

# Closure Report

## Site Description

Site Name:	West Pearl 36 State Com #004H
Company:	COG Operating LLC
Legal Description:	U/L O, Section 25, T19S, R34E
County:	Lea County, NM
GPS Coordinates:	N 32.62394° W 103.51313°

## Release Data

Date of Release:	09/08/2016
Type of Release:	Oil
Source of Release:	Dump valve failure on flare
Volume of Release:	10 bbls
Volume Recovered:	0 bbls

## Remediation Specifications

Remediation Parameters:	Excavate to a depth of 6 inches across the entire leak site. Backfill the site with clean soil.	
Remediation Activities:	11/22/2016 to 11/28/2016	
Plan Sent to OCD:	11/04/2016	Email from Cliff Brunson to Kristen Lynch
OCD Approval of Plan:	11/10/2016	Email from Kristen Lynch 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 09/09/2016
Final C-141	Signed 11/30/2016
Site Diagram	October 2016
Groundwater Plot	75'-100'
TOPO Maps	October 2016
Lab Summary	10/04/2016
Lab Analysis	10/04/2016
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.

12/01/2016

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:	WEST PEARL 36 STATE COM #004H	Facility Type:	Flare
Surface Owner:	State	Mineral Owner:	API No. 30-025-42146

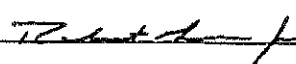
#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	25	19S	34E	250'	South	2180'	East	Lea

Latitude 32.6248387259106

Longitude 103.512415383595

#### NATURE OF RELEASE

Type of Release:	Oil	Volume of Release:	10bbls	Volume Recovered:	0bbls
Source of Release:	Flare	Date and Hour of Occurrence:	09-08-2016 4:00 pm	Date and Hour of Discovery:	09-08-2016 4:00 pm
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.*					
This release was caused by dump valve that failed on a flare. Replace faulty dump valves.					
Describe Area Affected and Cleanup Action Taken.*					
This release occurred due to a flare failure in the pasture. All free fluids were burnt up in the fire. Concho will have the spill site sampled to delineate 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:					
Printed Name:	Robert Grubbs Jr.				
Title:	Senior Environmental Coordinator				
E-mail Address:	rgrubbs@concho.com				
Date:	September 9, 2016				
Phone:	432-683-7443				
			OIL CONSERVATION DIVISION		
			Approved by Environmental Specialist:		
			Approval Date:		Expiration Date:
			Conditions of Approval:		Attached <input type="checkbox"/>

\* 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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-230-0077
Facility Name: West Pearl 36 State Com #004H	Facility Type: Flare

Surface Owner: State	Mineral Owner:	API No. 30-025-42146
----------------------	----------------	----------------------

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	25	19S	34E	250	South	2180	East	Lea County, NM

Latitude N 32.62483° Longitude W 103.51241°

### NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 10 bbls	Volume Recovered: 0 bbls
Source of Release: Dump valve failure on flare	Date and Hour of Occurrence 09/08/2016 @ 4:00 pm	Date and Hour of Discovery 09/08/2016 @ 4:00 pm
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.\*

This release was caused by a dump valve that failed on a flare. The faulty valve was replaced.

Describe Area Affected and Cleanup Action Taken.\*

This release occurred due to a flare failure in the pasture. All free fluids were burnt up during the fire. The spill was delineated and a remediation plan was created. Remediation was completed in accordance with the remediation plan approved by Kristen Lynch of NMOCD via email on 11/10/2016.

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.

