

# Closure Report

## Site Description

Site Name:	Tex-Mack #202
Company:	COG Operating LLC
Legal Description:	U/L N, Section 2, T17S, R31E
County:	Eddy County, NM
GPS Coordinates:	N 32.85893° W 103.84364°

## Release Data

Date of Release:	06/29/2016
Type of Release:	Produced water
Source of Release:	Produced water tank
Volume of Release:	10 bbls
Volume Recovered:	9 bbls

## Remediation Specifications

Remediation Parameters:	Excavate the area of SP3 to a depth of 1.5 feet. Excavate the remaining area around SP1 and SP2 to a depth of 6 inches. Backfill the site with clean soil.	
Remediation Activities:	11/18/2016 to 11/21/2016	
Plan Sent to OCD:	11/21/2016	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	11/29/2016	Email from Mike Bratcher 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 07/07/2016
Final C-141	Signed 11/28/2016
Site Diagram	October 2016
Groundwater Plot	175'
TOPO Maps	October 2016
Lab Summary	10/14/2016 and 10/31/2016
Lab Analysis	10/14/2016 and 10/31/2016
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.

11/30/2016

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:	COG Operating LLC	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	TEX-MACK #202	Facility Type:	Tank Battery
Surface Owner:	State	Mineral Owner:	API No. 30-015-35914

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	02	17S	31E	990'	South	1650'	West	Eddy

Latitude 32.8590813 Longitude 103.8436432

**NATURE OF RELEASE**

Type of Release:	Produced Water	Volume of Release:	10bbbls of Produced water	Volume Recovered:	9bbbls of Produced water
Source of Release:	Produced Water Tank	Date and Hour of Occurrence:	06-29-2016 08:00am	Date and Hour of Discovery:	06-29-2016 08:00am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour:			
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.\*

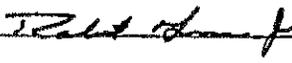
Describe Cause of Problem and Remedial Action Taken.\*

Murphy switch failed. Replaced Murphy switch.

Describe Area Affected and Cleanup Action Taken.\*

A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill site inspected for any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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:	Robert Grubbs Jr.	Approved by Environmental Specialist:		
Title:	Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address:	rgubbs@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date:	July 7, 2016	Phone:	432-683-7443	

\* 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  
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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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-685-4304
Facility Name: Tex-Mack #202	Facility Type: Tank Battery
Surface Owner: State	Mineral Owner: State
API No. 30-015-35914	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	2	17S	31E	990	South	1650	West	Eddy County, NM

Latitude N 32.85893° Longitude W 103.84364°

**NATURE OF RELEASE**

Type of Release: Produced water	Volume of Release: 10 bbls	Volume Recovered: 9 bbls
Source of Release: Produced water tank	Date and Hour of Occurrence 06/29/2016 @ 8:00 am	Date and Hour of Discovery 06/29/2016 @ 6:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
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.\*

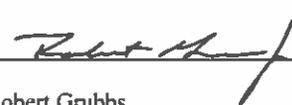
Describe Cause of Problem and Remedial Action Taken.\*

Failure of a Murphy switch caused a leak of 10 bbls of produced water. A vacuum truck recovered 9 bbls of produced water and the Murphy switch was replaced.

Describe Area Affected and Cleanup Action Taken.\*

The affected area included an 80' x 6' area inside the firewall just north of the tanks. The site was sampled and a remediation plan was created. Remediation was completed in accordance with the remediation plan approved by Mike Bratcher of NMOCD.

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: Robert Grubbs	Approved by Environmental Specialist:	
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: rgrubbs@concho.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: November 28, 2016	Phone: (432) 683-7443	

