



## DELINEATION WORKPLAN

### OXY – GOODNIGHT 26 FEDERAL 1 BATTERY (Leak Date: 12/5/18)

#### RP # 2RP-5212

This delineation workplan and remediation proposal addresses the releases associated with RP # 2RP-5212.

The following information includes:

1. Appropriate completed and signed C-141 pages.
2. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
3. GPS information for sample points and sample methodology.
4. Depth to groundwater information (i.e., pdf of OSE search results, USGS search results, and/or copy of Chevron groundwater trend map).
5. Watercourse/features map within 1000 feet.
6. BLM Cave Karst map.
7. FEMA National Flood map.
8. Laboratory analysis results summary table and original laboratory analysis reports.
9. Potentially other pertinent information as necessary for site specific purposes.

***Based on the information included in this package and the NMOCD rules, the following remediation is proposed:***

***OXY will excavate the spill area as depicted on the following site diagram. The leak areas near SP1 and SP2 (GREEN shade on diagram) will be excavated to a depth of 2 feet. The leak area near SP3 (PURPLE shade on diagram) will be excavated to a depth of 4 feet.***

***Bottom confirmation samples will be collected at no greater than 50 ft. intervals. Estimated volume of material to be removed is 269 cubic yards. The remediation will be completed within 90 days of plan approval.***

The entire site will then be backfilled with clean soil and revegetated (if warranted) to the standards of the appropriate regulatory agency or private surface owner.

All excavated materials will be disposed of at an NMOCD-approved disposal facility.

Goodnight 12/5/18  
26-1

Incident ID	
District RP	2RP-5212
Facility ID	
Application ID	

### Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	50 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	2RP-5212
Facility ID	
Application ID	

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 Dittrich Title: Environmental Coordinator

Signature:  Date: 2-8-19

email: wade\_dittrich@oxy.com Telephone: (575) 390-2828

**OCD Only**

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

Incident ID	
District RP	2RP-5212
Facility ID	
Application ID	

## Remediation Plan

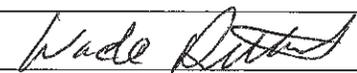
**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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 Dittrich Title: Environmental Coordinator  
 Signature:  Date: 2-8-18  
 email: wade\_dittrich@oxy.com Telephone: (575) 390-2828

