

# Closure Report

Incident ID NRM2012539093

## Site Description

Site Name:	Mesa Verde Wolfcamp 4H
Company:	Oxy, Permian
Legal Description:	U/L M, Section 15, T24S, R32E
County:	Lea County, NM
GPS Coordinates:	N 32.21119 W 103.68676

## Release Data

Date of Release:	3/30/2020
Type of Release:	Produced water
Source of Release:	Human Error-Frac Tank Over Flow
Volume of Release:	31 bbls
Volume Recovered:	30 bbls

## Remediation Specifications

Remediation Parameters:	Excavated SP1, SP3-SP5 to a depth of 1 foot. Excavated SP2 to a depth of 2.5 feet. Collected confirmation samples. Back filled the entire site with clean soil.
Remediation Activities:	3/11/21 to 3/23/21

Plan Sent to OCD:	7/29/2020	Receipted on PO 5Q68R - 200729 - C 1410
OCD Approval of Plan:	9/29/2020	Emailed from Cristian Eads to Wade Dittrich
Plan Sent to BLM:	9/29/2020	Emailed from Cliff Brunson to Jim Amos
BLM Approval of Plan:	1/17/2021	Emailed from James Amos to Cliff Brunson

## Supporting Documentation

Initial C-141	signed and included	
C-141, page 6	signed and included	
Site Diagram	Google Earth map with excavation depths & confirmation sample points	
Pictures	Remediation photos	
Lab Summary/Analysis	Confirmation lab summary/analysis report for 3-12-21 / 3-16-21	
Depth to Groundwater	USGS Info	

## 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.

3/26/2021

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	NRM2012539093
District RP	
Facility ID	
Application ID	

## 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)	
Contact mailing address	PO BOX 4294; HOUSTON, TX 77210		

### Location of Release Source

Latitude 32.21119 Longitude -103.68676  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	MESA VERDE WOLFCAMP 4H	Site Type	WELL
Date Release Discovered	3-30-2020	API# (if applicable)	30-025-46112

Unit Letter	Section	Township	Range	County
M	16	T24S	R32E	LEA COUNTY, NM

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

### 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) 31 BBLS	Volume Recovered (bbls) 30 BBLS
	Is the concentration of dissolved chloride 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

HUMAN ERROR-FRAC TANK OVER FLOW

Form C-141

State of New Mexico  
Oil Conservation Division


Page 2

Incident ID	NRM2012539093
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? <b>THE RELEASE WAS MORE THAN 25 BBLS</b>
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? <b>YES, BY JOHN W. DITTRICH, TO JAMES AMOS OF BLM, MIKE BRATCHER, VICTORIA VENEGAS, ROBERT HAMLET &amp; JIM GRISWOLD OF OCD, ALL VIA EMAIL ON 3-31-20 @ 2:37:35 PM.</b>	

**Initial Response**

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Wade Dittrich</u> Signature: <u></u> email: <u>wade_dittrich@oxy.com</u>	Title: <u>Environmental Coordinator</u> Date: <u>4-9-2020</u> Telephone: <u>(575) 390-2828</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____	

Form C-141

Page 6

State of New Mexico  
Oil Conservation Division

Incident ID	NRM2012539093
District RP	
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: 4-8-21  
email: wade\_dittrich@oxy.com Telephone: (575) 390-2828

**OCD Only**

Received by: Chad Hensley Date: 08/05/2021

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.

