

# Closure Report

2RP-5224

## Site Description

Site Name:	Cedar Canyon 28-2 WT Pump
Company:	Oxy Permian
Legal Description:	U/L B, Sec 28, T24S, R29E
County:	Eddy County, NM
GPS Coordinates:	N 32.19464, W -103.98766

## Release Data

Date of Release:	1/17/2019
Type of Release:	Produced Water
Source of Release:	Compromised flange on discharge side of pump
Volume of Release:	12 BBLS
Volume Recovered:	0 BBLS

## Remediation Specifications

Remediation Parameters:	Excavated the areas of SP1, SP2, and SP3 to a depth of 1.5 feet, and the areas of SP4, SP5, and SP6 to a depth of 1 foot. Obtained confirmation bottom and sidewall samples every 75 feet. Backfilled the site with clean soil.	
Remediation Activities:	2/14/20 to 3/2/20	
Plan Sent to OCD:	1/31/2019	E-mail from Kathy Purvis to Robert Hamlet
OCD Approval of Plan:	2/6/2019	E-mail from Robert Hamlet to Cliff Brunson
Plan Sent to BLM:	not required	
BLM Approval of Plan:	not required	

## Supporting Documentation

Initial C-141	signed and included
Site Diagram	January, 2019 with excavation depths & confirmation sample points
Pictures	Remediation photos
Lab Summary	Confirmation lab summary for 2-24-20 & 2-26-20
Depth to Groundwater	USGS Info, Groundwater trend map
C-141, page 6	signed and included

## 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.

3/5/2020

**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Kathy Purvis](#)  
**Cc:** [Bratcher, Mike, EMNRD](#); [Venegas, Victoria, EMNRD](#); ["Dittrich, John W"](#); ["Rebecca Moore"](#); ["Cliff Brunson"](#); ["Ken Swinney"](#); ["Jennifer Gilkey"](#)  
**Subject:** FW: [EXT] Initial C-141 with spill calculations; Cedar Canyon 28-2 WT Pump (30-015-41073) (2RP-5224) 1-17-19  
**Date:** Wednesday, February 6, 2019 11:20:56 AM

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RE: **OXY \* Cedar Canyon 28-2 WT Pump \* DOR: 01/17/2019**

All,

The OCD tracking number for this release event is **2RP-5224**.

Please include our new environmental tech Victoria Venegas [Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us) on all future correspondence.

Thank you,

Robert J Hamlet  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 840-5963  
[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)

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 groundwater, 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, or local laws and/or regulations.

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**From:** Bustamante, Amalia, EMNRD  
**Sent:** Wednesday, February 6, 2019 10:30 AM  
**To:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Cc:** Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>  
**Subject:** RE: [EXT] Initial C-141 with spill calculations; Cedar Canyon 28-2 WT Pump (1-17-19)

2RP-5224

*Amalia Bustamante*  
Oil Conservation Division-District II

---

**From:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Sent:** Thursday, January 31, 2019 10:13 AM

**To:** Bustamante, Amalia, EMNRD <[Amalia.Bustamante@state.nm.us](mailto:Amalia.Bustamante@state.nm.us)>  
**Cc:** Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Venegas, Victoria, EMNRD <[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)>  
**Subject:** FW: [EXT] Initial C-141 with spill calculations; Cedar Canyon 28-2 WT Pump (1-17-19)

---

**From:** Kathy Purvis <[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)>  
**Sent:** Thursday, January 31, 2019 9:19 AM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>  
**Cc:** 'Dittrich, John W' <[Wade\\_Dittrich@oxy.com](mailto:Wade_Dittrich@oxy.com)>; 'Rebecca Moore' <[Rebecca\\_Moore@oxy.com](mailto:Rebecca_Moore@oxy.com)>; 'Cliff Brunson' <[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)>; 'Ken Swinney' <[kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)>; 'Jennifer Gilkey' <[jgilkey@bbcinternational.com](mailto:jgilkey@bbcinternational.com)>  
**Subject:** [EXT] Initial C-141 with spill calculations; Cedar Canyon 28-2 WT Pump (1-17-19)

Attached are the C-141 and spill calculations for a leak that occurred at the Cedar Canyon 28-2 WT Pump on 1/17/19 in Eddy County, NM. Receipt notification and the RP number via email are greatly appreciated.

## Kathy Purvis

BBC International, Inc.

