



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805
E-MAIL: cbrunson@bbcinternational.com

DELINEATION/REMEDATION WORKPLAN

OXY – FEDERAL 12 4 NORTH CTB (Leak Date: 7/31/19)

RP # 2RP-5627

This delineation workplan and remediation proposal addresses the releases associated with RP # 2RP-5627.

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 entire leak area will be excavated to a depth of 2 feet.

Bottom and confirmation samples will be collected every 50 feet.

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.

Form C-141

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5627
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?	133 (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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" 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 ½-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.


Form C-141

Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5627
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 DittrichTitle: Environmental CoordinatorSignature: Date: 9-20-19email: wade_dittrich@oxy.comTelephone: (575) 390-2828**OCD Only**

Received by: _____

Date: _____

Form C-141

Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	2RP-5627
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 DittrichTitle: Environmental CoordinatorSignature: Date: 9-20-19email: wade_dittrich@oxy.comTelephone: (575) 390-2828**OCD Only**

Received by: _____ Date: _____

- ☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved




Signature: _____ Date: _____

Oxy, Federal 12 4 North CTB

Leak date: 7/31/19

Eddy County, NM 2RP-5627

Legend

-  2 ft excavation of the entire leak area
-  Sample points
-  Leak area



Google Earth

© 2018 Google



100 ft

Oxy, Federal 12 4 North CTB

Sample points

SP1, N 32.40793 W-103.73859

SP2, N 32.40792 W-103.73863

NORTH, N 32.40796 W-103.73859

SOUTH, N 32.40788 W-103.73866

EAST, N 32.40795 W-103.73857

WEST, N 32.40790 W-103.73867

Oxy, Federal 12 4 North CTB
U/L E, Section 12, T22S, R31E
Groundwater: 150'-175'





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 322333103461301

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

USGS 322333103461301 22S.31E.15.13223

Eddy County, New Mexico
Latitude 32°23'40", Longitude 103°46'15" NAD27
Land-surface elevation 3,456 feet above NAVD88
The depth of the well is 170 feet below land surface.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurem
1959-02-19		D	150.87			2			U	
1972-09-12		D	146.30			2			U	
1976-12-08		D	135.97			2			U	
1983-01-18		D	133.14			2			U	

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	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)
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[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?>