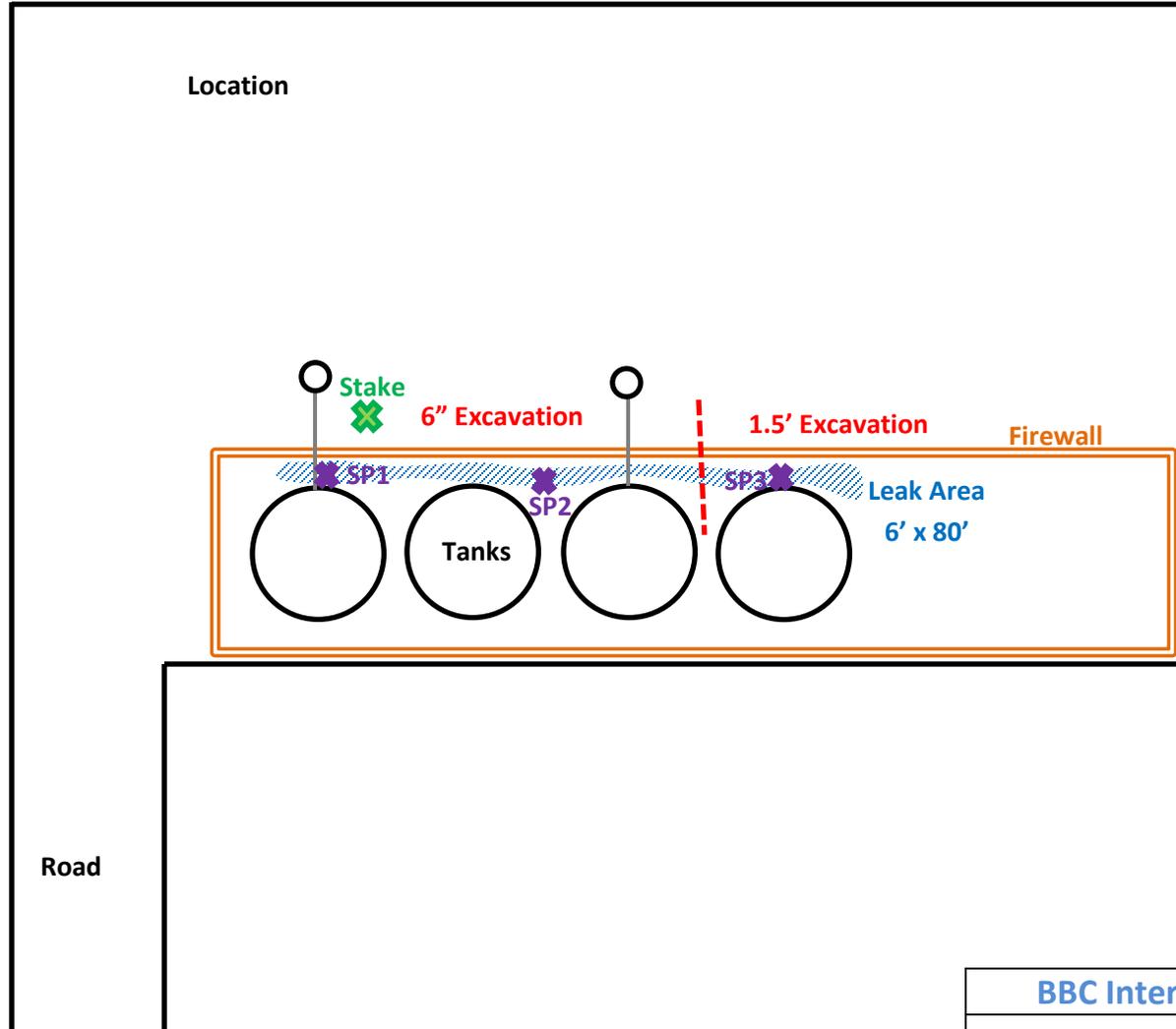
\* Attach Additional Sheets If Necessary



COG

Tex-Mack #202 (6/29/16)

Location



U/L N, Section 2, T17S, R31E

Eddy County, NM

N 32.85893° W 103.84364°

API# 30-015-35914

BBC International, Inc.