1324 W. Marland Blvd.

Hobbs, NM 88240

Business: (575) 397-6388

Cell: (575) 441-8619

[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)

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 Department

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NAB1903737518
District RP	2RP-5224
Facility ID	
Application ID	pAB1903736499

## Release Notification

### Responsible Party

Responsible Party	Oxy USA Inc.	OGRID	16696
Contact Name	Wade Dittrich	Contact Telephone	(575) 390-2828
Contact email	Wade_Dittrich@oxy.com	Incident # (assigned by OCD)	NAB1903737518
Contact mailing address	PO Box 4294; Houston, TX 77210		

### Location of Release Source

Latitude N 32.19464 Longitude W-103.98766  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	CEDAR CANYON 28-2 WT PUMP	Site Type	BATTERY
Date Release Discovered	1/17/19	API# (if applicable)	30-015-41073

Unit Letter	Section	Township	Range	County
B	28	24S	29E	EDDY COUNTY, NM

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: OXY)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 12 BBLS	Volume Recovered (bbls) 0 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

COMPROMISED FLANGE ON DISCHARGE SIDE OF PUMP

Form C-141

Page 2

State of New Mexico  
Oil Conservation Division

Incident ID	NAB1903737518
District RP	2RP-5224
Facility ID	
Application ID	pAB1903736499

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

**Initial Response**

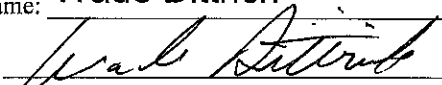

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Wade DittrichTitle: Environmental SpecialistSignature: Date: 1-29-19email: wade\_dittrich@oxy.comTelephone: (575) 390-2828**OCD Only**Received by: Date: 2/06/2019



# Oxy, Cedar Canyon 28-2 WT

Leak Date: (1-17-19)

API: 30-015-41073

RP# 2RP-5224

## Legend

- 1 ft Excavation
- 1.5 ft Excavation
- Confirmation Sample Points
- Leak Area



Google Earth

© 2020 Google



Oxy, Cedar Canyon 28-2 WT Pump

Sample points

BS1, N 32.19491 W-103.98774

BS2, N 32.19480 W-103.98748

BS3, N 32.19474 W-103.98766

BS4, N 32.19465 W-103.98738

BS5, N 32.19449 W-103.98746

BS6, N 32.19438 W-103.98761

SW1, N 32.19467 W-103.98729

SW2, N 32.19447 W-103.98744

SW3, N 32.19434 W-103.98771

SW4, N 32.19461 W-103.98745

SW5, N 32.19477 W-103.98769

SW6, N 32.19489 W-103.98759



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Data Category:  
Groundwater

Geographic Area:  
New Mexico

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Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 321355104012001

Minimum number of levels = 1  
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USGS 321355104012001 24S.29E.07.14444

Eddy County, New Mexico  
Latitude 32°13'55", Longitude 104°01'20" NAD27  
Land-surface elevation 2,983 feet above NAVD88  
The depth of the well is 160 feet below land surface.  
This well is completed in the Castile Formation (312CSTL) local aquifer.

Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1983-02-01		D	47.14				2		U	
1987-10-16		D	51.84				2		U	
1988-02-11		D	52.19				2		U	
1992-10-20		D	51.78				2		S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.



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**Title: Groundwater for New Mexico: Water Levels**

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Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2019-02-04 13:03:28 EST

0.52 0.44 nadww01













Confirmation Laboratory Analytical Results Summary  
Oxy, Cedar Canyon 28-2 CTB WT (1-17-19)

		Sample ID	Bottom 1	Bottom 2	Bottom 3	Bottom 4	Bottom 5	Bottom 6
Analyte	Method	Date	2/24/20	2/24/20	2/24/20	2/24/20	2/24/20	2/24/20
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		608	304	464	528	384	352
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

		Sample ID	Sidewall 1	Sidewall 2	Sidewall 3	Sidewall 4	Sidewall 5	Sidewall 6
Analyte	Method	Date	2/24/20	2/24/20	2/24/20	2/24/20	2/24/20	2/24/20
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<10.0	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<10.0	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<10.0	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		288	192	576	352	176	224
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

		Sample ID	Bottom 1
Analyte	Method	Date	2/26/20
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500Cl-B		240
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0



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

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February 26, 2020

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: CEDAR CANYON 28 -2 CTB WT

Enclosed are the results of analyses for samples received by the laboratory on 02/25/20 8:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 1 (H000579-01)**

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	02/25/2020	ND	1.95	97.4	2.00	3.42		
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33		
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35		
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32		
Total BTEX	<0.300	0.300	02/25/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	02/25/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/25/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/25/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/25/2020	ND					

Surrogate: 1-Chlorooctane 85.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.9 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 2 (H000579-02)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/25/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/25/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/25/2020	ND					

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.1 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 3 (H000579-03)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/25/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/25/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/25/2020	ND					

Surrogate: 1-Chlorooctane 91.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.4 % 42.2-156

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\*=Accredited Analyte

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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:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 4 (H000579-04)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/25/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/25/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/25/2020	ND					

Surrogate: 1-Chlorooctane 89.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 5 (H000579-05)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 90.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 6 (H000579-06)**