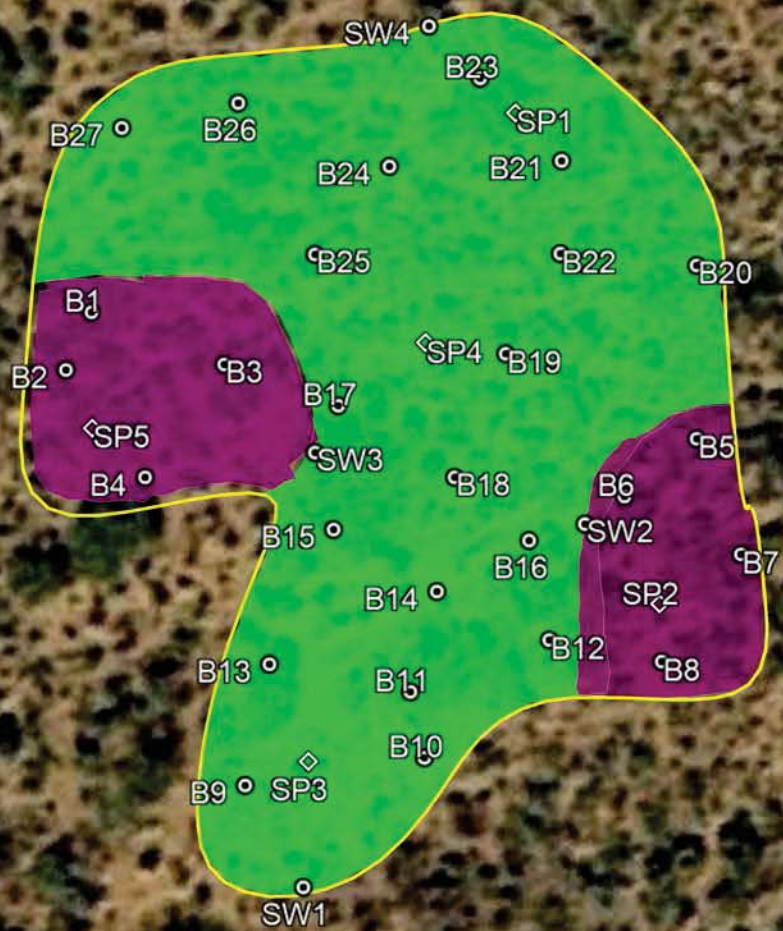
Closure Approved by:  Date: 08/05/2021  
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



# Oxy - Mesa Verde WC 4H

Leak Date: 3-30-20  
Lea County, NM  
Incident ID: NRM2012539093

- Legend
- 1 Ft excavation
  - 2.5 Ft excavation
  - Confirmation sample point
  - Deeper confirmation point
  - Leak Area
  - Location pad





**OXY – MESA VERDE WC 4H****SAMPLE POINTS**

SW1 – N32.210592 W103.685482	B24 – N32.210854 W103.685445
SW2 – N32.210724 W103.685361	B25 – N32.210822 W103.685477
SW3 – N32.210750 W103.685477	B26 – N32.210877 W103.685510
SW4 – N32.210905 W103.685428	B27 – N32.210868 W103.685560
B1 – N32.210801 W103.685573	
B2 – N32.210780 W103.685584	
B3 – N32.210782 W103.685516	
B4 – N32.210741 W103.685550	
B5 – N32.210755 W103.685313	
B6 – N32.210734 W103.685344	
B7 – N32.210713 W103.685294	
B8 – N32.210674 W103.685328	
B9 – N32.210629 W103.685507	
B10 – N32.210639 W103.685430	
B11 – N32.210663 W103.685436	
B12 – N32.210682 W103.685376	
B13 – N32.210673 W103.685497	
B14 – N32.210699 W103.685425	
B15 – N32.210722 W103.685469	
B16 – N32.210718 W103.685385	
B17 – N32.210767 W103.685467	
B18 – N32.210741 W103.685417	
B19 – N32.210786 W103.685395	
B20 – N32.210818 W103.685313	
B21 – N32.210856 W103.685371	
B22 – N32.210822 W103.685372	
B23 – N32.210886 W103.685406	

Oxy, Mesa Verde WC 4H

Sample Points:

SP1 N 32.210873° W -103.685391°

SP2 N 32.210695° W -103.685329°

SP3 N 32.210637° W -103.685480°

SP4 N 32.210789° W -103.685430°

SP5 N 32.210758° W -103.685573°

Laboratory Analytical Results Summary  
Oxy, Mesa Verde Wolfcamp #4H (3-30-20)

		Sample ID	SW1	SW2	SW3	SW4
Analyte	Method	Date	3/16/21	3/16/21	3/16/21	3/16/21
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		32.0	96.0	32.0	16.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

		Sample ID	BS1	BS2	BS3	BS4	BS5	BS6	BS7	BS8	BS9	BS10
Analyte	Method	Date	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21
			mg/kg	mg/kg	mg/kg	mg/kg	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	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<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	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<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	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		64.0	32.0	32.0	80.0	96.0	32.0	64.0	48.0	32.0	32.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	11.1	<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	<10.0	<10.0	<10.0	<10.0