**OCD Only**

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

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

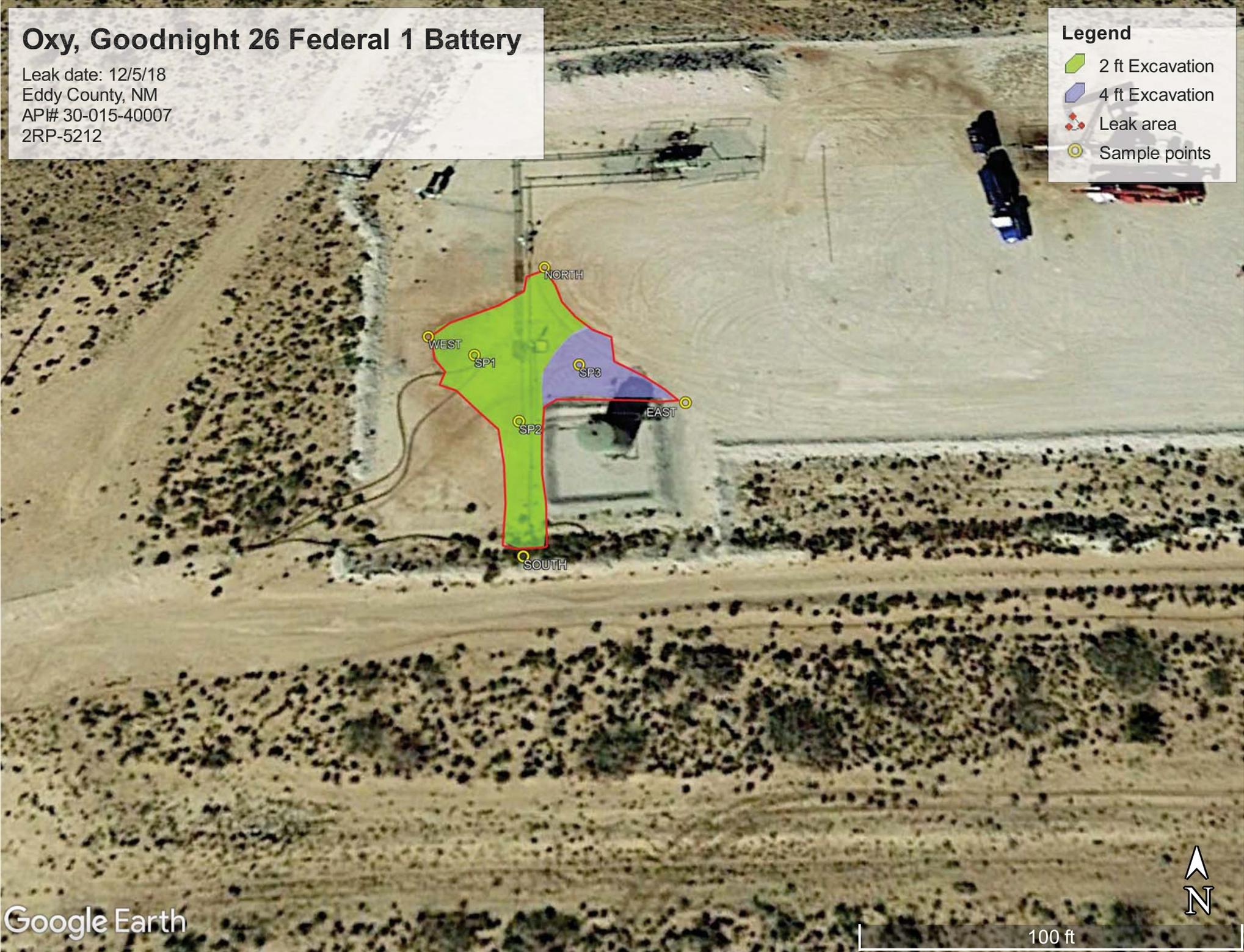
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Oxy, Goodnight 26 Federal 1 Battery