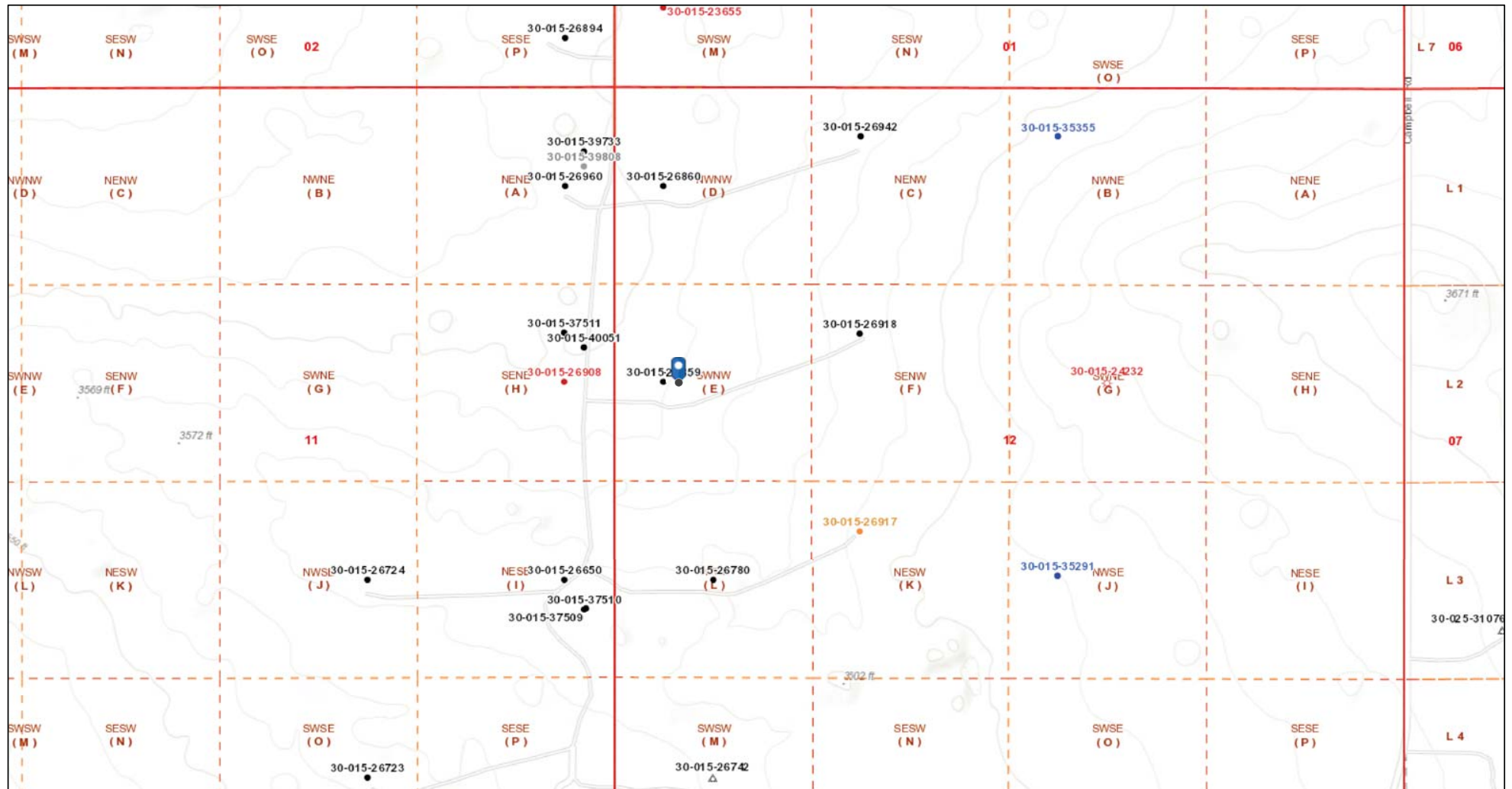


Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2019-08-08 12:42:51 EDT

0.47 0.45 nadww02

Oxy, Federal 12 4 North CTB



8/8/2019 9:49:28 AM

Well Locations - Small Scale

- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale

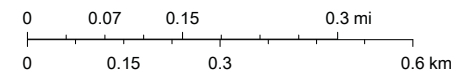
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2 Plugged
- CO2 Temporarily Abandoned

- ☆ 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

1:9,028





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

Oxy, Federal 12 4 North CTB

Leak date: 7/31/19
Eddy County, NM

BLM CAVE KARST MAP

- Legend
-  Leak area
 -  Low potential

Google Earth

© 2018 Google



1000 ft

National Flood Hazard Layer FIRMette



32°24'43.48"N

103°44'37.87"W



USGS The National Map: Orthoimagery. Data refreshed April, 2019.





















0 250 500 1,000 1,500 2,000 Feet

1:6,000

32°24'13.11"N

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		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 Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



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 8/8/2019 at 12:54:07 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
Federal 12 4 North CTB (7/31/19)

		Sample ID	NORTH @ SURFACE	EAST @ SURFACE	WEST @ SURFACE	SOUTH @ SURFACE
Analyte	Method	Date	9/11/19	9/11/19	9/11/19	9/11/19
			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		32	32	16	16
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

		Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	9/11/19	9/11/19	9/11/19	9/11/19	9/11/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.062	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.458	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		1.93	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		2.45	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		4200	720	880	16	<16.0
GRO	TPH 8015M		148	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		39200	211	304	<10.0	<10.0
EXT DRO	TPH 8015M		9680	28.4	52.1	<10.0	<10.0

		Sample ID	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'
Analyte	Method	Date	9/11/19	9/11/19	9/11/19	9/11/19	9/11/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.061	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.405	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		1.84	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		2.31	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		3680	720	912	<16.0	16
GRO	TPH 8015M		202	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		45900	245	190	<10.0	<10.0
EXT DRO	TPH 8015M		11000	34.8	22.9	<10.0	<10.0



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

September 18, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: FEDERAL 12 - 4 CTB

Enclosed are the results of analyses for samples received by the laboratory on 09/13/19 15:40.

