

# Closure Report

## Site Description

|                    |                               |
|--------------------|-------------------------------|
| Site Name:         | Cedar Canyon 22 #001H         |
| Company:           | Oxy Permian                   |
| Legal Description: | U/L K, Section 22, T24S, R29E |
| County:            | Eddy County, NM               |
| GPS Coordinates:   | N 32.20123° W-103.97413°      |

## Release Data

|                    |                                     |
|--------------------|-------------------------------------|
| Date of Release:   | 04/09/2017                          |
| Type of Release:   | Oil and produced water              |
| Source of Release: | Line pressure leak                  |
| Volume of Release: | 100 bbls oil, 5 bbls produced water |
| Volume Recovered:  | 96 bbls oil, 4 bbls produced water  |

## Remediation Specifications

|                         |  |   |
|-------------------------|--|---|
| Remediation Parameters: | Excavate the entire spill to a depth of 2.5 feet. Backfill the site with clean soil. |   |
| Remediation Activities: | 01/22/2018 to 02/14/2018   |   |
| Plan Sent to OCD:       | 09/13/2017   | Email from Cliff Brunson to Mike Bratcher |
| OCD Approval of Plan:   | 09/21/2017   | Email from Mike Bratcher to Cliff Brunson |
| Plan Sent to BLM:       | 09/13/2017   | Email from Cliff Brunson to Shelly Tucker |
| BLM Approval of Plan:   | 10/03/2017   | Email from Shelly Tucker to Cliff Brunson |

## Supporting Documentation

|                  |  |
|------------------|--|
| Initial C-141    | Signed 04/12/2017                                  |
| Final C-141      | Upon completion                                    |
| Site Diagram     | April 2017   |
| Groundwater Plot | 75'-100'   |
| TOPO Maps        | April 2017   |
| Lab Summary      | 04/17/2017   |
| Lab Analysis     | 04/17/2017   |
| Correspondence   | Request and approval of remediation plan via email |

## Request for Closure

Based on the completion of the remediation plan, Oxy Permian requests closure approval from NMOCD.

Wade Dittrich, Environmental Specialists, Oxy Permian

02/22/2018

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

APR 12 2017

Form C-141  
Revised April 3, 2017

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

**Release Notification and Corrective Action**

|                      |                                |                 |               |  |                                       |
|----------------------|--------------------------------|-----------------|---------------|--|---------------------------------------|
| <b>DAB1710736826</b> |                                | <b>OPERATOR</b> |               | <input checked="" type="checkbox"/> Initial Report | <input type="checkbox"/> Final Report |
| Name of Company      | OXY USA INC <i>116696</i>      | Contact         | CASEY SUMMERS |  |                                       |
| Address              | PO BOX 4294; HOUSTON, TX 77210 | Telephone No.   | 575-513-8289  |  |                                       |
| Facility Name        | CEDAR CANYON 22 #1H            | Facility Type   | OIL WELL      |  |                                       |
| Surface Owner        | FEDERAL                        | Mineral Owner   | FEDERAL       | API No.  | 30-015-40668                          |

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| K           | 22      | 24S      | 29E   | 1980          | SOUTH            | 1980          | WEST           | EDDY   |

Latitude\_N 32.2011642° Longitude\_W -103.9744949° NAD83

**NATURE OF RELEASE**

|                             |   |   |                           |                            |                    |
|-----------------------------|---|---|---------------------------|----------------------------|--------------------|
| Type of Release             | OIL & PRODUCED WATER  | Volume of Release                         | 100 bbls OIL<br>5 bbls PW | Volume Recovered           | 96 OIL / 4 PW bbls |
| Source of Release           | LINE OVER PRESSURED   | Date and Hour of Occurrence               | 3-31-2017 <i>4/9/17 *</i> | Date and Hour of Discovery |                    |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?                          | <i>e-mail</i>             |                            |                    |
| By Whom?                    | CASEY SUMMERS   | Date and Hour                             | 04/03/2017 12:30 PM       | <i>* 4/10/17 10:28am</i>   |                    |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                       | If YES, Volume Impacting the Watercourse. | <i>e-mail</i>             |                            |                    |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Line over pressured and caused PRV to open which over ran the tank. No high level alarm was set on tank. Oxy is looking into pressure and alarm issue to determine problem. Everything in line containment was recovered.

Describe Area Affected and Cleanup Action Taken.\*  
The affected area is approximately 35' x 15' and is both on and off location. Remediation will be completed in accordance with a remediation plan approved by NMOCD.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

|                 |                                    |                                       |  |
|-----------------|------------------------------------|---------------------------------------|--|
| Signature:      | <i>[Signature]</i>                 | <b>OIL CONSERVATION DIVISION</b>      |  |
| Printed Name:   | CASEY L SUMMERS                    | Approved by Environmental Specialist: | <i>[Signature]</i>                         |
| Title:          | ENVIRONMENTAL ADVISOR              | Approval Date:                        | <i>4/17/17</i> Expiration Date: <i>N/A</i> |
| E-mail Address: | casey_summers@oxy.com              | Conditions of Approval:               | <i>See attached</i>                        |
| Date:           | <i>4-12-17</i> Phone: 575-513-8289 | Attached                              | <input checked="" type="checkbox"/>        |