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42		
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33		
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35		
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32		
Total BTX	<0.300	0.300	02/25/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	02/25/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 87.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 1 (H000579-07)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 90.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.3 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 2 (H000579-08)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 90.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.0 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 3 (H000579-09)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 91.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.7 % 42.2-156

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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 4 (H000579-10)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 92.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.7 % 42.2-156

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**Analytical Results For:**

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

Received:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 5 (H000579-11)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	02/25/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 86.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.3 % 42.2-156

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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:	02/25/2020	Sampling Date:	02/24/2020
Reported:	02/26/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: SIDEWALL 6 (H000579-12)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2020	ND	1.95	97.4	2.00	3.42	
Toluene*	<0.050	0.050	02/25/2020	ND	1.94	97.2	2.00	3.33	
Ethylbenzene*	<0.050	0.050	02/25/2020	ND	1.96	98.0	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/25/2020	ND	5.79	96.4	6.00	2.32	
Total BTX	<0.300	0.300	02/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	02/25/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/26/2020	ND	200	99.9	200	2.76	
DRO >C10-C28*	<10.0	10.0	02/26/2020	ND	197	98.6	200	4.73	
EXT DRO >C28-C36	<10.0	10.0	02/26/2020	ND					

Surrogate: 1-Chlorooctane 86.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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

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Celey D. Keene, Lab Director/Quality Manager

91 jo 51 eba

**CARDINAL LABORATORIES**
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

Company Name: BBC International, Inc.		<b>BILL TO</b>		P.O. #:		ANALYSIS REQUEST	
Project Manager: Cliff Brunson		Company:		Attn:			
Address: P.O. Box 805		State: NM		Zip: 88241			
City: Hobbs		Address:		City:			
Phone #: 575-397-6388		Fax #: 575-397-0397		State:		Zip:	
Project #:		Project Owner: Oxy		Phone #:			
Project Name: Cedar Canyon 28-2 CTB WT		State:		Zip:			
Project Location: Eddy County, NM		Fax #:					
Sampler Name: Roger Hernandez		FOR LAB USE ONLY					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	
				GROUNDWATER			
				WASTEWATER			
				SOIL			
				OIL			
				SLUDGE			
				OTHER :			
				ACID/BASE:			
				ICE / COOL			
				OTHER :			
				DATE	TIME		
1	Bottom	✓	✓	2.24.20	1130	✓	✓
2	Bottom	✓	✓	2.24.20	1145	✓	✓
3	Bottom	✓	✓	2.24.20	1700	✓	✓
4	Bottom	✓	✓	2.24.20	1230	✓	✓
5	Bottom	✓	✓	2.24.20	1245	✓	✓
6	Bottom	✓	✓	2.24.20	100	✓	✓
7	Bottom	✓	✓	2.24.20	115	✓	✓
8	Bottom	✓	✓	2.24.20	13	✓	✓
9	Bottom	✓	✓	2.24.20	145	✓	✓
10	Bottom	✓	✓	2.24.20	200	✓	✓

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Relinquished By: *[Signature]* Date: 2.25.20 Received By: *[Signature]* Date: 2.25.20

Relinquished By: *[Signature]* Date: 2.25.20 Received By: *[Signature]* Date: 2.25.20

Delivered By: (Circle One) ☒ UPS ☐ Bus ☐ Other: *9.5c #113*

Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No ☐ Yes ☐ No

CHECKED BY: (Initials) *TS*

REMARKS: *RUSH !!*

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

Page 16 of 16



# ORDINAL LABORATORIES

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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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February 28, 2020

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: CEDAR CANYON 28 -2 CTB WT

Enclosed are the results of analyses for samples received by the laboratory on 02/27/20 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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:	02/27/2020	Sampling Date:	02/26/2020
Reported:	02/28/2020	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 -2 CTB WT	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - EDDY CO NM		

**Sample ID: BOTTOM 1 (H000628-01)**

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	02/27/2020	ND	2.00	99.9	2.00	4.28	
Toluene*	<0.050	0.050	02/27/2020	ND	2.02	101	2.00	4.10	
Ethylbenzene*	<0.050	0.050	02/27/2020	ND	2.03	101	2.00	4.11	
Total Xylenes*	<0.150	0.150	02/27/2020	ND	5.89	98.1	6.00	4.15	
Total BTEX	<0.300	0.300	02/27/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	02/27/2020	ND	400	100	400	3.92		

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	02/28/2020	ND	216	108	200	2.60	
DRO >C10-C28*	<10.0	10.0	02/28/2020	ND	241	121	200	10.8	
EXT DRO >C28-C36	<10.0	10.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 78.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.7 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

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Celey D. Keene, Lab Director/Quality Manager

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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Form C-141

Page 6

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	2RP-5224
Facility ID	
Application ID	


## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Wade Dittrich Title: Environmental Coordinator  
Signature:  Date: 3-4-2020  
email: wade\_dittrich@oxy.com Telephone: (575) 390-2828

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_