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.

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 "Coley D. Keene". The signature is written in a cursive style with a large, stylized 'C' at the beginning.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/13/2019
 Reported: 09/18/2019
 Project Name: FEDERAL 12 - 4 CTB
 Project Number: 7-31-19
 Project Location: NONE GIVEN

Sampling Date: 09/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: NORTH @ SURFACE (H903171-01)

BTEX 8021B			mg/kg		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	1.89	94.6	2.00	1.38		
Toluene*	<0.050	0.050	09/17/2019	ND	1.90	95.0	2.00	1.66		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	1.91	95.3	2.00	2.16		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	5.67	94.5	6.00	1.34		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 77.3 % 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	
Chloride	32.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 83.0 % 41-142

Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: EAST @ SURFACE (H903171-02)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	1.89	94.6	2.00	1.38		
Toluene*	<0.050	0.050	09/17/2019	ND	1.90	95.0	2.00	1.66		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	1.91	95.3	2.00	2.16		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	5.67	94.5	6.00	1.34		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 77.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: WEST @ SURFACE (H903171-03)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	1.89	94.6	2.00	1.38		
Toluene*	<0.050	0.050	09/17/2019	ND	1.90	95.0	2.00	1.66		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	1.91	95.3	2.00	2.16		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	5.67	94.5	6.00	1.34		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 77.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 91.5 % 41-142

Surrogate: 1-Chlorooctadecane 98.6 % 37.6-147

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Analytical Results For:

BBC International, Inc.
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 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SOUTH @ SURFACE (H903171-04)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 79.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 97.4 % 37.6-147

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Analytical Results For:

BBC International, Inc.
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 Fax To: (575) 397-0397

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 1 @ SURFACE (H903171-05)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	0.062	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	0.458	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	1.93	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	2.45	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4200	16.0	09/16/2019	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
									S-06

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*	148	50.0	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	39200	50.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	9680	50.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 155 % 41-142

Surrogate: 1-Chlorooctadecane 1210 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 397-0397

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 1 @ 1' (H903171-06)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 80.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	211	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	28.4	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 90.9 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 397-0397

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 1 @ 2' (H903171-07)

BTEX 8021B			mg/kg		Analyzed By: BF				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46	
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74	
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46	
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97	
Total BTEX	<0.300	0.300	09/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.8 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	304	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	52.1	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 87.2 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

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Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 1 @ 3' (H903171-08)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 81.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 92.7 % 41-142

Surrogate: 1-Chlorooctadecane 99.5 % 37.6-147

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Analytical Results For:

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 Cliff Brunson
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 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 1 @ 4' (H903171-09)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 80.2 % 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	
Chloride	<16.0	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 98.7 % 37.6-147

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Analytical Results For:

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Received: 09/13/2019
 Reported: 09/18/2019
 Project Name: FEDERAL 12 - 4 CTB
 Project Number: 7-31-19
 Project Location: NONE GIVEN

Sampling Date: 09/11/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 @ SURFACE (H903171-10)

BTEX 8021B		mg/kg	Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46	
Toluene*	0.061	0.050	09/17/2019	ND	2.01	101	2.00	1.74	
Ethylbenzene*	0.405	0.050	09/17/2019	ND	2.03	102	2.00	1.46	
Total Xylenes*	1.84	0.150	09/17/2019	ND	6.05	101	6.00	1.97	
Total BTEX	2.31	0.300	09/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.3 % 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
Chloride	3680	16.0	09/16/2019	ND	432	108	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*	202	50.0	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	45900	50.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	11000	50.0	09/16/2019	ND					