\* Attach Additional Sheets If Necessary

*2RP-4173*

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 4/12/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP-4173 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 5/12/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

jim.griswold@state.nm.us

## Bratcher, Mike, EMNRD

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**From:** Casey\_Summers@oxy.com  
**Sent:** Wednesday, April 12, 2017 12:46 PM  
**To:** Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; stucker@blm.gov; Jennifer\_Hudgens@oxy.com  
**Cc:** cbrunson@bbcinternational.com; kswinney@bbcinternational.com; kathy@bbcinternational.com; jgilkey@bbcinternational.com  
**Subject:** RE: Cedar Canyon 22 #001 Initial Notification  
**Attachments:** Cedar Canyon 22 #1H Initial C141.pdf

Attached is the initial C-141 for the release that occurred at the Cedar Canyon 22-1H on 04/9/2017 in Eddy County, NM. Receipt notification and the RP number via email are greatly appreciated  
Casey Summers  
O: (575)-628-4152  
C: (575)-513-8289

---

**From:** Summers, Casey L  
**Sent:** Monday, April 10, 2017 10:28 AM  
**To:** 'Bratcher, Mike, EMNRD' <mike.bratcher@state.nm.us>; 'Weaver, Crystal, EMNRD' <Crystal.Weaver@state.nm.us>; 'Tucker, Shelly' <stucker@blm.gov>; Hudgens, Jennifer A <Jennifer\_Hudgens@oxy.com>  
**Cc:** 'Cliff Brunson' <cbrunson@bbcinternational.com>; 'Ken Swinney' <kswinney@bbcinternational.com>; 'Kathy Purvis' <kathy@bbcinternational.com>; 'Jennifer Gilkey' <jgilkey@bbcinternational.com>  
**Subject:** Cedar Canyon 22 #001 Initial Notification

All,  
This is to inform you that Oxy Permian had a release in Eddy County at the Cedar Canyon 22 #001 on 4/09/2017.

- **Release Location:** Legal K-22-24S-29E, API: 30-015-40668
- **Release Volume:** 100 bbls of Oil and 5 bbls of Produced Water in and out of a lined containment. All fluid from release stayed on location.
- **Recovered:** 96 bbls of oil and 4 bbls of water recovered
- **Cause of release:** Line over pressured and caused PRV to open which over ran the tank. No high level alarm was sent on tank. Oxy is looking into pressure and alarm issue to determine problem.
- **Approximate Area impacted by release:** Everything in line containment was recovered. 35Lx15W FT is the measurement of fluid that exited the berm (measurements will change with future GPS track).
- **GPS Coordinates and Driving Direction:** 32.2011642,-103.9744949, FROM CARLSBAD ON PECOS HWY GO SOUTH, GO INTO MALAGA TURN ON DUARTE ROAD GO TO MCDONALD ROAD GO ACROSS RIVER, FOLLOW DIRT ROAD LEFT TO TOP OF HILL AND THE WELL WILL BE ON THE LEFT

Please let me know if you have any questions.

Thank you,

Casey Summers

## Bratcher, Mike, EMNRD

---

**From:** Casey\_Summers@oxy.com  
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Please let me know if you have any questions.

Thank you,

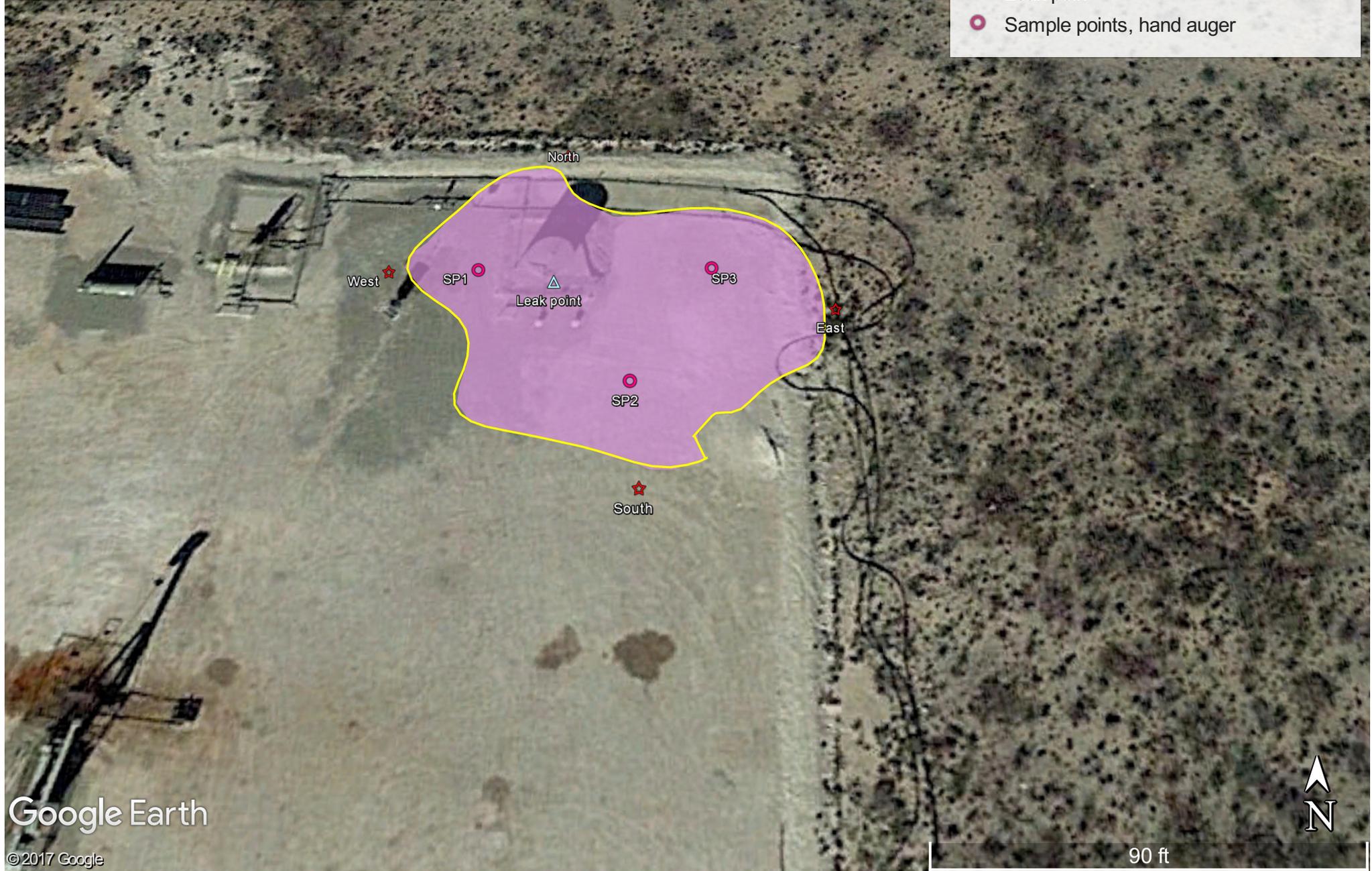
Casey Summers  
O: (575)-628-4152  
C: (575)-513-8289

