: Chancey Summers

Title: HES Lead

E-mail Address: Chancey_Summers@oxy.com

Date: 6/4/15

Phone: (432) 685-5824

Approved by Environmental Specialist:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

* Attach Additional Sheets If Necessary

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	Casey Summers
Address	6 Desta Drive, Midland, TX 79705	Telephone No.	(575) 513-8289
Facility Name	Martha Creek Gas Com Battery	Facility Type	Gathering
Surface Owner	BLM	Mineral Owner	
		API No.	30-15-10323

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
SE ¼	30	21S	24E					Eddy County, NM

Latitude N 32.44785° Longitude W 104.53339°

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	15 bbls	Volume Recovered	0 bbls
Source of Release	Blowout of a gasket on the manway of the heater treater	Date and Hour of Occurrence	05/26/2015	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?	Mike Bratcher, Heather Patterson- NMOCD; James Amos- BLM		
By Whom?	Kathy Purvis, BBC International	Date and Hour	05/29/2015 @ 10:46am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

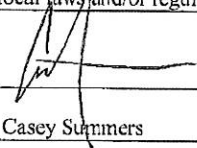
A blowout of the gasket on the manway of the heater treater caused 15 bbls of oil to leak onto ground. No fluids were recovered and the gasket was replaced.

Describe Area Affected and Cleanup Action Taken.*

The affected area is approximately 200' x 250' on location. Remediation was completed in accordance with the remediation plan approved by Mike Bratcher of NMOCD via email on 11/25/2015 and approved by Shelly Tucker of the BLM via email on 11/23/2015.

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

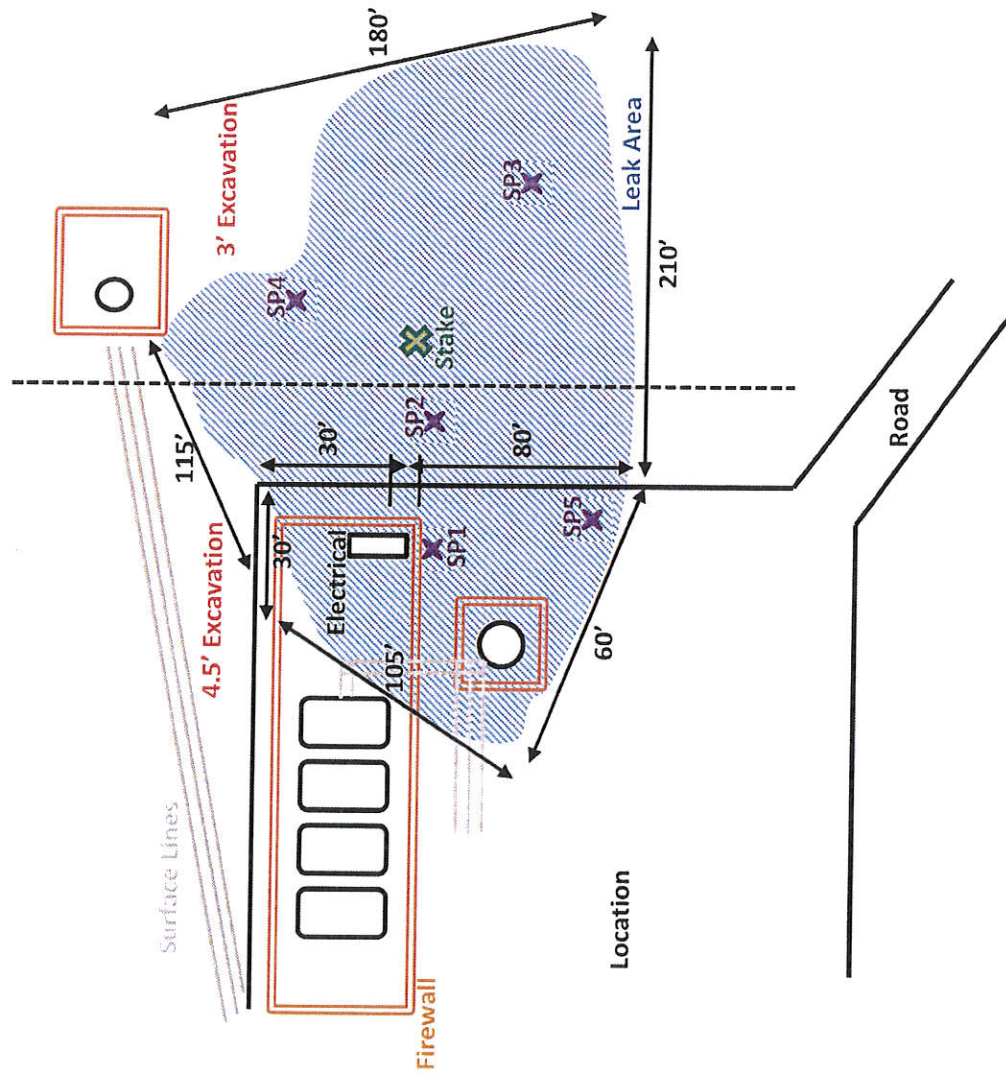
Signature:			
Printed Name:	Casey Summers	Approved by Environmental Specialist:	
Title:	NM Environmental Advisor	Approval Date:	Expiration Date:
E-mail Address:	Casey.Summers@oxy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	2-23-16	Phone:	(575) 513-8289