		Sample ID	BS11	BS12	BS13	BS14	BS15	BS16	BS17	BS18	BS19	BS20
Analyte	Method	Date	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21
			mg/kg	mg/kg	mg/kg	mg/kg	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	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<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	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<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	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		32.0	48.0	16.0	48.0	48.0	32.0	96.0	80.0	32.0	32.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<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	31.4	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	15.4	<10.0	<10.0	<10.0

		Sample ID	BS21	BS22	BS23	BS24	BS25	BS26	BS27
Analyte	Method	Date	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21	3/16/21
			mg/kg	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	<0.050
Toluene	BTEX 8021B		<0.050	<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	<0.050
Total Xylenes	BTEX 8021B		<0.150	<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	<0.300
Chloride	SM4500Cl-B		48.0	64.0	32.0	32.0	176	16.0	48.0
GRO	TPH 8015M		<10.0	<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	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0



Laboratory Analytical Results Summary  
Oxy, Mesa Verde Wolfcamp #4H (3-30-20)

		Sample ID	SP1 @ 3'	SP1 @ 4'	SP2 @ 3'	SP2 @ 4'	SP3 @ 3'	SP3 @ 4'	SP4 @ 3'	SP4 @ 4'	SP5 @ 3'	SP5 @ 4'
Analyte	Method	Date	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21	3/12/21
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chloride	SM4500Cl-B		48.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0
GRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
EXT DRO	TPH 8015M		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a













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

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March 15, 2021

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MESA VERDE WOLFCAMP #4H

Enclosed are the results of analyses for samples received by the laboratory on 03/15/21 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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



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:	03/15/2021	Sampling Date:	03/12/2021
Reported:	03/15/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	MESA VERDE WC 4H	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SP 1 @ 3' (H210639-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/15/2021	ND	400	100	400	0.00	

**Sample ID: SP 1 @ 4' (H210639-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00	

**Sample ID: SP 2 @ 3' (H210639-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00	

**Sample ID: SP 2 @ 4' (H210639-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/15/2021	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



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:	03/15/2021	Sampling Date:	03/12/2021
Reported:	03/15/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	MESA VERDE WC 4H	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SP 3 @ 3' (H210639-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

**Sample ID: SP 3 @ 4' (H210639-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

**Sample ID: SP 4 @ 3' (H210639-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

**Sample ID: SP 4 @ 4' (H210639-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

**Sample ID: SP 5 @ 3' (H210639-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

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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:	03/15/2021	Sampling Date:	03/12/2021
Reported:	03/15/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	MESA VERDE WC 4H	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SP 5 @ 4' (H210639-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2021	ND	400	100	400	0.00		

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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 cursive script, appearing to read "Celey D. Keene", written in black ink.

---

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>BBC International</u>		P.O. #:		ANALYSIS REQUEST	
Project Manager:		Company:			
Address:		Attn:			
City: <u>HOBBS</u>		Address:			
State: <u>NM</u>		City:			
Zip: <u>88240</u>		State:			
Phone #:		Fax #:			
Project #:		Project Owner: <u>DRY</u>			
Project Name: <u>MESA VERDE WC 4'H</u>		City:			
Project Location:		State:			
Zip:		Phone #:			
Fax #:		Sample Name: <u>Poger Hernandez</u>			
FOR LAB USE ONLY		PRESERV.		SAMPLING	
Lab I.D. <u>H201639</u>		Sample I.D.			
Sample I.D.		(G)RAB OR (C)OMP.			
# CONTAINERS		GROUNDWATER			
WASTEWATER		SOIL			
OIL		SLUDGE			
OTHER :		ACID/BASE:			
ICE / COOL		OTHER :			
DATE		TIME			
1 SP103		3/12/1000		TPH * Remove	
2 SP203		3/12/1010		BTEX * EXT	
3 SP203		3/12/1020		CL - Rush CL only	
4 SP303		3/12/1030		3/15/21 @ 10:15	
5 SP303		3/12/1040			
6 SP403		3/12/1050			
7 SP403		3/12/1100			
8 SP503		3/12/1110			
9 SP503		3/12/1120			
10 SP503		3/12/1130			
Relinquished By: <u>Poger Hernandez</u>		Date: <u>3.15.21</u>		Time: <u>10:15</u>	
Received By: <u>Lawrence Alabaz</u>		Date: <u>3.15.21</u>		Time: <u>10:15</u>	
Delivered By: (Circle One)		Observed Temp. °C <u>4.4</u>		Sample Condition	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
FORM 006 R-3 1/09/04/20		CHECKED BY: <u>DRS</u>		Turnaround Time: <u>Standard</u>	
				Bacteria (only) Sample Condition	
				Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
				Observed Temp. °C	
				Corrected Temp. °C	