# Oxy, Cedar Canyon 22 #1H

Leak date: 04/09/2017  
Eddy County, NM  
API# 30-015-40668  
2RP-4173

## Legend

-  2.5' Excavation across entire leak area
-  Cardinal sample points, hand auger
-  Leak Area
-  Leak point
-  Sample points, hand auger



Oxy, Cedar Canyon 22 #1H

Sample points, hand auger

SP1, N 32.20141 W-103.97423

SP2, N 32.20132 W-103.97410

SP3, N 32.20142 W-103.97404

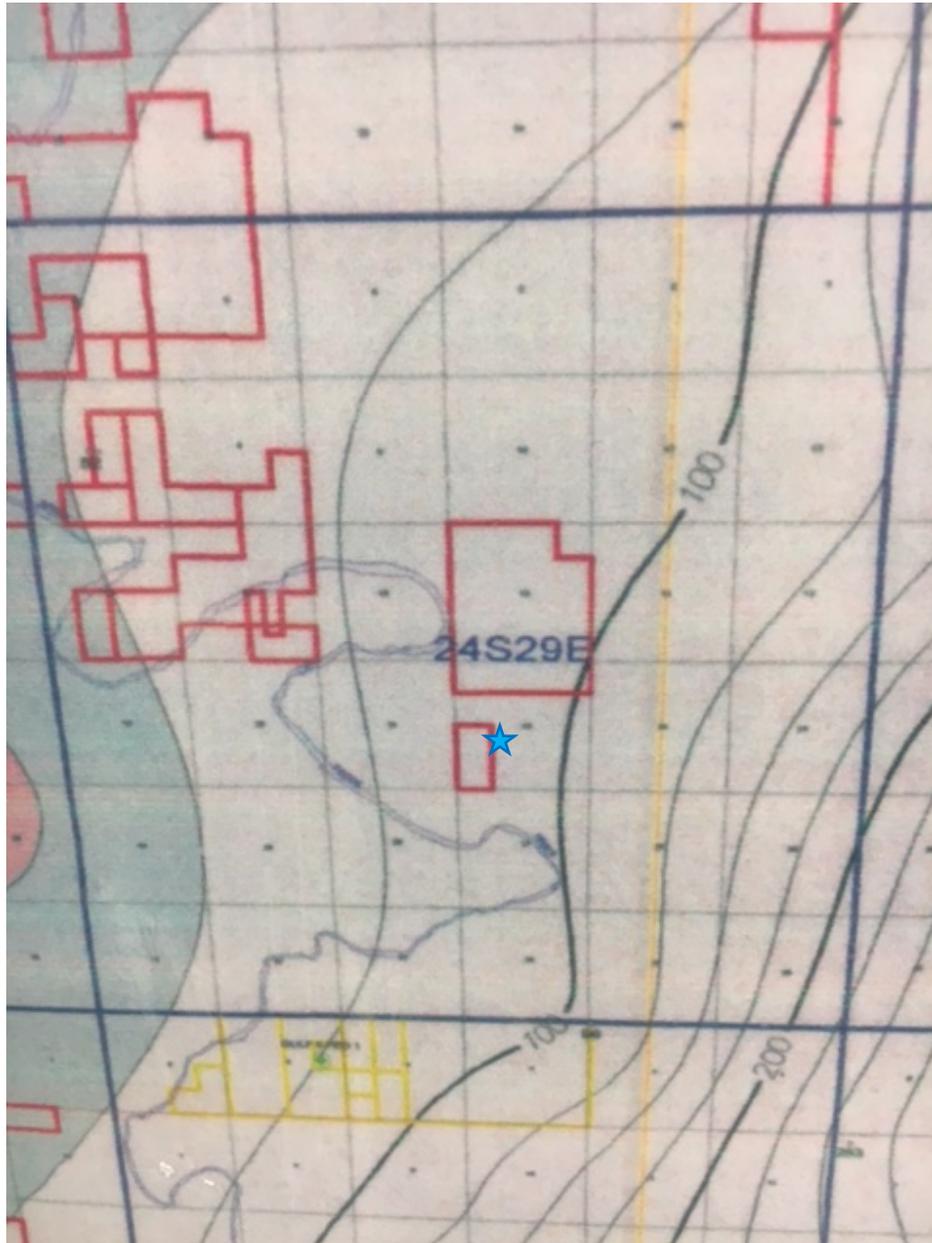
NORTH, N 32.20151 W-103.97416

SOUTH, N 32.20124 W-103.97410

EAST, N 32.20138 W-103.97394

WEST, N 32.20141 W-103.97431

**Oxy, Cedar Canyon 22 #001**  
**U/L K, Section 22, T24S, R29E**  
**Groundwater: 75'-100'**





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*New Mexico Office of the State Engineer*  
**Water Column/Average Depth to Water**

---

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 596258

**Northing (Y):** 3563189

**Radius:** 1700

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The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