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	202	50.0	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	45900	50.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	11000	50.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 180 % 41-142

Surrogate: 1-Chlorooctadecane 1360 % 37.6-147

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Analytical Results For:

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Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 2 @ 1' (H903171-11)

BTEX 8021B			mg/kg		Analyzed By: BF				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46	
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74	
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46	
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97	
Total BTEX	<0.300	0.300	09/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 79.1 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	245	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	34.8	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 92.7 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 2 @ 2' (H903171-12)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 83.5 % 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
Chloride	912	16.0	09/16/2019	ND	432	108	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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	190	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	22.9	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 2 @ 3' (H903171-13)

BTEX 8021B		mg/kg		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46		
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74		
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46		
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97		
Total BTEX	<0.300	0.300	09/17/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 82.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/16/2019	ND	432	108	400	0.00	QR-03	

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	09/16/2019	ND	216	108	200	4.15	
DRO >C10-C28*	<10.0	10.0	09/16/2019	ND	225	112	200	7.95	
EXT DRO >C28-C36	<10.0	10.0	09/16/2019	ND					

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 99.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/13/2019	Sampling Date:	09/11/2019
Reported:	09/18/2019	Sampling Type:	Soil
Project Name:	FEDERAL 12 - 4 CTB	Sampling Condition:	Cool & Intact
Project Number:	7-31-19	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SP 2 @ 4' (H903171-14)

BTEX 8021B			mg/kg		Analyzed By: BF				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/17/2019	ND	2.02	101	2.00	3.46	
Toluene*	<0.050	0.050	09/17/2019	ND	2.01	101	2.00	1.74	
Ethylbenzene*	<0.050	0.050	09/17/2019	ND	2.03	102	2.00	1.46	
Total Xylenes*	<0.150	0.150	09/17/2019	ND	6.05	101	6.00	1.97	
Total BTEX	<0.300	0.300	09/17/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 82.5 % 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
Chloride	16.0	16.0	09/17/2019	ND	432	108	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	09/17/2019	ND	210	105	200	0.401	
DRO >C10-C28*	<10.0	10.0	09/17/2019	ND	205	103	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	09/17/2019	ND					

Surrogate: 1-Chlorooctane 85.8 % 41-142

Surrogate: 1-Chlorooctadecane 91.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

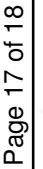
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A handwritten signature in black ink that reads "Caley D. Keene".

Caley D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 18 of 18

BILL TO										ANALYSIS REQUEST														
Company Name: BBC International, Inc.										P.O. #:														
Project Manager: Cliff Brunson										Company:														
Address: P.O. Box 805										Attn:														
City: Hobbs State: NM Zip: 88241										Address:														
Phone #: 575-397-6388 Fax #: 575-397-0397										City:														
Project #: Project Owner: Oxy										State: Zip:														
Project Name: FEDERAL 12-4 CTB - 7-31-19										Phone #:														
Project Location:										Fax #:														
Sampler Name: Jeff Ornelas																								
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME										
H903171													9-11-19	11:45	✓	✓	✓							
11	SP2 @ 1'												9-11-19	12:12	✓	✓	✓							
12	SP2 @ 2'												9-11-19	1:11	✓	✓	✓							
13	SP2 @ 3'												9-11-19	1:29	✓	✓	✓							
14	SP2 @ 4'																							

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Relinquished By: <i>[Signature]</i>	Date: 7-13-19	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: 7-13-19	Received By: <i>[Signature]</i>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)	Time: 3:00 PM	Time: 4:40 PM	REMARKS:	
Sampler - UPS - Bus - Other: 2.3° 2.7° #47	Sample Condition	Cool Intact		
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <i>[Signature]</i>	

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