Leak date: 12/5/18  
Eddy County, NM  
AP# 30-015-40007  
2RP-5212

**Legend**

-  2 ft Excavation
-  4 ft Excavation
-  Leak area
-  Sample points



Oxy, Goodnight 26 Federal 1 Battery

Sample points

SP1, N 32.27332 W-103.94751

SP2, N 32.27325 W-103.94746

SP3, N 32.27331 W-103.94740

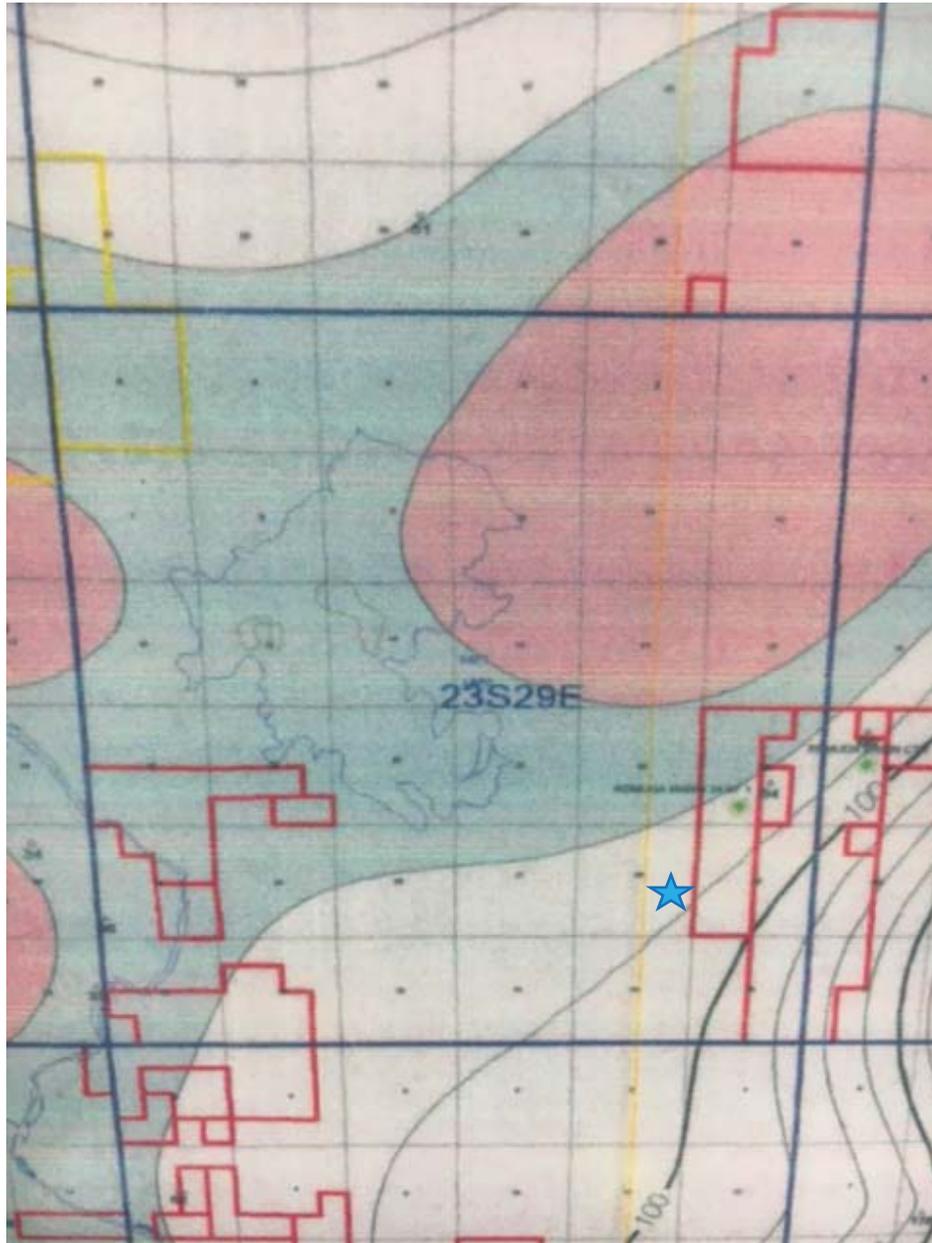
NORTH, N 32.27342 W-103.94744

SOUTH, N 32.27312 W-103.94745

EAST, N 32.27327 W-103.94729

WEST, N 32.27334 W-103.94756

**Oxy, Goodnight 26 Federal #1 Battery**  
**U/L I, Section 26, T23S, R29E**  
**Groundwater: 50'-75'**





USGS Home  
 Contact USGS  
 Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:  Geographic Area:

Click to hideNews Bulletins

- Due to a lapse in appropriations, the majority of USGS websites may not be up to date and may not reflect current conditions. Websites displaying real-time data, such as Earthquake and Water and information needed for public health and safety will be updated with limited support. Additionally, USGS will not be able to respond to inquiries until appropriations are enacted. For more information, please see [www.doi.gov/shutdown](http://www.doi.gov/shutdown).
- [Please see news on new formats](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs  
 site\_no list = 

- 321717103561001

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

USGS 321717103561001 23S.29E.24.41321

Eddy County, New Mexico  
 Latitude 32°17'17", Longitude 103°56'10" NAD27  
 Land-surface elevation 3,034 feet above NAVD88  
 This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

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
1983-02-02		D	52.17			2		U		
1987-10-14		D	50.54			2		U		
1992-11-16		D	54.14			2		S		
2003-01-29		D	50.26			2		S	USGS	

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
Measuring agency	USGS	U.S. Geological Survey

Section	Code	Description
Source of measurement	A	Reported by another government agency (do not use "A" if reported by owner, use "O").
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)   [Plug-Ins](#)   [FOIA](#)   [Privacy](#)   [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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

**URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>**

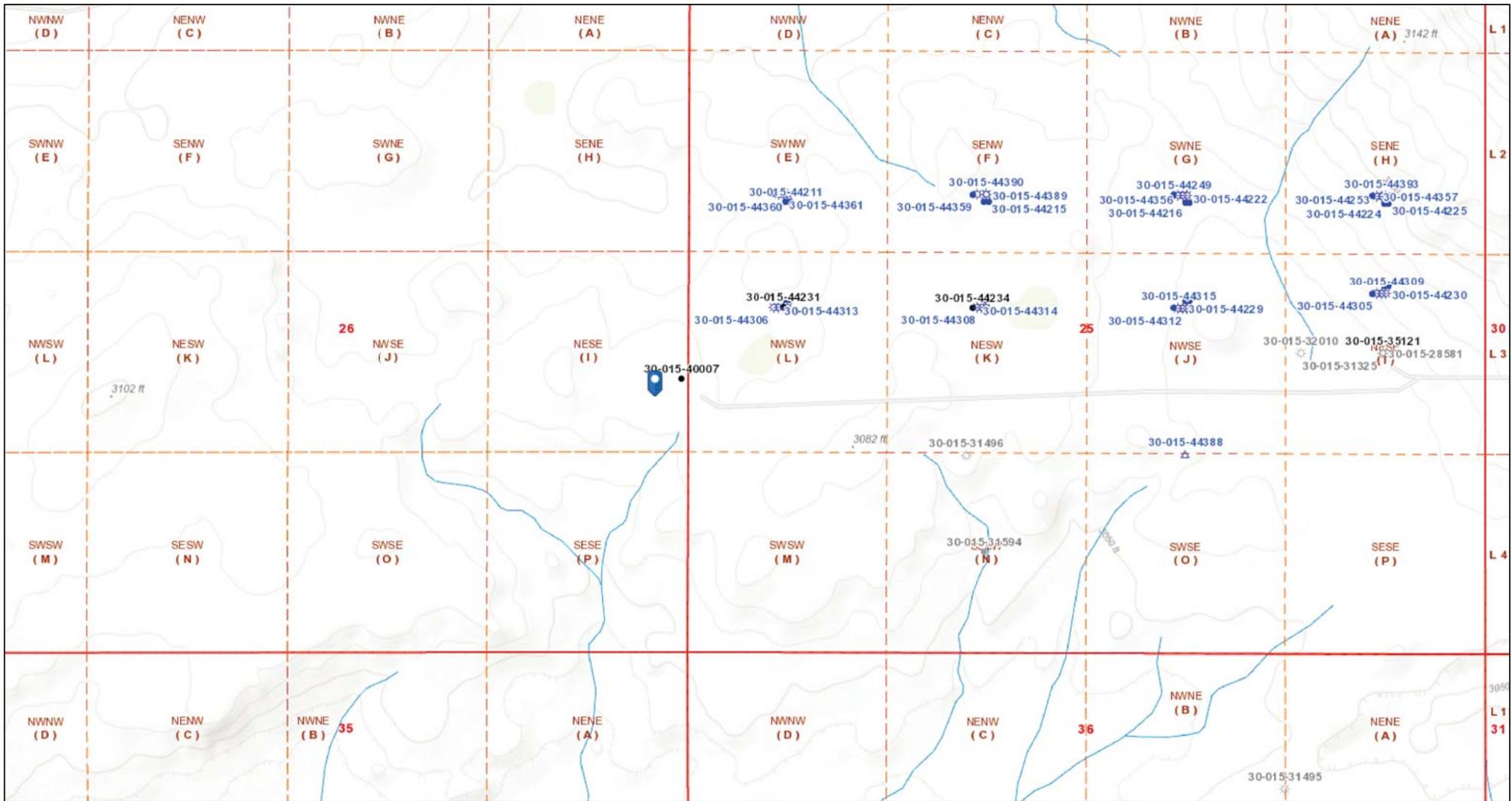


Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2019-01-08 14:01:54 EST

2.08 0.75 nadww01

# Goodnight 26 Federal 1 Battery, TOPO Map with Water Features



12/19/2018 12:37:23 PM

1:9,028

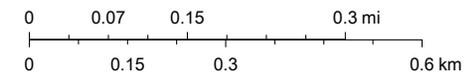
Well Locations - Small Scale

Well Locations - Large Scale

- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2 Plugged
- CO2 Temporarily Abandoned