---

4/17/17 9:54 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

**Public Land Survey System (PLSS)**

Q64:            Q16: **NW**            Q4: **SW**            Sec: **22**            Tws: **24S**            Rng: **29E**

**State Plane Coordinate System - NAD27**

X:            ft            Y:            ft            Zone:

**State Plane Coordinate System - NAD83**

X:            ft            Y:            ft            Zone:

**Degrees/Minutes/Seconds**

Longitude (X):            Degrees:    °            Minutes:    '            Seconds:    "

Latitude (Y):            Degrees:    °            Minutes:    '            Seconds:    "

**UTM - NAD27**

Easting (X):            mtrs    Northing (Y):            mtrs    Zone:

**SUBMIT**

All Conversion Results are displayed as **NAD 1983 UTM Zone 13**

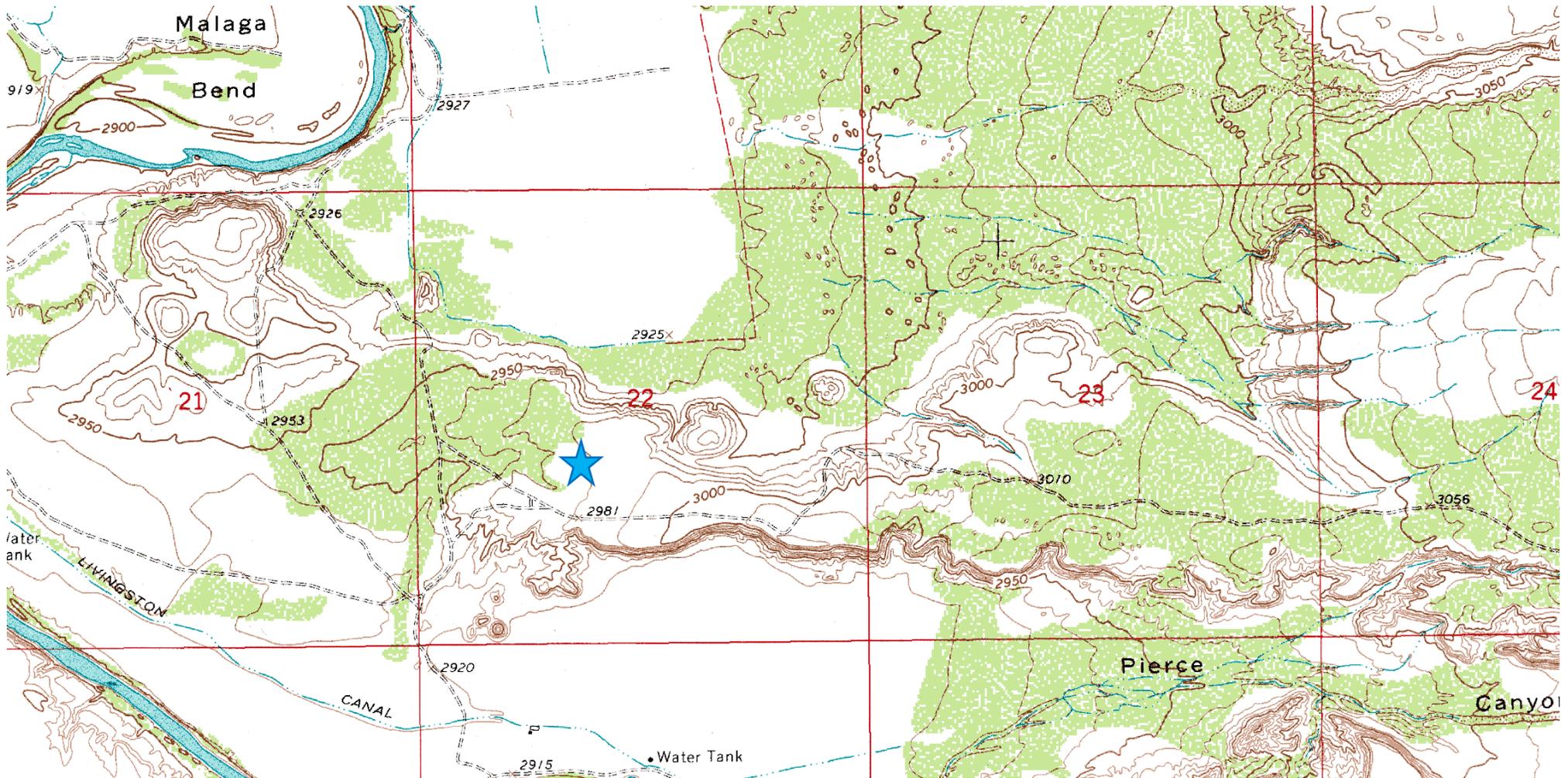
Easting (X): **596258.0** mtrs            Northing (Y): **3563189.0** mtrs