COG

Tex-Mack #202

Date: 10/03/2016

DRWG by: K. Purvis

NOT TO SCALE

File: COG 2016



# Groundwater Plot

## COG Tex-Mack #202

County  
Eddy

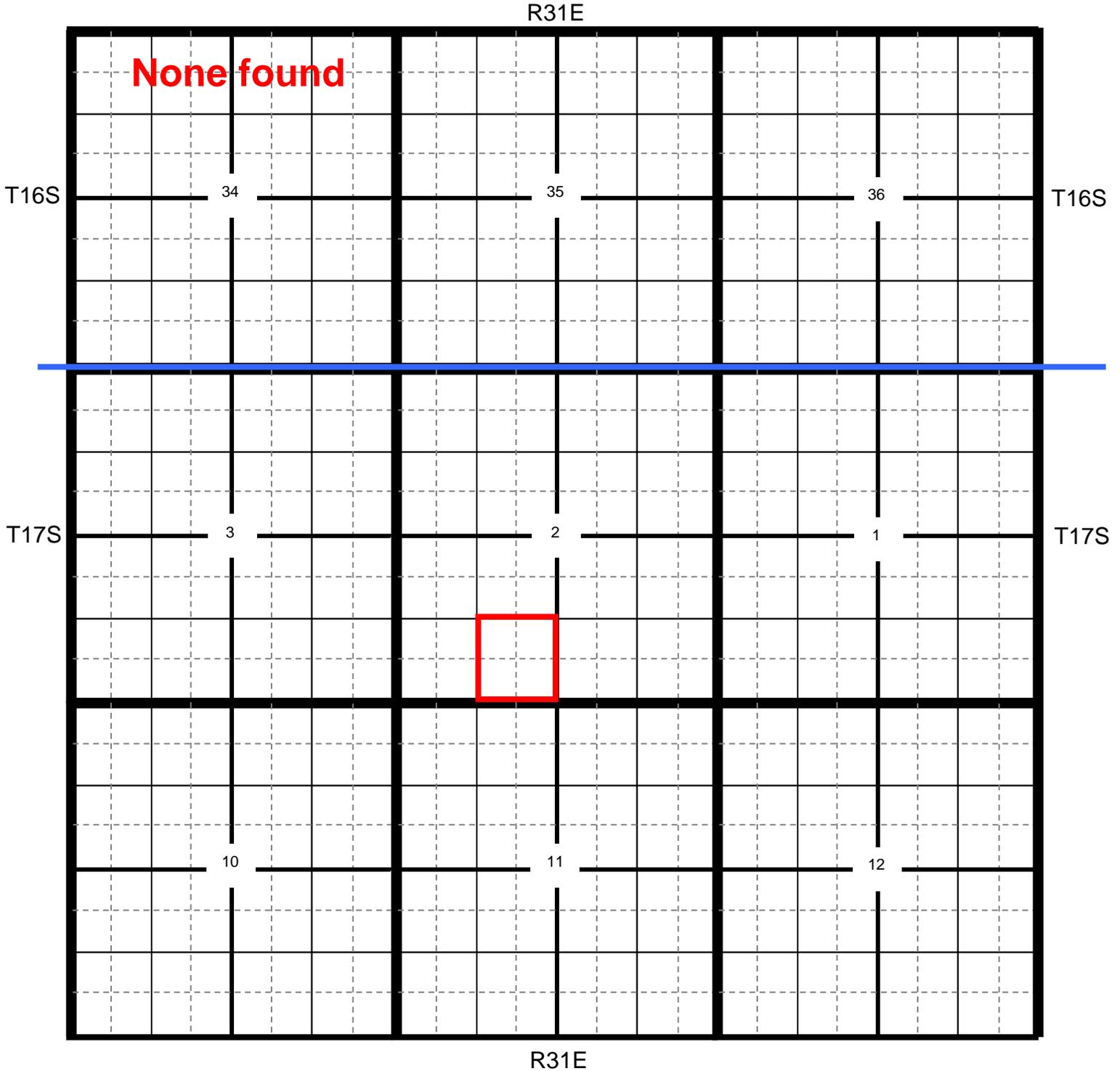
Unit Letter  
N

Section  
2

Township  
17S

Range  
31E

Trend Map 175'



📍 Location

● OCD

● USGS

● SEO

● All Databases

## COG Tex-Mack #202

<b>County</b> Eddy	<b>Unit Letter</b> N	<b>Section</b> 2	<b>Township</b> 17S	<b>Range</b> 31E
-----------------------	-------------------------	---------------------	------------------------	---------------------

Trend Map 175'