* Attach Additional Sheets If Necessary



Oxy

Martha Creek Gas Com Battery



SE ¼, Section 30, T21S, R24E
Eddy County, NM
N 32.44785° W 104.53339° stake
API# 30-015-10323

BBC International, Inc.	
Oxy	
Martha Creek Gas Com Battery	
Date: 06/02/2015	DRWG by: K. Purvis
NOT TO SCALE	File: Oxy 2015

Groundwater Plot

Oxy Martha Creek Gas Com Battery

County
Eddy

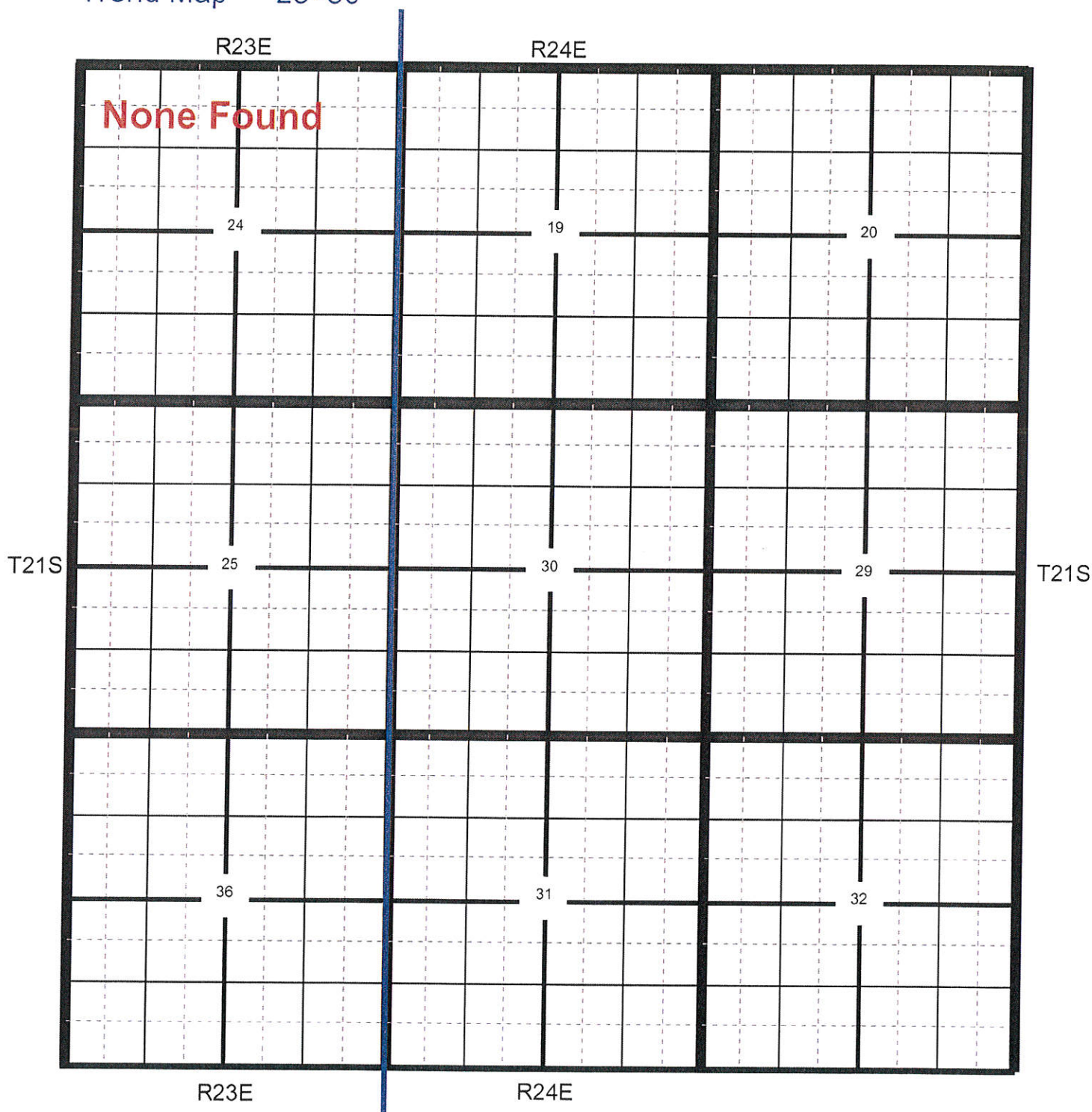
Unit Letter
SE ¼

Section
30

Township
21S

Range
24E

Trend Map 25'-50'



Location

OCD

USGS

SEO

All Databases

Section Quarters

Oxy Martha Creek Gas Com Battery

County Eddy Unit Letter SE ¼ Section 30 Township 21S Range 24E

Trend Map 25'-50'

1

2

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

3

4

Martha Creek Gas Com Battery

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MARTHA CREEK QUADRANGLE
NEW MEXICO: EDDY CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
REVISIONARY SHEET 1 OF 2

Maped, edited, and published by the Geological Survey
Compiled by (GVS) and (MGS)
Topography by photogrammetry methods from aerial photographs
taken 1973 (scale 1:62,500) and 1974 (scale 1:62,500).
Projection and 1983 datum: NAD 83, UTM Zone 13N.
Contour interval: 20 feet (except where noted).
Elevation datum: 1983 mean sea level.
Base map: 1:62,500, 1973 North American edition.
Printed: 1978, 1:24,000 scale.