~~ Please keep screen open to copy UTM values for Reports. ~~



# Oxy

## Cedar Canyon 22 #1H



**Laboratory Analytical Results Summary  
Cedar Canyon 22 #001**

|               |            | Sample | SP1 @ 1' | SP1 @ 2' | SP1 @ 3' | SP1 @ 8' |
|---------------|------------|--------|----------|----------|----------|----------|
| Analyte       | Method     | Date   | 4/17/17  | 4/17/17  | 4/17/17  | 4/17/17  |
|               |            |        | mg/Kg    | mg/Kg    | mg/Kg    | mg/Kg    |
| Benzene       | BTEX 8021B |        | <0.500   | <0.050   | <0.050   | <0.050   |
| Toluene       | BTEX 8021B |        | 5.29     | 0.425    | <0.050   | <0.050   |
| Ethylbenzene  | BTEX 8021B |        | 9.16     | <0.050   | <0.050   | <0.050   |
| Total Xylenes | BTEX 8021B |        | 40.8     | 4.64     | <0.150   | <0.150   |
| Total BTEX    | BTEX 8021B |        | 55.3     | 5.07     | <0.300   | <0.300   |
| Chloride      | SM4500Cl-B |        | 496      | 32       | 32       | 32       |
| GRO           | TPH 8015M  |        | 935      | 88.9     | <10.0    | <10.0    |
| DRO           | TPH 8015M  |        | 5850     | 1420     | <10.0    | <10.0    |

|               |            | Sample | SOUTH @ 1' |
|---------------|------------|--------|------------|
| Analyte       | Method     | Date   | 2/8/17     |
|               |            |        | mg/Kg      |
| Benzene       | BTEX 8021B |        | <0.050     |
| Toluene       | BTEX 8021B |        | <0.050     |
| Ethylbenzene  | BTEX 8021B |        | <0.050     |
| Total Xylenes | BTEX 8021B |        | <0.150     |
| Total BTEX    | BTEX 8021B |        | <0.300     |
| Chloride      | SM4500Cl-B |        | 32         |
| GRO           | TPH 8015M  |        | <10.0      |
| DRO           | TPH 8015M  |        | <10.0      |

|               |            | Sample | SP2 @ 1' | SP2 @ 2' | SP2 @ 3' | SP2 @ 8' |
|---------------|------------|--------|----------|----------|----------|----------|
| Analyte       | Method     | Date   | 4/17/17  | 4/17/17  | 4/17/17  | 4/17/17  |
|               |            |        | mg/Kg    | mg/Kg    | mg/Kg    | mg/Kg    |
| Benzene       | BTEX 8021B |        | <0.500   | <0.050   | <0.050   | <0.050   |
| Toluene       | BTEX 8021B |        | 2.12     | 0.205    | <0.050   | <0.050   |
| Ethylbenzene  | BTEX 8021B |        | 4.2      | <0.050   | <0.050   | <0.050   |
| Total Xylenes | BTEX 8021B |        | 18.6     | 1.45     | <0.150   | <0.150   |
| Total BTEX    | BTEX 8021B |        | 24.9     | 1.65     | <0.300   | <0.300   |
| Chloride      | SM4500Cl-B |        | 480      | 16       | <16.0    | 64       |
| GRO           | TPH 8015M  |        | 652      | 96.4     | <10.0    | <10.0    |
| DRO           | TPH 8015M  |        | 6700     | 2000     | <10.0    | <10.0    |

|               |            | Sample | NORTH @ 1' |
|---------------|------------|--------|------------|
| Analyte       | Method     | Date   | 2/8/17     |
|               |            |        | mg/Kg      |
| Benzene       | BTEX 8021B |        | <0.050     |
| Toluene       | BTEX 8021B |        | 0.066      |
| Ethylbenzene  | BTEX 8021B |        | <0.050     |
| Total Xylenes | BTEX 8021B |        | <0.150     |
| Total BTEX    | BTEX 8021B |        | <0.300     |
| Chloride      | SM4500Cl-B |        | 32         |
| GRO           | TPH 8015M  |        | <10.0      |
| DRO           | TPH 8015M  |        | <10.0      |