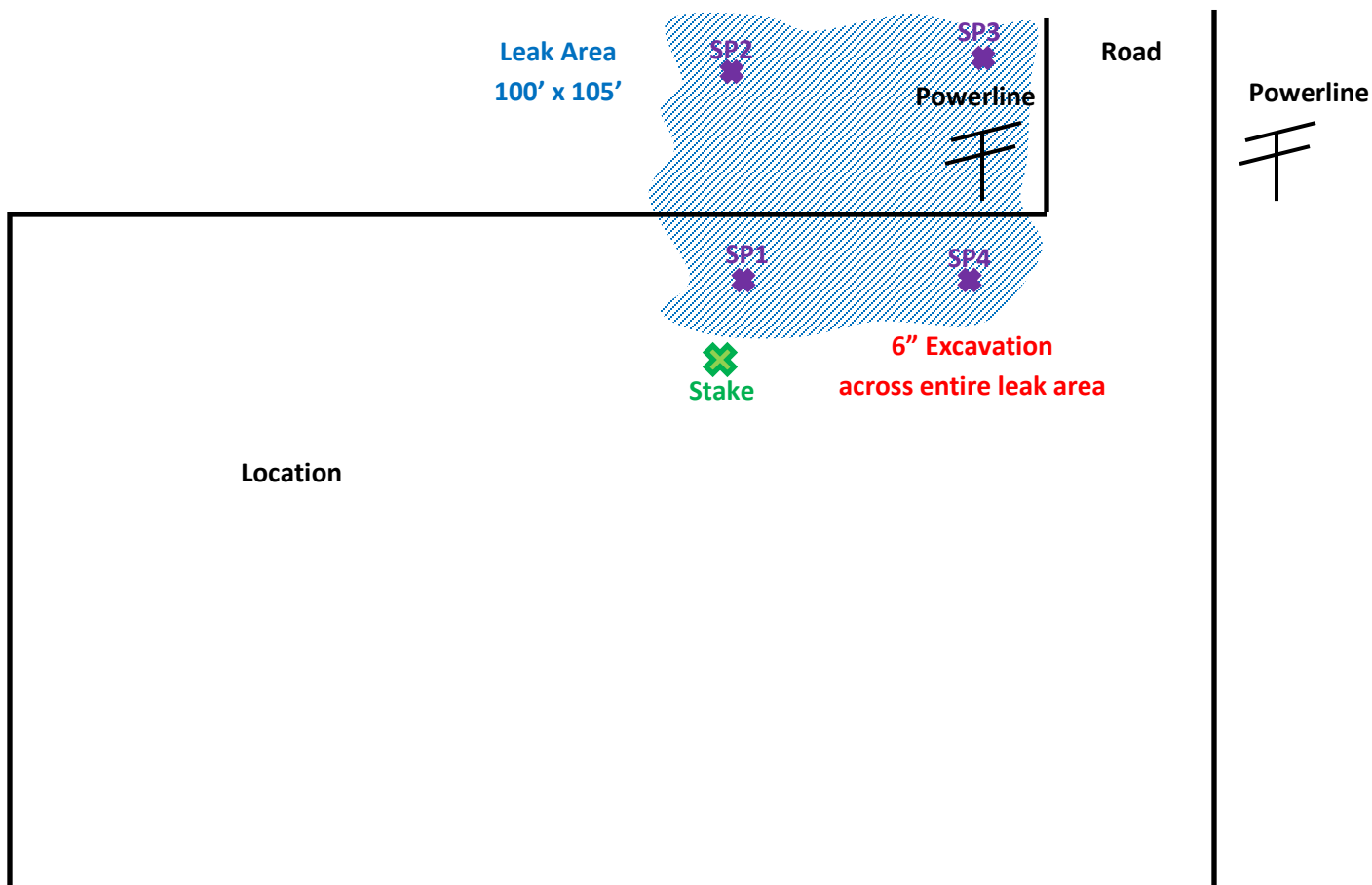
Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Robert Grubbs Jr		Approved by Environmental Specialist: 	
Title: Senior Environmental Coordinator		Approval Date: 11/9/2022	Expiration Date:
E-mail Address: rgrubbs@concho.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: November 30, 2016 Phone: (432) 683-7443			

\* Attach Additional Sheets If Necessary



COG

West Pearl 36 State Com #004H (9/8/16)



U/L O, Section 25, T19S, R34E

Lea County, NM

N 32.62394° W 103.51313°

API# 30-025-42146

BBC International, Inc.