- ☆ Gas Active
- ☆ Gas, Cancelled, Never Drilled
- ☆ Gas, New
- ☆ Gas, Plugged
- ☆ Gas, Temporarily Abandoned
- ⚙ Injection, Active
- ⚙ Injection, Cancelled
- ⚙ Injection, New
- ⚙ Injection, Plugged
- ⚙ Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled

- Oil, New
- Oil, Plugged
- Oil, Temporarily Abandoned
- △ Salt Water Injection, Active
- △ Salt Water Injection, Cancelled
- △ Salt Water Injection, New
- △ Salt Water Injection, Plugged
- △ Salt Water Injection Temporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged



Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, OCD, BLM

# Oxy, Goodnight 26 Federal #1 Battery

Leak date: 12/5/18  
Eddy County, NM  
AP# 30-015-40007

# BLM CAVE KARST MAP

## Legend

-  Leak Area
-  Medium potential



# National Flood Hazard Layer FIRMette



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                                    |  |  |
|------------------------------------|--|--|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>  |
|                                    |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>   |
|                                    |  | Regulatory Floodway  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  |
|                                    |  | Area with Flood Risk due to Levee <i>Zone D</i>  |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>   |
|                                    |  | Effective LOMRs  |
| <b>GENERAL STRUCTURES</b>          |  | Area of Undetermined Flood Hazard <i>Zone D</i>  |
|                                    |  | Channel, Culvert, or Storm Sewer   |
|                                    |  | Levee, Dike, or Floodwall  |
| <b>OTHER FEATURES</b>              |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation  |
|                                    |  | 17.5 Coastal Transect  |
|                                    |  | Base Flood Elevation Line (BFE)  |
|                                    |  | Limit of Study   |
| <b>MAP PANELS</b>                  |  | Jurisdiction Boundary  |
|                                    |  | Coastal Transect Baseline  |
|                                    |  | Profile Baseline   |
|                                    |  | Hydrographic Feature   |
|                                    |  | Digital Data Available   |
|                                    |  | No Digital Data Available  |
|                                    |  | Unmapped   |
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

32°16'38.91"N



103°57'9.48"W

103°56'32.02"W

USGS The National Map: Orthoimagery. Data refreshed October, 2017.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/8/2019 at 2:13:26 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Laboratory Analytical Results Summary  
 Goodnight 26 Federal #1H (12/5/18)

Analyte	Method	Sample ID	SP1 @	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'
			SURFACE			
		Date	1/3/19	1/3/19	1/3/19	1/3/19
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		0.051	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.706	0.245	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.203	0.93	<0.050	0.081
Total Xylenes	BTEX 8021B		1.34	1.44	<0.150	0.297
Total BTEX	BTEX 8021B		2.3	2.62	<0.300	0.378
Chloride	SM4500Cl-B		32	48	160	272
GRO	TPH 8015M		<50.0	22.9	<10.0	<10.0
DRO	TPH 8015M		10900	843	72.8	45.6
EXT DRO	TPH 8015M		5480	250	32.5	<10.0

Analyte	Method	Sample ID	SP2 @	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'
			SURFACE			
		Date	1/3/19	1/3/19	1/3/19	1/3/19
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.186	0.209	0.064	<0.050
Ethylbenzene	BTEX 8021B		0.088	0.852	0.144	<0.050
Total Xylenes	BTEX 8021B		0.615	1.11	0.973	<0.150
Total BTEX	BTEX 8021B		0.889	2.17	1.18	<0.300
Chloride	SM4500Cl-B		80	32	32	32
GRO	TPH 8015M		<10.0	60	17	<10.0
DRO	TPH 8015M		3560	2850	423	23.6
EXT DRO	TPH 8015M		1630	530	60.1	<10.0