|               |            | Sample | SP3 @ 1' | SP3 @ 2' | SP3 @ 3' | SP3 @ 8' |
|---------------|------------|--------|----------|----------|----------|----------|
| Analyte       | Method     | Date   | 4/17/17  | 4/17/17  | 4/17/17  | 4/17/17  |
|               |            |        | mg/Kg    | mg/Kg    | mg/Kg    | mg/Kg    |
| Benzene       | BTEX 8021B |        | <0.500   | <0.050   | <0.050   | <0.050   |
| Toluene       | BTEX 8021B |        | 3.28     | 0.519    | <0.050   | <0.050   |
| Ethylbenzene  | BTEX 8021B |        | 5.37     | <0.050   | <0.050   | <0.050   |
| Total Xylenes | BTEX 8021B |        | 23.1     | 5.25     | <0.150   | <0.150   |
| Total BTEX    | BTEX 8021B |        | 31.8     | 5.77     | <0.300   | <0.300   |
| Chloride      | SM4500Cl-B |        | 448      | 16       | <16.0    | 64       |
| GRO           | TPH 8015M  |        | 813      | 126      | <10.0    | <10.0    |
| DRO           | TPH 8015M  |        | 6140     | 1760     | 10.4     | <10.0    |

|               |            | Sample | EAST @ 1' |
|---------------|------------|--------|-----------|
| Analyte       | Method     | Date   | 2/8/17    |
|               |            |        | mg/Kg     |
| Benzene       | BTEX 8021B |        | <0.050    |
| Toluene       | BTEX 8021B |        | 0.073     |
| Ethylbenzene  | BTEX 8021B |        | <0.050    |
| Total Xylenes | BTEX 8021B |        | <0.150    |
| Total BTEX    | BTEX 8021B |        | <0.300    |
| Chloride      | SM4500Cl-B |        | 64        |
| GRO           | TPH 8015M  |        | <10.0     |
| DRO           | TPH 8015M  |        | <10.0     |

|               |            | Sample | WEST @ 1' |
|---------------|------------|--------|-----------|
| Analyte       | Method     | Date   | 2/8/17    |
|               |            |        | mg/Kg     |
| Benzene       | BTEX 8021B |        | <0.050    |
| Toluene       | BTEX 8021B |        | 0.082     |
| Ethylbenzene  | BTEX 8021B |        | <0.050    |
| Total Xylenes | BTEX 8021B |        | <0.150    |
| Total BTEX    | BTEX 8021B |        | <0.300    |
| Chloride      | SM4500Cl-B |        | <16.0     |
| GRO           | TPH 8015M  |        | <10.0     |
| DRO           | TPH 8015M  |        | <10.0     |



April 28, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: CEDAR CANYON

Enclosed are the results of analyses for samples received by the laboratory on 04/21/17 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

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:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP1 @ 1' (H701078-01)**

| BTEX 8021B            |             | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result      | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*              | <0.500      | 0.500           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>5.29</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| <b>Ethylbenzene*</b>  | <b>9.16</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>40.8</b> | 1.50            | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>55.3</b> | 3.00            | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 126 % 72-148

| 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>496</b> | 16.0            | 04/26/2017 | ND              | 416 | 104        | 400           | 3.77 |           |

| 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>935</b>  | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| <b>DRO &gt;C10-C28</b> | <b>5850</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 154 % 28.3-164

Surrogate: 1-Chlorooctadecane 138 % 34.7-157

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\*=Accredited Analyte

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

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP1 @ 2' (H701078-02)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>0.425</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*         | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>4.64</b>  | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>5.07</b>  | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 161 % 72-148

| 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            | 04/26/2017 | ND              | 416 | 104        | 400           | 3.77 |           |

| 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>88.9</b> | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| <b>DRO &gt;C10-C28</b> | <b>1420</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 103 % 28.3-164

Surrogate: 1-Chlorooctadecane 103 % 34.7-157

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 Cliff Brunson  
 P.O. Box 805  
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 Fax To: (575) 397-0397

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP1 @ 3' (H701078-03)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 32.0   | 16.0            | 04/26/2017 | ND              | 416 | 104        | 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 91.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.5 % 34.7-157

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|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP1 @ 8' (H701078-04)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

*Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148*

| 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            | 04/26/2017 | ND              | 416 | 104        | 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

*Surrogate: 1-Chlorooctane 97.5 % 28.3-164*
*Surrogate: 1-Chlorooctadecane 90.3 % 34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP2 @ 1' (H701078-05)**

| BTEX 8021B            |             | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result      | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*              | <0.500      | 0.500           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>2.12</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| <b>Ethylbenzene*</b>  | <b>4.20</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>18.6</b> | 1.50            | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>24.9</b> | 3.00            | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 120 % 72-148

| 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>480</b> | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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>652</b>  | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |      |
| <b>DRO &gt;C10-C28</b> | <b>6700</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |      |

Surrogate: 1-Chlorooctane 150 % 28.3-164

Surrogate: 1-Chlorooctadecane 159 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

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|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP2 @ 2' (H701078-06)**

| BTEX 8021B            |              | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*              | <0.050       | 0.050           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>0.205</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*         | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>1.45</b>  | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>1.65</b>  | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 143 % 72-148

| 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            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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>96.4</b> | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| <b>DRO &gt;C10-C28</b> | <b>2000</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 113 % 28.3-164

Surrogate: 1-Chlorooctadecane 119 % 34.7-157

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|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP2 @ 3' (H701078-07)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

*Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148*

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | <16.0  | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

*Surrogate: 1-Chlorooctane 102 % 28.3-164*
*Surrogate: 1-Chlorooctadecane 98.1 % 34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP2 @ 8' (H701078-08)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

*Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148*

| 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>64.0</b> | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