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---

March 18, 2021

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: MESA VERDE WOLFCAMP #4H

Enclosed are the results of analyses for samples received by the laboratory on 03/17/21 8:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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



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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SIDEWALL 1 (H210673-01)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTEX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 77.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 73.8 % 42.2-156

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\*=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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SIDEWALL 2 (H210673-02)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 77.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 72.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SIDEWALL 3 (H210673-03)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 87.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.3 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: SIDEWALL 4 (H210673-04)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 82.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.9 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 1 (H210673-05)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 83.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.9 % 42.2-156

Cardinal Laboratories

\*=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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 2 (H210673-06)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 83.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.2 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 3 (H210673-07)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 82.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.0 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 4 (H210673-08)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	11.1	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 82.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.6 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 5 (H210673-09)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 70.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 65.6 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 6 (H210673-10)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 80.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 75.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 7 (H210673-11)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.8 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 8 (H210673-12)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 81.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.6 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 9 (H210673-13)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 82.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.0 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 10 (H210673-14)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 80.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.5 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 11 (H210673-15)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTEx	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 83.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 12 (H210673-16)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTX	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 84.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 13 (H210673-17)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTX	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 77.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 72.5 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 14 (H210673-18)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 81.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 75.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 15 (H210673-19)**

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	03/17/2021	ND	2.23	111	2.00	0.489		
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869		
Total BTX	<0.300	0.300	03/17/2021	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 79.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 74.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 16 (H210673-20)**

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	03/17/2021	ND	2.23	111	2.00	0.489	
Toluene*	<0.050	0.050	03/17/2021	ND	2.12	106	2.00	0.907	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.08	104	2.00	0.616	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.16	103	6.00	0.869	
Total BTX	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	400	100	400	3.92		

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	03/17/2021	ND	206	103	200	7.59	
DRO >C10-C28*	<10.0	10.0	03/17/2021	ND	222	111	200	5.64	
EXT DRO >C28-C36	<10.0	10.0	03/17/2021	ND					

Surrogate: 1-Chlorooctane 77.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 73.0 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 17 (H210673-21)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTEx	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	31.4	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	15.4	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 18 (H210673-22)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTEx	<0.300	0.300	03/17/2021	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	12.4	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 86.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 19 (H210673-23)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTEx	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 92.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 20 (H210673-24)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 21 (H210673-25)**

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	03/17/2021	ND	2.06	103	2.00	4.41		
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09		
Total BTEx	<0.300	0.300	03/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 81.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.1 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 22 (H210673-26)**

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	03/17/2021	ND	2.06	103	2.00	4.41		
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09		
Total BTEx	<0.300	0.300	03/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 85.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 23 (H210673-27)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 85.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.9 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 24 (H210673-28)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 85.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.2 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 25 (H210673-29)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 86.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.2 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 26 (H210673-30)**

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	03/17/2021	ND	2.06	103	2.00	4.41		
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19		
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77		
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09		
Total BTEx	<0.300	0.300	03/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.4 % 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:	03/17/2021	Sampling Date:	03/16/2021
Reported:	03/18/2021	Sampling Type:	Soil
Project Name:	MESA VERDE WOLFCAMP #4H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	OXY - LEA COUNTY, NM		

**Sample ID: BOTTOM 27 (H210673-31)**

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	03/17/2021	ND	2.06	103	2.00	4.41	
Toluene*	<0.050	0.050	03/17/2021	ND	2.10	105	2.00	3.19	
Ethylbenzene*	<0.050	0.050	03/17/2021	ND	2.03	101	2.00	3.77	
Total Xylenes*	<0.150	0.150	03/17/2021	ND	6.15	102	6.00	4.09	
Total BTX	<0.300	0.300	03/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2021	ND	432	108	400	3.77		

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	03/18/2021	ND	211	106	200	7.29	
DRO >C10-C28*	<10.0	10.0	03/18/2021	ND	228	114	200	4.42	
EXT DRO >C28-C36	<10.0	10.0	03/18/2021	ND					

Surrogate: 1-Chlorooctane 82.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.6 % 42.2-156

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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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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 cursive script, appearing to read "C. D. Keene", written in black ink.