Analyte	Method	Sample ID	SP3 @	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'	SP3 @ 5'	SP3 @ 6'	SP3 @ 7'
			SURFACE							
		Date	1/3/19	1/3/19	1/3/19	1/3/19	1/3/19	1/3/19	1/3/19	1/3/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		2.2	<0.050	<0.050	<0.200	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		24.1	0.107	<0.050	1.6	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		10.8	0.305	<0.050	2.55	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		77.8	1.49	<0.150	19.2	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		115	1.9	<0.300	23.3	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		32	32	48	16	32	32	112	80
GRO	TPH 8015M		1900	65.9	<10.0	346	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		42000	1110	117	3260	139	52.3	86.8	77.7
EXT DRO	TPH 8015M		7740	206	31	513	42	11.3	12.6	<10.0

Analyte	Method	Sample ID	NORTH @	EAST @	WEST @	SOUTH @
			SURFACE	SURFACE	SURFACE	SURFACE
		Date	1/3/19	1/3/19	1/3/19	1/3/19
			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		192	64	80	32
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		57.2	<10.0	46.3	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

January 11, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: GOODNIGHT 26-1

Enclosed are the results of analyses for samples received by the laboratory on 01/07/19 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 1 @ SURFACE (H900023-01)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.051</b>	0.050	01/10/2019	ND	2.09	105	2.00	1.78	
<b>Toluene*</b>	<b>0.706</b>	0.050	01/10/2019	ND	2.22	111	2.00	3.34	
<b>Ethylbenzene*</b>	<b>0.203</b>	0.050	01/10/2019	ND	2.21	111	2.00	0.317	
<b>Total Xylenes*</b>	<b>1.34</b>	0.150	01/10/2019	ND	6.79	113	6.00	0.690	
<b>Total BTEX</b>	<b>2.30</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 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
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	01/08/2019	ND	209	105	200	3.08		
<b>DRO &gt;C10-C28*</b>	<b>10900</b>	50.0	01/08/2019	ND	190	95.1	200	4.24		
<b>EXT DRO &gt;C28-C36</b>	<b>5480</b>	50.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 79.9 % 41-142

Surrogate: 1-Chlorooctadecane 522 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 1 @ 1' (H900023-02)**

BTEX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/10/2019	ND	2.09	105	2.00	1.78	
<b>Toluene*</b>	<b>0.245</b>	0.050	01/10/2019	ND	2.22	111	2.00	3.34	
<b>Ethylbenzene*</b>	<b>0.930</b>	0.050	01/10/2019	ND	2.21	111	2.00	0.317	
<b>Total Xylenes*</b>	<b>1.44</b>	0.150	01/10/2019	ND	6.79	113	6.00	0.690	
<b>Total BTEX</b>	<b>2.62</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 174 % 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
<b>Chloride</b>	<b>48.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>22.9</b>	10.0	01/08/2019	ND	209	105	200	3.08	
<b>DRO &gt;C10-C28*</b>	<b>843</b>	10.0	01/08/2019	ND	190	95.1	200	4.24	
<b>EXT DRO &gt;C28-C36</b>	<b>250</b>	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 75.0 % 41-142

Surrogate: 1-Chlorooctadecane 96.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 1 @ 2' (H900023-03)**

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	01/10/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
Ethylbenzene*	<0.050	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
Total Xylenes*	<0.150	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
Total BTEX	<0.300	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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
<b>Chloride</b>	<b>160</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	209	105	200	3.08	
<b>DRO &gt;C10-C28*</b>	<b>72.8</b>	10.0	01/08/2019	ND	190	95.1	200	4.24	
<b>EXT DRO &gt;C28-C36</b>	<b>32.5</b>	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 84.1 % 41-142

Surrogate: 1-Chlorooctadecane 84.6 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 1 @ 3' (H900023-04)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/10/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>0.081</b>	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>0.297</b>	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>0.378</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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
<b>Chloride</b>	<b>272</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53	
<b>DRO &gt;C10-C28*</b>	<b>45.6</b>	10.0	01/08/2019	ND	190	95.2	200	7.22	
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 80.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 2 @ SURFACE (H900023-05)**