*Surrogate: 1-Chlorooctane 103 % 28.3-164*
*Surrogate: 1-Chlorooctadecane 95.1 % 34.7-157*

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 Fax To: (575) 397-0397

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP3 @ 1' (H701078-09)**

| BTEX 8021B            |             | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |
|-----------------------|-------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result      | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*              | <0.500      | 0.500           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>3.28</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| <b>Ethylbenzene*</b>  | <b>5.37</b> | 0.500           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>23.1</b> | 1.50            | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>31.8</b> | 3.00            | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 126 % 72-148

| 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>448</b> | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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>813</b>  | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |      |
| <b>DRO &gt;C10-C28</b> | <b>6140</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |      |

Surrogate: 1-Chlorooctane 165 % 28.3-164

Surrogate: 1-Chlorooctadecane 153 % 34.7-157

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|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP3 @ 2' (H701078-10)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b>       | <b>0.519</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*         | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| <b>Total Xylenes*</b> | <b>5.25</b>  | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| <b>Total BTEX</b>     | <b>5.77</b>  | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 161 % 72-148

| 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            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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>126</b>  | 10.0            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| <b>DRO &gt;C10-C28</b> | <b>1760</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 94.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 104 % 34.7-157

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|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP3 @ 3' (H701078-11)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | <16.0  | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| <b>DRO &gt;C10-C28</b> | <b>10.4</b> | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 99.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 94.5 % 34.7-157

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 Fax To: (575) 397-0397

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: SP3 @ 8' (H701078-12)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

*Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148*

| 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            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

*Surrogate: 1-Chlorooctane 91.5 % 28.3-164*
*Surrogate: 1-Chlorooctadecane 83.8 % 34.7-157*

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

 Received: 04/21/2017  
 Reported: 04/28/2017  
 Project Name: CEDAR CANYON  
 Project Number: 22 # 001  
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SOUTH (H701078-13)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |  |
| Toluene*       | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |  |
| Total BTEX     | <0.300 | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 32.0   | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |  |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |  |

Surrogate: 1-Chlorooctane 92.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.6 % 34.7-157

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 Fax To: (575) 397-0397

 Received: 04/21/2017  
 Reported: 04/28/2017  
 Project Name: CEDAR CANYON  
 Project Number: 22 # 001  
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: NORTH (H701078-14)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b> | <b>0.066</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*   | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes*  | <0.150       | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX      | <0.300       | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 72-148

| 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            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 90.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.9 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

|                   |              |                     |               |
|-------------------|--------------|---------------------|---------------|
| Received:         | 04/21/2017   | Sampling Date:      | 04/17/2017    |
| Reported:         | 04/28/2017   | Sampling Type:      | Soil          |
| Project Name:     | CEDAR CANYON | Sampling Condition: | Cool & Intact |
| Project Number:   | 22 # 001     | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN    |                     |               |

**Sample ID: EAST (H701078-15)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b> | <b>0.073</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*   | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes*  | <0.150       | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX      | <0.300       | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 103 % 72-148

| 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>64.0</b> | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 94.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.3 % 34.7-157

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 04/21/2017  
 Reported: 04/28/2017  
 Project Name: CEDAR CANYON  
 Project Number: 22 # 001  
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WEST (H701078-16)**

| 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           | 04/26/2017 | ND              | 2.06 | 103        | 2.00          | 4.14 |           |
| <b>Toluene*</b> | <b>0.082</b> | 0.050           | 04/26/2017 | ND              | 1.91 | 95.4       | 2.00          | 3.49 |           |
| Ethylbenzene*   | <0.050       | 0.050           | 04/26/2017 | ND              | 1.91 | 95.6       | 2.00          | 3.84 |           |
| Total Xylenes*  | <0.150       | 0.150           | 04/26/2017 | ND              | 5.43 | 90.6       | 6.00          | 3.93 |           |
| Total BTEX      | <0.300       | 0.300           | 04/26/2017 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | <16.0  | 16.0            | 04/24/2017 | ND              | 448 | 112        | 400           | 3.51 |           |

| 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            | 04/25/2017 | ND              | 211 | 105        | 200           | 0.253 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 04/25/2017 | ND              | 224 | 112        | 200           | 1.64  |           |

Surrogate: 1-Chlorooctane 83.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.8 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- 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 SM450Cl-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



---

Celey D. Keene, Lab Director/Quality Manager



# ARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

192

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

Phone #: 575-397-6388

Project #:

Project Name: CEDAR CANYON 22# 001

Project Location:

Sampler Name: ROGER HERNANDEZ

FOR LAB USE ONLY

P.O. #:

Company:

Attn:

Address:

City:

State:

Phone #:

Fax #:

### BILL TO

### ANALYSIS REQUEST

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX                              |                                     |                                     |                                     |                                     |                                     | ACID/BASE:                          | ICE / COOL                          | OTHER : | DATE | TIME                                | TPH                                 | BTEX                                | CHLORIDE |
|----------|-------------|-------------------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------|------|-------------------------------------|-------------------------------------|-------------------------------------|----------|
|          |             |                   |              | GROUNDWATER                         | WASTEWATER                          | SOIL                                | OIL                                 | SLUDGE                              | OTHER :                             |                                     |                                     |         |      |                                     |                                     |                                     |          |
| H1010178 | SP1@1'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1000 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP1@2'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1025 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP1@3'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1035 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@1'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1057 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@2'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1135 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@3'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1150 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@1'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1200 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@2'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 1220 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@1'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 135  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |
|          | SP2@2'      | G                 | 1            | <input checked="" type="checkbox"/> | 4-17-17 | 150  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |          |