1

2

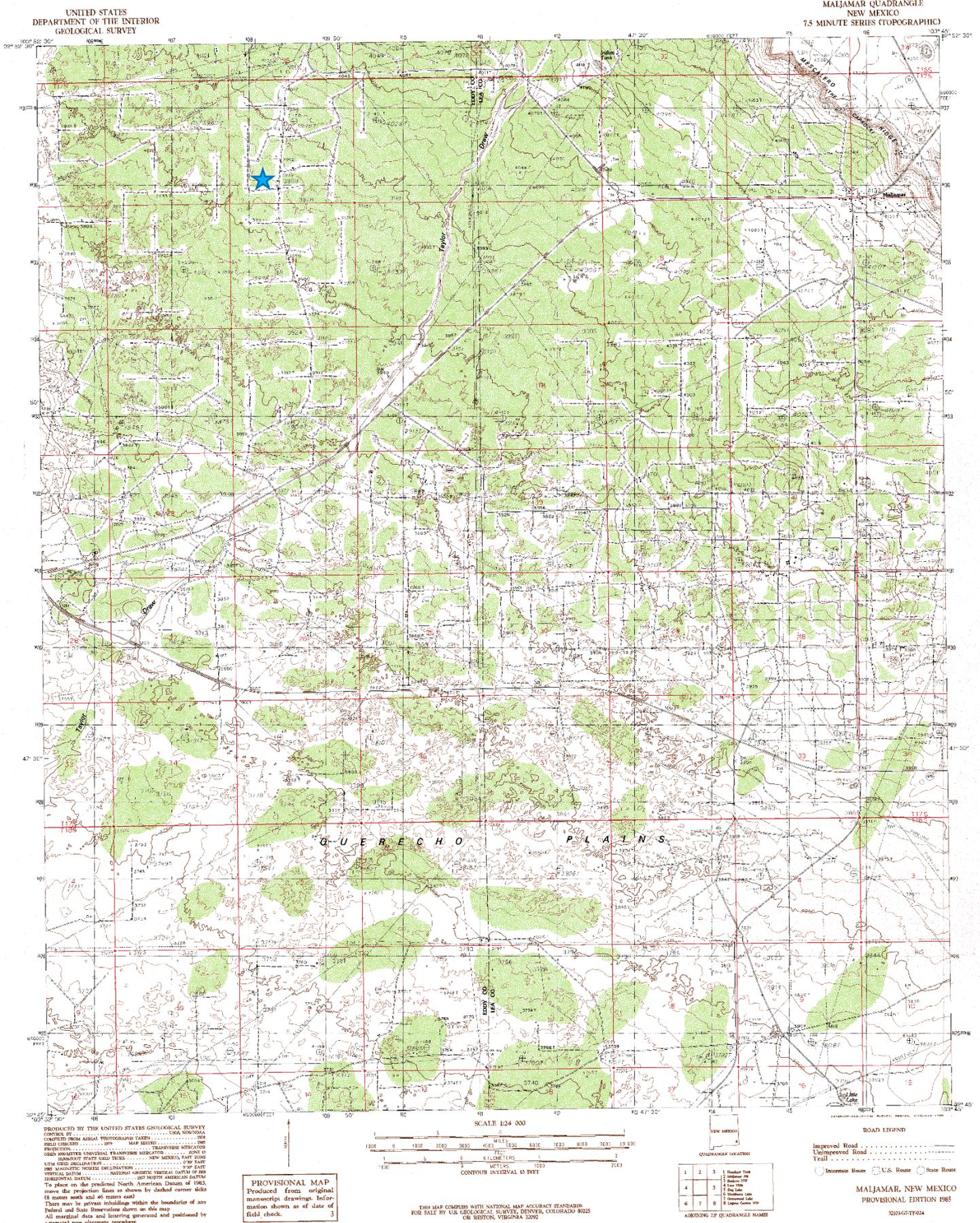
NW/NW <b style="color: red; font-size: 1.2em;">None found</b>	NE/NW	NW/NE	NE/NE
Unit Letter D	Unit Letter C	Unit Letter B	Unit Letter A
SW/NW	SE/NW	SW/NE	SE/NE
Unit Letter E	Unit Letter F	Unit Letter G	Unit Letter H
NW/SW	NE/SW	NW/SE	NE/SE
Unit Letter L	Unit Letter K	Unit Letter J	Unit Letter I
SW/SW	SE/SW	SW/SE	SE/SE
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P