COG

West Pearl 36 State Com #004H

Date: 10/03/2016

DRWG by: K. Purvis

NOT TO SCALE

File: COG 2016

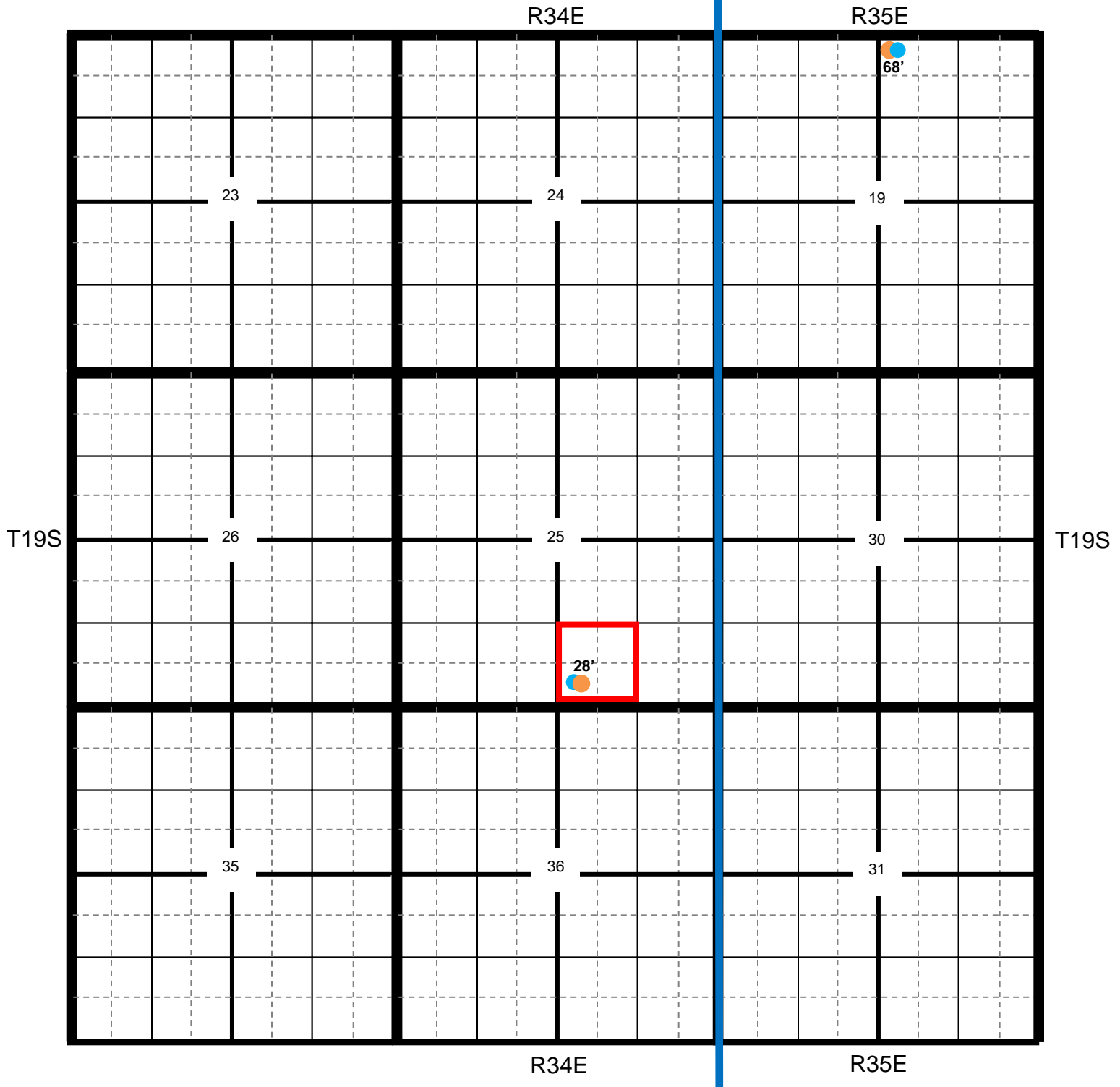


## Groundwater Plot

COG West Pearl State Com #004H

County  
LeaUnit Letter  
OSection  
25Township  
19SRange  
34E

Trend Map 75'-100'