---

Celey D. Keene, Lab Director/Quality Manager



## ARDINAL LABORATORIES

101 East Maryland, 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:	
State: NM Zip: 88241		State:	
Fax #: 575-397-0397		Zip:	
Project #:		Project Owner: Oxy	
Project Name: MESA VERDE WC 14H		Phone #:	
Project Location:		Fax #:	
Sample Name: Roger Hernandez		PRESERV	
FOR LAB USE ONLY		SAMPLING	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	DATE	TIME	TPH	BTEX	CL-	EXT
HA10673	1 SIDEWALL		1	✓	3/6/21	9:00	✓	✓	✓	
	2 SIDEWALL		1	✓	3/14/21	9:10	✓	✓	✓	
	3 SIDEWALL		1	✓	3/14/21	9:30	✓	✓	✓	
	4 SIDEWALL		1	✓	3/16/21	9:40	✓	✓	✓	
	5 BOTTOM		1	✓	3/16/21	9:50	✓	✓	✓	
	6 BOTTOM		1	✓	3/16/21	10:00	✓	✓	✓	
	7 BOTTOM		1	✓	3/16/21	10:10	✓	✓	✓	
	8 BOTTOM		1	✓	3/16/21	10:20	✓	✓	✓	
	9 BOTTOM		1	✓	3/16/21	10:30	✓	✓	✓	

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Relinquished By: [Signature] Date: 3/17/21 Time: 8:45  
 Received By: [Signature] Date: 3/17/21 Time: 8:45  
 Relinquished By: [Signature] Date: 3/17/21 Time: 8:45  
 Received By: [Signature] Date: 3/17/21 Time: 8:45

Delivered By: (Circle One) ☒ UPS ☐ Bus ☐ Other: 2.4c #113

Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No

CHECKED BY: [Signature] (Initials)

REMARKS: Bush!

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





**ARDINAL LABORATORIES**  
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2021

<b>Company Name:</b> BBC International, Inc.		<b>P.O. #:</b>		<b>BILL TO</b>																		
<b>Project Manager:</b> Cliff Brunson		<b>Company:</b>		<b>ANALYSIS REQUEST</b>																		
<b>Address:</b> P.O. Box 805		<b>Attn:</b>																				
<b>City:</b> Hobbs		<b>Address:</b>																				
<b>Phone #:</b> 575-397-6388		<b>City:</b>																				
<b>State:</b> NM <b>Zip:</b> 88241		<b>State:</b>																				
<b>Fax #:</b> 575-397-0397		<b>Zip:</b>																				
<b>Project #:</b>		<b>Project Owner:</b> Oxy																				
<b>Project Name:</b> MESA VERDE WE UH		<b>Phone #:</b>																				
<b>Project Location:</b>		<b>Fax #:</b>																				
<b>Sample Name:</b> Rake Hernandez		<b>PRESERV:</b>																				
<b>FOR LAB USE ONLY</b>		<b>SAMPLING</b>																				
<b>Lab I.D.</b>	<b>Sample I.D.</b>	<b>(G)RAB OR (C)OMP.</b>	<b># CONTAINERS</b>	<b>GROUNDWATER</b>	<b>WASTEWATER</b>	<b>SOIL</b>	<b>OIL</b>	<b>SLUDGE</b>	<b>OTHER :</b>	<b>ACID/BASE:</b>	<b>ICE / COOL</b>	<b>OTHER :</b>	<b>DATE</b>	<b>TIME</b>								
HA10473	Bottom		5										3/16/21	1040								
11	Bottom		5										3/16/21	1050								
12	Bottom		5										3/16/21	1100								
13	Bottom		5										3/16/21	1110								
14	Bottom		5										3/16/21	1120								
15	Bottom		5										3/16/21	1130								
16	Bottom		5										3/16/21	1140								
17	Bottom		5										3/16/21	1150								
18	Bottom		5										3/16/21	1200								
19	Bottom		5										3/16/21	1210								
20	Bottom		5										3/16/21	1220								