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	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>0.186</b>	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>0.088</b>	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>0.615</b>	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>0.889</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.3 % 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
<b>Chloride</b>	<b>80.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>3560</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>1630</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 86.3 % 41-142

Surrogate: 1-Chlorooctadecane 187 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 2 @ 1' (H900023-06)**

BTEX 8021B		mg/kg		Analyzed By: ms				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>0.209</b>	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>0.852</b>	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>1.11</b>	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>2.17</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 176 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>60.0</b>	10.0	01/08/2019	ND	176	87.9	200	5.53	
<b>DRO &gt;C10-C28*</b>	<b>2850</b>	10.0	01/08/2019	ND	190	95.2	200	7.22	
<b>EXT DRO &gt;C28-C36</b>	<b>530</b>	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 96.2 % 41-142

Surrogate: 1-Chlorooctadecane 185 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 2 @ 2' (H900023-07)**

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	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>0.064</b>	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>0.144</b>	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>0.973</b>	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>1.18</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>17.0</b>	10.0	01/08/2019	ND	176	87.9	200	5.53	
<b>DRO &gt;C10-C28*</b>	<b>423</b>	10.0	01/08/2019	ND	190	95.2	200	7.22	
<b>EXT DRO &gt;C28-C36</b>	<b>60.1</b>	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 109 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 2 @ 3' (H900023-08)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/10/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/10/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 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	
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>23.6</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 88.9 % 41-142

Surrogate: 1-Chlorooctadecane 94.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ SURFACE (H900023-09)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>2.20</b>	1.00	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>24.1</b>	1.00	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>10.8</b>	1.00	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>77.8</b>	3.00	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>115</b>	6.00	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>1900</b>	50.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>42000</b>	50.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>7740</b>	50.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 139 % 41-142

Surrogate: 1-Chlorooctadecane 1330 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 1' (H900023-10)**

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	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>0.107</b>	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>0.305</b>	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>1.49</b>	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>1.90</b>	0.300	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 125 % 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
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>65.9</b>	10.0	01/08/2019	ND	176	87.9	200	5.53	
<b>DRO &gt;C10-C28*</b>	<b>1110</b>	10.0	01/08/2019	ND	190	95.2	200	7.22	
<b>EXT DRO &gt;C28-C36</b>	<b>206</b>	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 137 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 2' (H900023-11)**

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	01/10/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/10/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/10/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/10/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/10/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 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	
<b>Chloride</b>	<b>48.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>117</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>31.0</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 90.8 % 41-142

Surrogate: 1-Chlorooctadecane 98.9 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 3' (H900023-12)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/10/2019	ND	1.79	89.5	2.00	2.57	
<b>Toluene*</b>	<b>1.60</b>	0.200	01/10/2019	ND	1.86	92.8	2.00	1.46	
<b>Ethylbenzene*</b>	<b>2.55</b>	0.200	01/10/2019	ND	1.91	95.3	2.00	2.60	
<b>Total Xylenes*</b>	<b>19.2</b>	0.600	01/10/2019	ND	5.79	96.6	6.00	2.25	
<b>Total BTEX</b>	<b>23.3</b>	1.20	01/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 127 % 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
<b>Chloride</b>	<b>16.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>346</b>	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>3260</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>513</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 182 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 4' (H900023-13)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 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	
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>139</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>42.0</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 87.3 % 41-142

Surrogate: 1-Chlorooctadecane 99.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 5' (H900023-14)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 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	
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>52.3</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>11.3</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 84.5 % 41-142

Surrogate: 1-Chlorooctadecane 90.0 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 6' (H900023-15)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 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	
<b>Chloride</b>	<b>112</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>86.8</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
<b>EXT DRO &gt;C28-C36</b>	<b>12.6</b>	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 88.3 % 41-142

Surrogate: 1-Chlorooctadecane 96.2 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SP 3 @ 7' (H900023-16)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 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	
<b>Chloride</b>	<b>80.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>77.7</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 88.8 % 41-142