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Relinquished By: Roger Hernandez

Date: 4/21/17

Time: 9:15

Received By: Todd Brunson

Date: 4/21/17

Time: 1:30

Sample Condition:  Intact  Cool  Yes  No

Delivered By: (Circle One) UPS - Bus - Other: #75

Checked By: [Signature]

Remarks:



**From:** Bratcher, Mike, EMNRD  
**To:** [Cliff Brunson](#); [Shelly Tucker](#)  
**Cc:** [Wade Dittrich](#); [Jennifer\\_Smith@oxy.com](mailto:Jennifer_Smith@oxy.com); [Weaver, Crystal, EMNRD](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#)  
**Subject:** RE: OXY Cedar Canyon 22 #1H (2RP-4173) - Delineation Workplan  
**Date:** Thursday, September 21, 2017 7:04:14 AM

---

RE: OXY USA \* Cedar Canyon 22 1H \* 2RP-4173 \* DOR: 4/9/17

Cliff,

Your proposal for remediation of the above referenced release is approved. Federal sites will require like approval from BLM. Please advise once remedial activities have been scheduled.

Mike Bratcher  
NMOCD District 2  
811 South First Street  
Artesia, NM 88210  
575-748-1283 Ext 108

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

---

**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Wednesday, September 13, 2017 2:37 PM  
**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Shelly Tucker <[stucker@blm.gov](mailto:stucker@blm.gov)>  
**Cc:** Wade Dittrich <[Wade\\_Dittrich@oxy.com](mailto:Wade_Dittrich@oxy.com)>; [Jennifer\\_Smith@oxy.com](mailto:Jennifer_Smith@oxy.com); Weaver, Crystal, EMNRD <[Crystal.Weaver@state.nm.us](mailto:Crystal.Weaver@state.nm.us)>; Ken Swinney <[kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)>; Jennifer Gilkey <[jgilkey@bbcinternational.com](mailto:jgilkey@bbcinternational.com)>; Kathy Purvis <[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)>  
**Subject:** OXY Cedar Canyon 22 #1H (2RP-4173) - Delineation Workplan

Mike and Shelly,

Please find the attached Delineation Workplan and remediation proposal for the OXY Cedar Canyon 22 #1H (2RP-4173). OXY is requesting that you review this plan and is looking forward to both the OCD's and BLM's approval. Mike, this plan is one we discussed recently.

If you have any questions, please let me know.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS  
President  
BBC International, Inc.

World-Wide Environmental Specialists

Mailing Address:

P. O. Box 805

Hobbs, NM 88241-0805 USA

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Phone: (575) 397-6388

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E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)



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**From:** Tucker, Shelly  
**To:** [Bratcher, Mike, EMNRD](#)  
**Cc:** [Cliff Brunson](#); [Wade Dittrich](#); [Jennifer Smith@oxy.com](#); [Weaver, Crystal, EMNRD](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#)  
**Subject:** Re: OXY Cedar Canyon 22 #1H (2RP-4173) - Delineation Workplan  
**Date:** Tuesday, October 3, 2017 4:17:35 PM

---

## BLM concurs with NMOCD approval.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

*Shelly J Tucker*

Environmental Protection Specialist  
O&G Spill/Release Coordinator

Bureau of Land Management  
620 E. Greene St  
Carlsbad, NM 88220

575.234.5905 - Direct  
575.361.0084 - Cellular  
575.234.6235 - Emergency Spill Number

[stucker@blm.gov](mailto:stucker@blm.gov)

The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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On Thu, Sep 21, 2017 at 7:04 AM, Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)> wrote:

RE: OXY USA \* Cedar Canyon 22 1H \* 2RP-4173 \* DOR: 4/9/17

Cliff,

Your proposal for remediation of the above referenced release is approved. Federal sites will require like approval from BLM. Please advise once remedial activities have been scheduled.

Mike Bratcher

NMOCD District 2

[811 South First Street](#)

[Artesia, NM 88210](#)

[575-748-1283 Ext 108](#)

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---

**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]

**Sent:** Wednesday, September 13, 2017 2:37 PM

**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Shelly Tucker <[stucker@blm.gov](mailto:stucker@blm.gov)>

**Cc:** Wade Dittrich <[Wade\\_Dittrich@oxy.com](mailto:Wade_Dittrich@oxy.com)>; Jennifer\_Smith@oxy.com; Weaver, Crystal, EMNRD <[Crystal.Weaver@state.nm.us](mailto:Crystal.Weaver@state.nm.us)>; Ken Swinney <[kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)>; Jennifer Gilkey <[jgilkey@bbcinternational.com](mailto:jgilkey@bbcinternational.com)>; Kathy Purvis <[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)>

**Subject:** OXY Cedar Canyon 22 #1H (2RP-4173) - Delineation Workplan

Mike and Shelly,

Please find the attached Delineation Workplan and remediation proposal for the OXY Cedar Canyon 22 #1H (2RP-4173). OXY is requesting that you review this plan and is looking forward to both the OCD's and BLM's approval. Mike, this plan is one we discussed recently.

If you have any questions, please let me know.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS

President

BBC International, Inc.

World-Wide Environmental Specialists

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