3

4

# COG

## Tex-Mack #202



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

MALJAMAR QUADRANGLE  
NEW MEXICO  
7.5 MINUTE SERIES (TOPOGRAPHIC)

**PROVISIONAL MAP**  
Produced from original  
manuscript drawings. Infor-  
mation shown as of date of  
field check.

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225  
OR RESTON, VIRGINIA 20192

1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8

ADJOINING 15' QUADRANGLE NAME

**ROAD LEGEND**

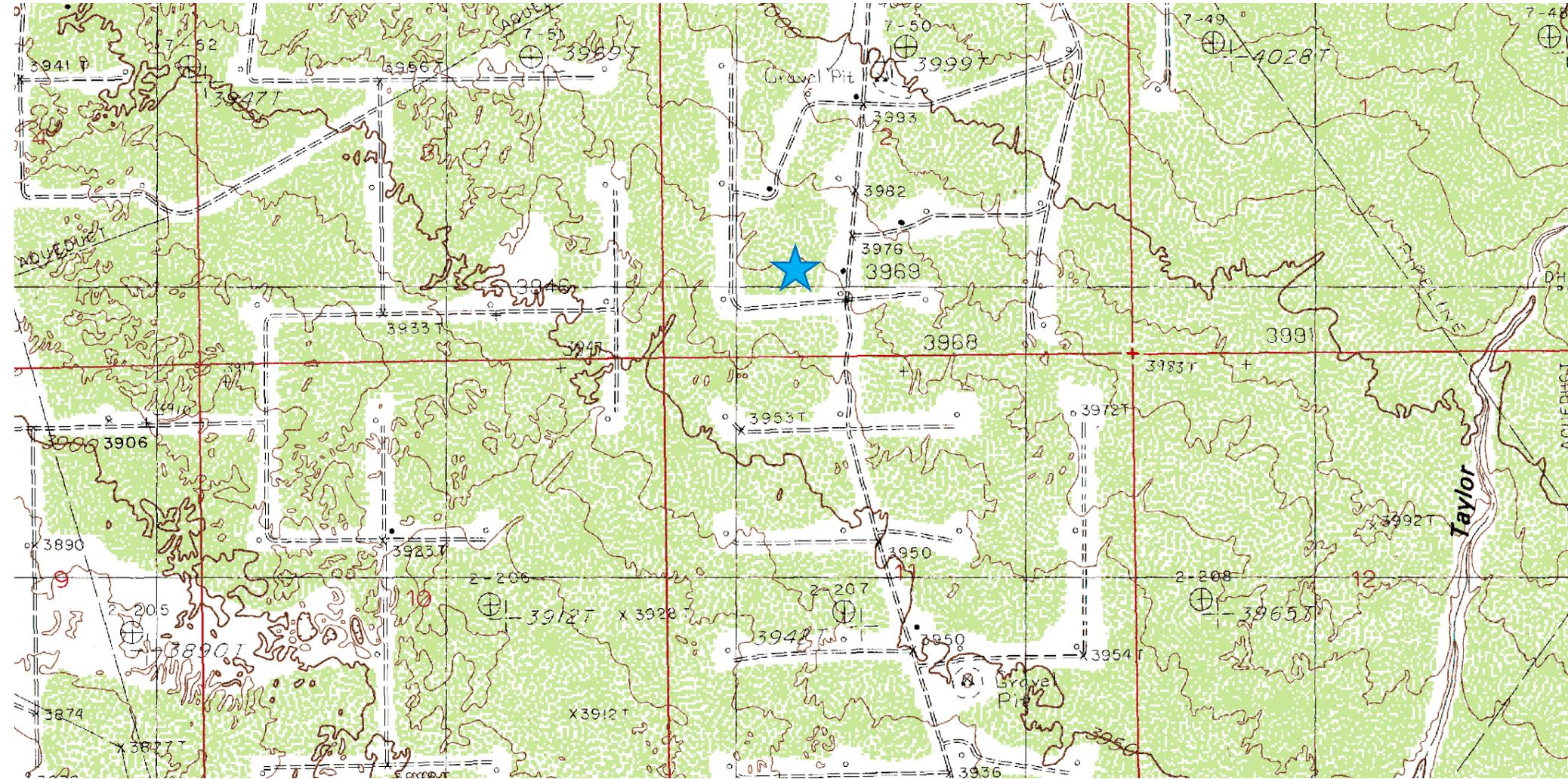
Improved Road  
Unimproved Road  
Trail

Interstate Route U.S. Route State Route

MALJAMAR, NEW MEXICO  
PROVISIONAL EDITION 1985

# COG

## Tex-Mack #202



**Laboratory Analytical Results Summary  
Tex-Mack #202**

		Sample	SP1 @ SURFACE	SP1 @ 1'
Analyte	Method	Date	10/14/16	10/14/16
			mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a
<b>Toluene</b>	BTEX 8021B		<b>0.059</b>	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<b>0.05</b>	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	n/a
<b>Chloride</b>	SM4500Cl-B		<b>80</b>	<b>64</b>
<b>GRO</b>	TPH 8015M		<10.0	n/a
<b>DRO</b>	TPH 8015M		<b>41</b>	n/a

		Sample	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 1.5'
Analyte	Method	Date	10/14/16	10/14/16	10/31/16
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<b>0.051</b>	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>128</b>	<b>992</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 @ SURFACE	SP3 @ 1'	SP3 @ 1.5'
Analyte	Method	Date	10/14/16	10/14/16	10/31/16
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	n/a	<0.050
<b>Toluene</b>	BTEX 8021B		<b>0.949</b>	n/a	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<b>2.02</b>	n/a	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<b>4.02</b>	n/a	<0.150
<b>Total BTEX</b>	BTEX 8021B		<b>6.99</b>	n/a	<0.300
<b>Chloride</b>	SM4500Cl-B		<b>848</b>	<b>3920</b>	<b>32</b>
<b>GRO</b>	TPH 8015M		<b>394</b>	n/a	<10.0
<b>DRO</b>	TPH 8015M		<b>4860</b>	n/a	<10.0



October 24, 2016

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: TEX-MACK