**Relinquished By:** [Signature] **Date:** 3-17-21 **Received By:** [Signature] **Date:** 3-17-21

**Relinquished By:** [Signature] **Date:** 3-17-21 **Received By:** [Signature] **Date:** 3-17-21

**Delivered By:** (Circle One) **Sample Condition** **CHECKED BY:** (Initials)

**Sampler - UPS - Bus - Other:** 2.46 #113 ☒ Yes ☐ No ☐ No ☐ No

**REMARKS:** Bush!



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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:				P.O. #:				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>			
Project Manager:				Company:											
Address:				Attn:											
City:				Address:											
Phone #:				City:											
Project #:				State:											
Project Name:				Zip:											
Project Location:				Phone #:											
Sample Name:				Fax #:											
FOR LAB USE ONLY															

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	TPH	BTEX	CL							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :														
Heil 673	Bottom	G	1									3.4.2	1220										
	Bottom	G	1									3.4.2	1230										
	Bottom	G	1									3.4.2	1240										
	Bottom	G	1									3.4.2	1250										
	Bottom	G	1									3.4.2	1300										
	Bottom	G	1									3.4.2	1310										
	Bottom	G	1									3.4.2	1320										
	Bottom	G	1									3.4.2	1330										
	Bottom	G	1									3.4.2	1340										
	Bottom	G	1									3.4.2	1350										

Relinquished By: <i>Don Spruce</i>				Date: <i>3.4.2</i>				Received By: <i>Janice Clark</i>				Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:			
Relinquished By:				Date:				Received By:				All Results are emailed. Please provide Email address:			
Time: <i>0840</i>				Time:				Time:				REMARKS:			
Date: <i>3.4.2</i>				Date:				Date:							
Time:				Time:				Time:							
Corrected Temp. °C				Corrected Temp. °C				Corrected Temp. °C							
Sample Condition				Sample Condition				Sample Condition							
Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>							
Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>							
CHECKED BY: <i>TC</i>				CHECKED BY: <i>TC</i>				CHECKED BY: <i>TC</i>							
Turnaround Time:				Turnaround Time:				Turnaround Time:							
Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>							
Bacteria (only) <input checked="" type="checkbox"/>				Bacteria (only) <input checked="" type="checkbox"/>				Bacteria (only) <input checked="" type="checkbox"/>							
Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>							
Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>							
Corrected Temp. °C				Corrected Temp. °C				Corrected Temp. °C							





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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		<b>BILL TO</b>		ANALYSIS REQUEST																																	
Project Manager: Cliff Brunson		P.O. #:																																			
Address: P.O. Box 805		Company:																																			
City: Hobbs		Attn:																																			
State: NM Zip: 88241		Address:																																			
Phone #: 575-397-6388		City:																																			
Fax #: 575-397-0397		State:																																			
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Project Name:		Phone #:																																			
Project Location:		Fax #:																																			
Sample Name:		Matrix		PRESERV		SAMPLING																															
FOR LAB USE ONLY																																					
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		TPH		BTEX		EXT		CL-	
HARD 73		31		13.710m		27		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓			
Relinquished By:		Date:		3-17-21		Time:		0844		Received By:		Date:		3-17-21		Time:		0844		Sample Condition		Cool		Intact		Checked By:		(Initials)		YB		Push!					
Relinquished By:		Date:		3-17-21		Time:		0844		Received By:		Date:		3-17-21		Time:		0844		Sample Condition		Cool		Intact		Checked By:		(Initials)		YB		Push!					
Delivered By: (Circle One)		Sampler - UPS		Bus		Other:		3.46 #113		Sample Condition		Cool		Intact		Checked By:		(Initials)		YB		Push!															

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National Water Information System: Web Interface


USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
New Mexico

GO

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- **Notice** - The USGS Water Resources Mission Area's priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

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Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 321312103395601

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 321312103395601 24S.32E.10.344333

Lea County, New Mexico  
Latitude 32°13'30.4", Longitude 103°39'52.7" NAD83  
Land-surface elevation 3,589.00 feet above NGVD29  
The depth of the well is 60 feet below land surface.  
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) 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 measur
1950-04-13			D 33.64				2			U
1955-06-03			D 31.90				2	R		U
1976-01-22			D 31.80				2			U
1981-03-20			D 19.93				2			U
1986-03-18			D 37.16				2			U
1991-05-29			D 39.64				2			U
1996-03-14			D 38.20				2			S
2001-02-27			D 36.58				2			S
2006-02-07	09:30 MST	m	19.40				2		S	USGS
2010-12-16	15:30 MST	m	33.96				2		S	USGS

Explanation

Section	Code	Description
---------	------	-------------

**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 29714

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 29714
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	8/5/2021