\* Location

● OCD

● USGS

● SEO

● All Databases



## Section Quarters

## COG West Pearl 36 State Com #004H

<b>County</b>	<b>Unit Letter</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>
Lea	O	25	19S	34E

## Trend Map 75'-100'

1

2

NW/NW	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

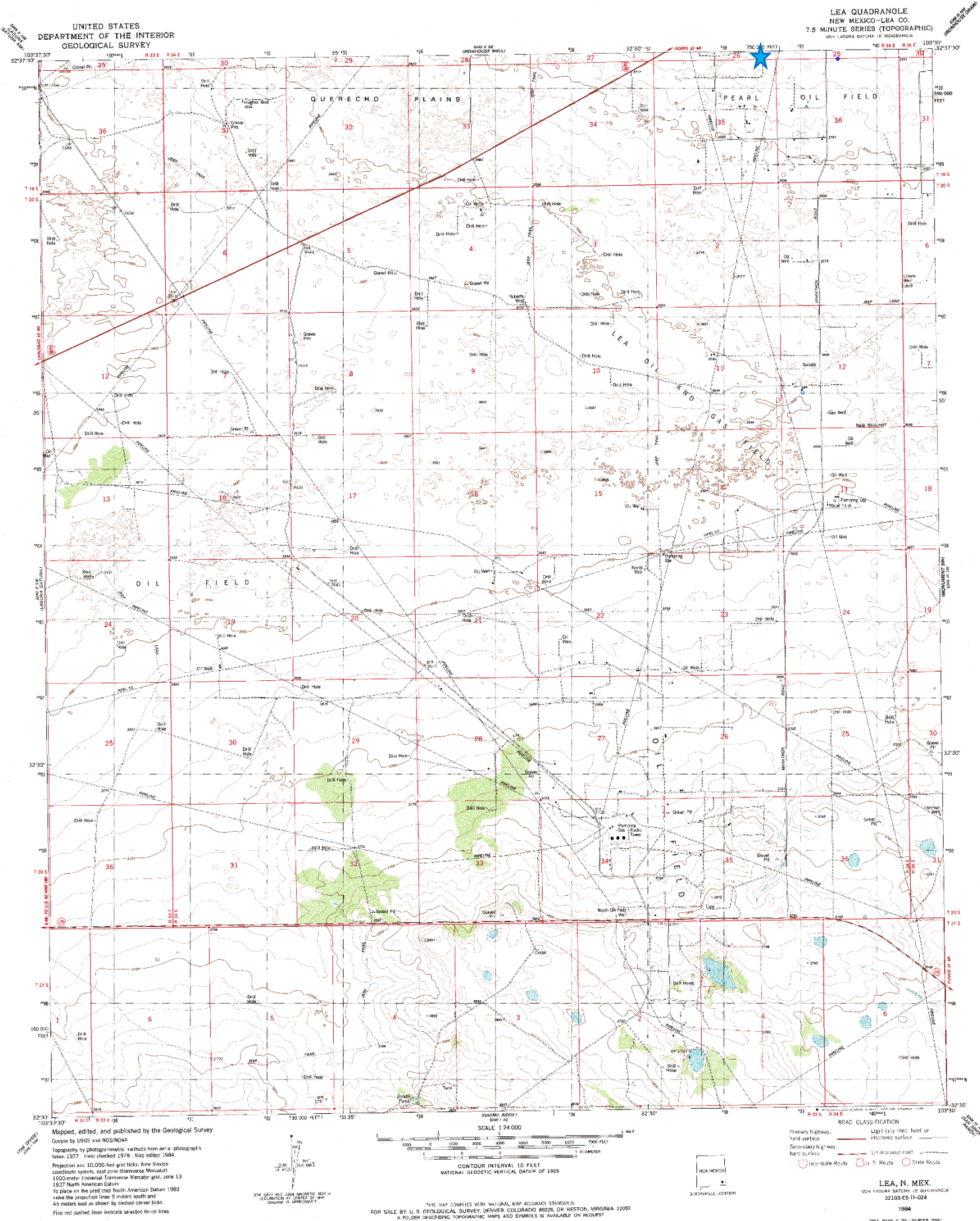
4

✱ Location     
 ● OCD     
 ● USGS     
 ● SEO     
 ● All Databases

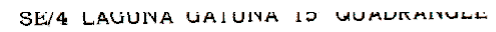


COG

## West Pearl 36 State Com #004H



**COG**





**Laboratory Analytical Results Summary  
West Pearl 36 State Com #004H**

		Sample	SP1 @ SURFACE	SP1 @ 1'
Analyte	Method	Date	10/4/16	10/4/16
			mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<b>0.128</b>	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<b>0.05</b>	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300
<b>GRO</b>	TPH 8015M		<100	<10.0
<b>DRO</b>	TPH 8015M		<b>11800</b>	<b>66.8</b>

		Sample	SP2 @ SURFACE	SP2 @ 1'
Analyte	Method	Date	10/4/16	10/4/16
			mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<b>0.086</b>	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300
<b>GRO</b>	TPH 8015M		<10.0	<10.0
<b>DRO</b>	TPH 8015M		<10.0	<10.0

		Sample	SP3 @ SURFACE	SP3 @ 1'
Analyte	Method	Date	10/4/16	10/4/16
			mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300
<b>GRO</b>	TPH 8015M		<10.0	<10.0
<b>DRO</b>	TPH 8015M		<b>46.5</b>	<10.0

		Sample	SP4 @ SURFACE	SP4 @ 1'
Analyte	Method	Date	10/4/16	10/4/16
			mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<b>0.146</b>	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<b>0.053</b>	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300