Enclosed are the results of analyses for samples received by the laboratory on 10/19/16 16:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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".

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:	10/19/2016	Sampling Date:	10/14/2016
Reported:	10/24/2016	Sampling Type:	Soil
Project Name:	TEX-MACK	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 1 @ SURFACE (H602349-01)**

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	10/21/2016	ND	1.99	99.4	2.00	1.67	
<b>Toluene*</b>	<b>0.059</b>	0.050	10/21/2016	ND	2.24	112	2.00	1.57	
<b>Ethylbenzene*</b>	<b>0.050</b>	0.050	10/21/2016	ND	2.24	112	2.00	1.80	
Total Xylenes*	<0.150	0.150	10/21/2016	ND	6.76	113	6.00	1.70	
Total BTEX	<0.300	0.300	10/21/2016	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 73.6-140*

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	10/24/2016	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	10/21/2016	ND	185	92.4	200	0.308	
<b>DRO &gt;C10-C28</b>	<b>41.0</b>	10.0	10/21/2016	ND	200	100	200	1.39	

*Surrogate: 1-Chlorooctane 104 % 35-147*
*Surrogate: 1-Chlorooctadecane 121 % 28-171*
**Sample ID: SP 1 @ 1' (H602349-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	10/24/2016	ND	400	100	400	0.00	

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: 10/19/2016  
 Reported: 10/24/2016  
 Project Name: TEX-MACK  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 10/14/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ SURFACE (H602349-03)**

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	10/21/2016	ND	1.99	99.4	2.00	1.67		
<b>Toluene*</b>	<b>0.051</b>	0.050	10/21/2016	ND	2.24	112	2.00	1.57		
Ethylbenzene*	<0.050	0.050	10/21/2016	ND	2.24	112	2.00	1.80		
Total Xylenes*	<0.150	0.150	10/21/2016	ND	6.76	113	6.00	1.70		
Total BTEX	<0.300	0.300	10/21/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>128</b>	16.0	10/24/2016	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	10/21/2016	ND	192	95.9	200	3.20		
DRO >C10-C28	<10.0	10.0	10/21/2016	ND	210	105	200	12.0		