Surrogate: 1-Chlorooctadecane 97.4 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: NORTH @ SURFACE (H90023-17)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46	
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60	
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25	
Total BTEX	<0.300	0.300	01/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 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
<b>Chloride</b>	<b>192</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53	
<b>DRO &gt;C10-C28*</b>	<b>57.2</b>	10.0	01/08/2019	ND	190	95.2	200	7.22	
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 84.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.6 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: EAST @ SURFACE (H900023-18)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 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	
<b>Chloride</b>	<b>64.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
DRO >C10-C28*	<10.0	10.0	01/08/2019	ND	190	95.2	200	7.22		
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 83.3 % 41-142

Surrogate: 1-Chlorooctadecane 84.7 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: WEST@ SURFACE (H900023-19)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57		
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46		
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60		
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25		
Total BTEX	<0.300	0.300	01/11/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 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	
<b>Chloride</b>	<b>80.0</b>	16.0	01/09/2019	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53		
<b>DRO &gt;C10-C28*</b>	<b>46.3</b>	10.0	01/08/2019	ND	190	95.2	200	7.22		
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND						

Surrogate: 1-Chlorooctane 87.9 % 41-142

Surrogate: 1-Chlorooctadecane 93.5 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	01/07/2019	Sampling Date:	01/03/2019
Reported:	01/11/2019	Sampling Type:	Soil
Project Name:	GOODNIGHT 26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	OXY		

**Sample ID: SOUTH @ SURFACE (H900023-20)**

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	01/11/2019	ND	1.79	89.5	2.00	2.57	
Toluene*	<0.050	0.050	01/11/2019	ND	1.86	92.8	2.00	1.46	
Ethylbenzene*	<0.050	0.050	01/11/2019	ND	1.91	95.3	2.00	2.60	
Total Xylenes*	<0.150	0.150	01/11/2019	ND	5.79	96.6	6.00	2.25	
Total BTEX	<0.300	0.300	01/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 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
<b>Chloride</b>	<b>32.0</b>	16.0	01/09/2019	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/08/2019	ND	176	87.9	200	5.53	
DRO >C10-C28*	<10.0	10.0	01/08/2019	ND	190	95.2	200	7.22	
EXT DRO >C28-C36	<10.0	10.0	01/08/2019	ND					

Surrogate: 1-Chlorooctane 86.6 % 41-142

Surrogate: 1-Chlorooctadecane 89.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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





**ARDINAL LABORATORIES**

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

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

Company Name: BBC International, Inc.		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: Cliff Brunson		P.O. #:													
Address: P.O. Box 805		Company:													
City: Hobbs State: NM Zip: 88241		Attn:													
Phone #: 575-397-6388 Fax #: 575-397-0397		Address:													
Project #: Project Owner: Oxy		City:													
Project Name: Goodnight 26-1		State: Zip:													
Project Location:		Phone #:													
Sampler Name: Jeff Ornelas		Fax #:													

FOR LAB USE ONLY		GRAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME	BTEX	TPH	Extended	CI
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :						
H900023	SP1 @ SURFACE	9	1			✓				✓		1-3-19	9:19 AM	✓	✓	✓		
1	SP1 @ 1'											1-3-19	9:30 AM	✓	✓	✓		
2	SP1 @ 2'											1-3-19	9:40 AM	✓	✓	✓		
3	SP1 @ 3'											1-3-19	9:58 AM	✓	✓	✓		
4	SP2 @ SURFACE											1-3-19	10:15 AM	✓	✓	✓		
5	SP2 @ 1'											1-3-19	10:22 AM	✓	✓	✓		
6	SP2 @ 2'											1-3-19	10:39 AM	✓	✓	✓		
7	SP2 @ 3'											1-3-19	11:11 AM	✓	✓	✓		
8	SP3 @ SURFACE											1-3-19	11:15 AM	✓	✓	✓		
9	SP3 @ 1'											1-3-19	11:19 AM	✓	✓	✓		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 1/27/19	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 11:00		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date: 11:30	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other: 5.80 / #97	Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

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