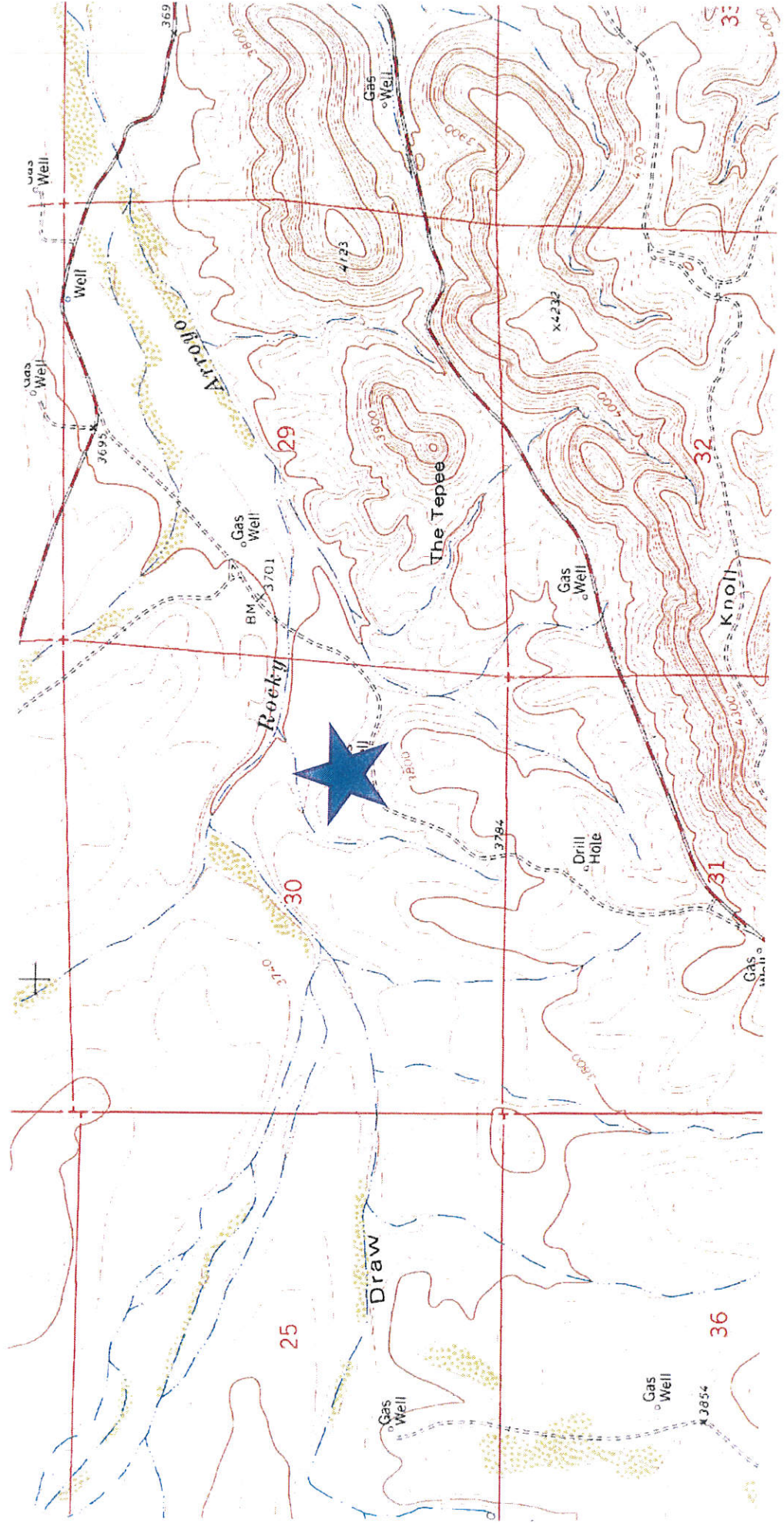
SCALE 1:24,000

CONTOUR INTERVAL: 20 FEET
EXCEPT WHERE NOTED OTHERWISE

MARTHA CREEK, N. MEX.

Oxy

Martha Creek Gas Com Battery



Laboratory Analytical Results Summary
Martha Creek Gas Com Battery

Analyte	Method	Sample Date	SP1 @ SURFACE mg/Kg 7/8/15	SP1 @ 1' mg/Kg 7/8/15	SP1 @ 2' mg/Kg 7/8/15	SP1 @ 3' mg/Kg 9/1/15	SP1 @ 4' mg/Kg 9/1/15	SP1 @ 5' mg/Kg 9/1/15	SP1 @ 6' mg/Kg 9/1/15
Benzene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.100	<0.050	<0.050
Toluene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	0.27	0.075	<0.050
Ethylbenzene	BTEX 8021B		0.408	0.274	<0.050	0.235	0.598	0.658	<0.050
Total Xylenes	BTEX 8021B		1.39	0.518	<0.150	1.09	7.56	0.691	<0.150
Total BTEX	BTEX 8021B		1.79	0.791	<0.300	1.32	8.43	1.42	<0.300
Chloride	SM4500C1-B		176	32	16	n/a	n/a	n/a	n/a
GRO	TPH 8015M		330	97.6	<10.0	102	205	50.1	<10.0
DRO	TPH 8015M		40800	8270	489	4620	1630	798	24.2

Analyte	Method	Sample Date	SP2 @ SURFACE mg/Kg 7/8/15	SP2 @ 1' mg/Kg 7/8/15	SP2 @ 2' mg/Kg 7/8/15	SP2 @ 3' mg/Kg 7/8/15	SP2 @ 4' mg/Kg 7/8/15	SP2 @ 5' mg/Kg 9/1/15
Benzene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.100	<0.050