Surrogate: 1-Chlorooctane 86.2 % 35-147

Surrogate: 1-Chlorooctadecane 104 % 28-171

**Sample ID: SP 2 @ 1' (H602349-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>992</b>	16.0	10/24/2016	ND	400	100	400	0.00		

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:	10/19/2016	Sampling Date:	10/14/2016
Reported:	10/24/2016	Sampling Type:	Soil
Project Name:	TEX-MACK	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 3 @ SURFACE (H602349-05)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	10/21/2016	ND	1.99	99.4	2.00	1.67	
<b>Toluene*</b>	<b>0.949</b>	0.500	10/21/2016	ND	2.24	112	2.00	1.57	
<b>Ethylbenzene*</b>	<b>2.02</b>	0.500	10/21/2016	ND	2.24	112	2.00	1.80	
<b>Total Xylenes*</b>	<b>4.02</b>	1.50	10/21/2016	ND	6.76	113	6.00	1.70	
<b>Total BTEX</b>	<b>6.99</b>	3.00	10/21/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>848</b>	16.0	10/24/2016	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>394</b>	50.0	10/21/2016	ND	192	95.9	200	3.20		
<b>DRO &gt;C10-C28</b>	<b>4860</b>	50.0	10/21/2016	ND	210	105	200	12.0		

Surrogate: 1-Chlorooctane 157 % 35-147

Surrogate: 1-Chlorooctadecane 344 % 28-171

**Sample ID: SP 3 @ 1' (H602349-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3920</b>	16.0	10/24/2016	ND	400	100	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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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.
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report



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Celey D. Keene, Lab Director/Quality Manager



**ARDINAL LABORATORIES**

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**BILL TO**

**ANALYSIS REQUEST**

Company Name: BBC International, Inc.		P.O. #:							
Project Manager: Cliff Brunson		Company:							
Address: P.O. Box 805		Attn:							
City: Hobbs		Address:							
Phone #: 575-397-6388		City:							
Fax #: 575-397-0397		State:							
Project #: _____		Project Owner: <i>COG</i>							
Project Name: <i>Tex-Mack</i>		State:							
Project Location:		Phone #:							
Sampler Name: <i>Price Brunson</i>		Fax #:							
FOR LAB USE ONLY									
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	ANALYSIS
<i>H1002349</i>	<i>SP1 @ Surface</i>	<input checked="" type="checkbox"/>	<i>1</i>	GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>	<i>910</i>	<i>TPH</i>
	<i>SP1 @ 1'</i>	<input checked="" type="checkbox"/>	<i>1</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>	<i>935</i>	<i>BTEX</i>
	<i>SP2 @ Surface</i>	<input checked="" type="checkbox"/>	<i>1</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>	<i>1095</i>	<i>CL</i>
	<i>SP2 @ 1'</i>	<input checked="" type="checkbox"/>	<i>1</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>	<i>110</i>	
	<i>SP3 @ Surface</i>	<input checked="" type="checkbox"/>	<i>1</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>	<i>135</i>	
	<i>SP3 @ 1'</i>	<input checked="" type="checkbox"/>	<i>1</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>10/14/16</i>		

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 the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: _____	Date: <i>10/19/16</i>	Time: <i>4:17</i>	Received By: <i>Cliff Brunson</i>	Date: _____	Time: _____
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <i>6:30</i>	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>		CHECKED BY: <i>Cliff Brunson</i>		
Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: _____		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	
REMARKS: <i>#75</i>					

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



November 10, 2016

Cliff Brunson  
BBC International, Inc.  
P.O. Box 805  
Hobbs, NM 88241

RE: TEX-MACK #202

Enclosed are the results of analyses for samples received by the laboratory on 11/03/16 11:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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:	11/03/2016	Sampling Date:	10/31/2016
Reported:	11/10/2016	Sampling Type:	Soil
Project Name:	TEX-MACK #202	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 2 @ 1.5' (H602479-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	11/07/2016	ND	400	100	400	0.00	

**Sample ID: SP 3 @ 1.5' (H602479-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	11/07/2016	ND	400	100	400	0.00	

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

**Notes and Definitions**

- QR-03      The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCS/D recovery and/or RPD values.
- ND          Analyte NOT DETECTED at or above the reporting limit
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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**