<b>GRO</b>	TPH 8015M		<50.0	<10.0
<b>DRO</b>	TPH 8015M		<b>35500</b>	<b>53.5</b>



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

---

October 11, 2016

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: WEST PEARL 36 STATE COM #004H

Enclosed are the results of analyses for samples received by the laboratory on 10/06/16 14:35.

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 1 @ SURFACE (H602257-01)**

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	10/11/2016	ND	2.19	109	2.00	0.609	
<b>Toluene*</b>	<b>0.128</b>	0.050	10/11/2016	ND	2.24	112	2.00	1.35	
<b>Ethylbenzene*</b>	<b>0.050</b>	0.050	10/11/2016	ND	2.18	109	2.00	1.08	
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07	
Total BTEX	<0.300	0.300	10/11/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<100	100	10/08/2016	ND	185	92.3	200	5.29		
<b>DRO &gt;C10-C28</b>	<b>11800</b>	100	10/08/2016	ND	199	99.4	200	0.107		

Surrogate: 1-Chlorooctane 97.2 % 35-147

Surrogate: 1-Chlorooctadecane 517 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 1 @ 1' (H602257-02)**

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	10/11/2016	ND	2.19	109	2.00	0.609	
Toluene*	<0.050	0.050	10/11/2016	ND	2.24	112	2.00	1.35	
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08	
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07	
Total BTEx	<0.300	0.300	10/11/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29	
DRO >C10-C28	66.8	10.0	10/08/2016	ND	199	99.4	200	0.107	