Toluene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		0.716	0.141	0.109	<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		3.04	0.57	0.321	0.478	<0.150	n/a
Total BTEX	BTEX 8021B		3.75	0.711	0.43	0.478	<0.300	n/a
Chloride	SM4500C1-B		816	528	640	480	480	176
GRO	TPH 8015M		303	91.4	41.5	58.5	<10.0	n/a
DRO	TPH 8015M		38500	8690	3450	3840	41.4	n/a

Analyte	Method	Sample Date	SP3 @ SURFACE mg/Kg 7/8/15	SP3 @ 1' mg/Kg 7/8/15	SP3 @ 2' mg/Kg 7/8/15	SP3 @ 3' mg/Kg 7/8/15	SP3 @ 4' mg/Kg 9/1/15
Benzene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.849	0.155	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		3.13	0.527	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		3.97	0.681	<0.300	<0.300	<0.300
Chloride	SM4500C1-B		864	544	624	608	144
GRO	TPH 8015M		334	95.7	40.3	22.3	<10.0
DRO	TPH 8015M		39400	9220	3670	2160	37.7

Analyte	Method	Sample Date	SP4 @ SURFACE mg/Kg 7/8/15	SP4 @ 1' mg/Kg 7/8/15	SP4 @ 2' mg/Kg 7/8/15	SP4 @ 3' mg/Kg 9/1/15
Benzene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.571	0.073	0.069	<0.050
Total Xylenes	BTEX 8021B		2.1	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		2.67	<0.300	<0.300	<0.300
Chloride	SM4500C1-B		816	576	768	128
GRO	TPH 8015M		372	118	46.3	<10.0
DRO	TPH 8015M		41900	10900	3470	30.4