104

**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: \_\_\_\_\_  
 Project Name: Tex-Mack #202  
 Project Location: Eddy County, NM  
 Sampler Name: Price Brunson  
 P.O. #: \_\_\_\_\_ Company: *COG*  
 Attn: *Robert Grubbs*  
 Address: \_\_\_\_\_ City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME						
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :								
<i>H1002479</i>	SP2 @ 1.5'	<input checked="" type="checkbox"/>	<i>61</i>			<input checked="" type="checkbox"/>				10/31/16	10:30 am	<input checked="" type="checkbox"/>					
	SP3 @ 1.5'	<input checked="" type="checkbox"/>	<i>61</i>			<input checked="" type="checkbox"/>				10/31/16	10:50 am	<input checked="" type="checkbox"/>					

*1640 11/12/16*

Relinquished By: \_\_\_\_\_ Date: *11/2/16* Received By: \_\_\_\_\_ Date: *11/3/16*  
 Time: *4:00pm* Received By: *Rebecca Lumsden*  
 Relinquished By: *Rebecca Lumsden* Date: *11/3/16* Received By: *Spacie Henderson*  
 Time: *7:26 AM*  
 Delivered By: (Circle One) *UPS*  *Bus*  *Other*   
 Sampler - UPS - Bus - Other: *#75-4.80*  
 Sample Condition  Intact  Cool  Yes  No  
 CHECKED BY: *Spacie Henderson*  
 (Initials)

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

November 14, 2016

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: TEX-MACK #202

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Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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).

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Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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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:	11/03/2016	Sampling Date:	10/31/2016
Reported:	11/14/2016	Sampling Type:	Soil
Project Name:	TEX-MACK #202	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 2 @ 1.5' (H602479-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	11/07/2016	ND	400	100	400	0.00	

**Sample ID: SP 3 @ 1.5' (H602479-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2016	ND	2.25	113	2.00	0.370	
Toluene*	<0.050	0.050	11/11/2016	ND	2.28	114	2.00	0.780	
Ethylbenzene*	<0.050	0.050	11/11/2016	ND	2.20	110	2.00	0.669	
Total Xylenes*	<0.150	0.150	11/11/2016	ND	6.65	111	6.00	0.572	
Total BTEX	<0.300	0.300	11/11/2016	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.6-140*

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	11/07/2016	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/10/2016	ND	173	86.3	200	1.84	
DRO >C10-C28	<10.0	10.0	11/10/2016	ND	180	90.2	200	0.365	

*Surrogate: 1-Chlorooctane 85.2 % 35-147*
*Surrogate: 1-Chlorooctadecane 87.0 % 28-171*

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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- ND          Analyte NOT DETECTED at or above the reporting limit
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- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report



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Celey D. Keene, Lab Director/Quality Manager



**From:** Bratcher, Mike, EMNRD  
**To:** [Cliff Brunson](#); [Amber Groves](#)  
**Cc:** [Patterson, Heather, EMNRD](#); [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#); [Weaver, Crystal, EMNRD](#)  
**Subject:** RE: COG Tex-Mack #202 - Remediation Plan  
**Date:** Tuesday, November 29, 2016 2:51:36 PM

---

RE: COG \* TEX-MACK 202 \* **2RP-3768** \* DOR: 6/29/16

Cliff,

Your proposal for remediation of the above referenced release is approved. Please advise once remedial activities have been scheduled.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

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

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

---

**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Monday, November 21, 2016 8:24 AM  
**To:** Bratcher, Mike, EMNRD; Amber Groves  
**Cc:** Patterson, Heather, EMNRD; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** COG Tex-Mack #202 - Remediation Plan

Mike and Amber,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Tex-Mack #202 release. I have attached the information packet that we used in our discussion with a cover page describing the remediation plan that we agreed upon.

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

Thanks, Cliff

Cliff P. Brunson, CEI, CRS  
President  
BBC International, Inc.  
World-Wide Environmental Specialists  
Mailing Address:  
P. O. Box 805  
Hobbs, NM 88241-0805 USA  
Shipping Address:  
1324 W. Marland St.  
Hobbs, NM 88240 USA  
Phone: (575) 397-6388  
Fax: (575) 397-0397  
E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)



\*\*\*\*\*

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