Surrogate: 1-Chlorooctane 89.6 % 35-147

Surrogate: 1-Chlorooctadecane 100 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 2 @ SURFACE (H602257-03)**

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	10/11/2016	ND	2.19	109	2.00	0.609		
Toluene*	0.086	0.050	10/11/2016	ND	2.24	112	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08		
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07		
Total BTEX	<0.300	0.300	10/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29		
DRO >C10-C28	<10.0	10.0	10/08/2016	ND	199	99.4	200	0.107		

Surrogate: 1-Chlorooctane 85.0 % 35-147

Surrogate: 1-Chlorooctadecane 90.2 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 2 @ 1' (H602257-04)**

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	10/11/2016	ND	2.19	109	2.00	0.609		
Toluene*	<0.050	0.050	10/11/2016	ND	2.24	112	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08		
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07		
Total BTEX	<0.300	0.300	10/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29		
DRO >C10-C28	<10.0	10.0	10/08/2016	ND	199	99.4	200	0.107		

Surrogate: 1-Chlorooctane 92.4 % 35-147

Surrogate: 1-Chlorooctadecane 86.1 % 28-171

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





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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 3 @ SURFACE (H602257-05)**

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	10/11/2016	ND	2.19	109	2.00	0.609	
Toluene*	<0.050	0.050	10/11/2016	ND	2.24	112	2.00	1.35	
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08	
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07	
Total BTEx	<0.300	0.300	10/11/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29	
DRO >C10-C28	46.5	10.0	10/08/2016	ND	199	99.4	200	0.107	

Surrogate: 1-Chlorooctane 90.8 % 35-147

Surrogate: 1-Chlorooctadecane 87.4 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 3 @ 1' (H602257-06)**

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	10/11/2016	ND	2.19	109	2.00	0.609		
Toluene*	<0.050	0.050	10/11/2016	ND	2.24	112	2.00	1.35		
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08		
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07		
Total BTEX	<0.300	0.300	10/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29		
DRO >C10-C28	<10.0	10.0	10/08/2016	ND	199	99.4	200	0.107		

Surrogate: 1-Chlorooctane 87.4 % 35-147

Surrogate: 1-Chlorooctadecane 92.3 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 4 @ SURFACE (H602257-07)**

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	10/11/2016	ND	2.19	109	2.00	0.609		
<b>Toluene*</b>	<b>0.146</b>	0.050	10/11/2016	ND	2.24	112	2.00	1.35		
<b>Ethylbenzene*</b>	<b>0.053</b>	0.050	10/11/2016	ND	2.18	109	2.00	1.08		
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07		
Total BTX	<0.300	0.300	10/11/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	10/08/2016	ND	185	92.3	200	5.29		
<b>DRO &gt;C10-C28</b>	<b>35500</b>	50.0	10/08/2016	ND	199	99.4	200	0.107		

Surrogate: 1-Chlorooctane 76.2 % 35-147

Surrogate: 1-Chlorooctadecane 5250 % 28-171

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



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

**Analytical Results For:**

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

Received:	10/06/2016	Sampling Date:	10/04/2016
Reported:	10/11/2016	Sampling Type:	Soil
Project Name:	WEST PEARL 36 STATE COM #004H	Sampling Condition:	Cool & Intact
Project Number:	COG	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

**Sample ID: SP 4 @ 1' (H602257-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2016	ND	2.19	109	2.00	0.609	
Toluene*	<0.050	0.050	10/11/2016	ND	2.24	112	2.00	1.35	
Ethylbenzene*	<0.050	0.050	10/11/2016	ND	2.18	109	2.00	1.08	
Total Xylenes*	<0.150	0.150	10/11/2016	ND	6.58	110	6.00	1.07	
Total BTEX	<0.300	0.300	10/11/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.6-140

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	10/08/2016	ND	185	92.3	200	5.29	
DRO >C10-C28	53.5	10.0	10/08/2016	ND	199	99.4	200	0.107	