Analyte	Method	Sample Date	SP5 @ SURFACE mg/Kg 7/8/15	SP5 @ 1' mg/Kg 7/8/15	SP5 @ 2' mg/Kg 7/8/15	SP5 @ 3' mg/Kg 9/1/15	SP5 @ 4' mg/Kg 9/1/15	SP5 @ 5' mg/Kg 9/1/15	SP5 @ 6' mg/Kg 9/1/15
Benzene	BTEX 8021B		<0.200	<0.200	<0.050	<0.100	<0.100	<0.050	<0.050
Toluene	BTEX 8021B		<0.200	<0.200	<0.050	<0.100	<0.100	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.252	1.05	0.071	0.439	0.111	0.435	<0.050
Total Xylenes	BTEX 8021B		6.4	4.04	<0.150	2.6	1.47	0.465	<0.150
Total BTEX	BTEX 8021B		6.65	5.09	<0.300	3.04	1.58	0.9	<0.300
Chloride	SM4500C1-B		144	64	32	n/a	n/a	n/a	n/a
GRO	TPH 8015M		436	316	23.5	182	158	29.8	<10.0
DRO	TPH 8015M		41000	8480	1510	5420	1200	574	43.1



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

July 24, 2015

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MARTHA CREEK GAS COM BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/17/15 11:20.

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.

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:	07/17/2015	Sampling Date:	07/07/2015
Reported:	07/24/2015	Sampling Type:	Soil
Project Name:	MARTHA CREEK GAS COM BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	EDDY COUNTY, NM		

Sample ID: SP1 @ SURFACE (H501847-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/21/2015	ND	1.91	95.6	2.00	2.71	
Toluene*	<0.200	0.200	07/21/2015	ND	1.90	94.9	2.00	2.58	
Ethylbenzene*	0.408	0.200	07/21/2015	ND	1.99	99.3	2.00	3.99	
Total Xylenes*	1.39	0.600	07/21/2015	ND	5.20	86.7	6.00	3.71	
Total BTEX	1.79	1.20	07/21/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 131 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/22/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	330	100	07/21/2015	ND	179	89.6	200	4.76	
DRO >C10-C28	40800	100	07/21/2015	ND	182	90.9	200	10.5	

Surrogate: 1-Chlorooctane 122 % 47.2-157

Surrogate: 1-Chlorooctadecane 942 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Coley D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 07/17/2015
Reported: 07/24/2015
Project Name: MARTHA CREEK GAS COM BATTERY
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 07/07/2015
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Judy Garcia

Sample ID: SP1 @ 1' (H501847-02)

BTX 80218		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/21/2015	ND	1.91	95.6	2.00	2.71	
Toluene*	<0.050	0.050	07/21/2015	ND	1.90	94.9	2.00	2.58	
Ethylbenzene*	0.274	0.050	07/21/2015	ND	1.99	99.3	2.00	3.99	
Total Xylenes*	0.518	0.150	07/21/2015	ND	5.20	86.7	6.00	3.71	
Total BTX	0.791	0.300	07/21/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 157 % 85.6-137

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	07/22/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	97.6	10.0	07/21/2015	ND	179	89.6	200	4.76	
DRO >C10-C28	8270	10.0	07/21/2015	ND	182	90.9	200	10.5	

Surrogate: 1-Chlorooctane 108 % 47.2-157

Surrogate: 1-Chlorooctadecane 163 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	07/17/2015	Sampling Date:	07/07/2015
Reported:	07/24/2015	Sampling Type:	Soil
Project Name:	MARTHA CREEK GAS COM BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	EDDY COUNTY, NM		

Sample ID: SP1 @ 2' (H501847-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/21/2015	ND	1.91	95.6	2.00	2.71	
Toluene*	<0.050	0.050	07/21/2015	ND	1.90	94.9	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/21/2015	ND	1.99	99.3	2.00	3.99	
Total Xylenes*	<0.150	0.150	07/21/2015	ND	5.20	86.7	6.00	3.71	
Total BTX	<0.300	0.300	07/21/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 118 % 85.6-137

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	07/22/2015	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/21/2015	ND	179	89.6	200	4.76		
DRO >C10-C28	489	10.0	07/21/2015	ND	182	90.9	200	10.5		

Surrogate: 1-Chlorooctane 87.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.5 % 52.1-176

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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