Surrogate: 1-Chlorooctane 85.6 % 35-147

Surrogate: 1-Chlorooctadecane 97.1 % 28-171

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



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

### 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

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.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



**ORDINAL 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. #:		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>BILL TO</b> </div>									
Project Manager: Cliff Brunson				Company: C06											
Address: P.O. Box 805				Attn: Robert Grubbs		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ANALYSIS REQUEST</b> </div>									
City: Hobbs				State: NM Zip: 88241											
Phone #: 575-397-6388				Fax #: 575-397-0397		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ANALYSIS REQUEST</b> </div>									
Project #:				Project Owner: C06											
Project Name: West Pearl 36 State Com #004H				City:		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ANALYSIS REQUEST</b> </div>									
Project Location: Lea County, NM				State: Zip:											
Sample Name: Price Brunson				Phone #:		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ANALYSIS REQUEST</b> </div>									
FOR LAB USE ONLY				Fax #:											

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	TPH	BTEX
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						
H0021251	SP1 @ SURFACE		6									10/4/16	9:10 AM	✓	✓
	SP1 @ 1'		6			✓						10/4/16	9:30 AM	✓	✓
	SP2 @ SURFACE		6			✓						10/4/16	9:45 AM	✓	✓
	SP2 @ 1'		6			✓						10/4/16	10:10 AM	✓	✓
	SP3 @ SURFACE		6			✓						10/4/16	10:45 AM	✓	✓
	SP3 @ 1'		6			✓						10/4/16	11:30 AM	✓	✓
	SP4 @ SURFACE		6			✓						10/4/16	12:45 PM	✓	✓
	SP4 @ 1'		6			✓						10/4/16	1:20 PM	✓	✓

**PLEASE NOTE:** Liability and Damages. Cardholder'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: <i>Cliff Brunson</i>		Received By: <i>Robert Grubbs</i>	
Date: <i>10/4/16</i>	Type: <i>Open</i>	Date: <i>10-6-16</i>	Time: <i>4:35</i>
Relinquished By: <i>Jennifer Galey</i>		Received By: <i>Jodi Hunter</i>	
Delivered By: (Circle One) <i>UPS</i>		Sample Condition <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Damaged	
Sampler - UPS - Bus - Other:		CHECKED BY: <i>[Signature]</i>	
Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
REMARKS:			



**From:** Lynch, Kristen, EMNRD  
**To:** [Cliff Brunson](#)  
**Cc:** [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#)  
**Subject:** RE: COG - West Pearl 36 State Com #004H - Remediation Plan  
**Date:** Thursday, November 10, 2016 7:55:41 AM  
**Attachments:** [1RP 4435 West Pearl 36 State Com #004H Remediation Plan.pdf](#)

---

Good Morning,

Based on documents provided and NMOCD review, the work plan for RP 4435 has been approved. Please see attached for your records.

Thank You,

*Kristen D. Lynch  
Environmental Specialist, District 1  
Oil Conservation Division, EMNRD  
(575) 393-6161 ext. 111  
575-370-3180 (emergency-cell)*

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.

---

**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Friday, November 04, 2016 3:30 PM  
**To:** Lynch, Kristen, EMNRD  
**Cc:** Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** COG - West Pearl 36 State Com #004H - Remediation Plan

Kristen,

This e-mail is to confirm our discussion concerning the remediation plan for the COG West Pearl 36 State Com #004H 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 back 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)



\*\*\*\*\*

Confidentiality Notice: This electronic transmission (and any attached documents) is intended only for the person(s) to whom it is addressed and may contain information that is privileged, confidential, or otherwise protected from disclosure. If you have received this transmission in error, please immediately notify the sender by e-mail or by telephone call to (575) 397-6388 for handling instructions. Any disclosure or distribution of the contents of this transmission by anyone other than the named recipient(s) is strictly prohibited.

\*\*\*\*\*

















**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 157368

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 157368
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	11/9/2022