



DELINEATION WORKPLAN

CHEVRON – SMITH 4 FEDERAL #001

(Leak Date: 03/14/19)

RP # 1RP-5435

This delineation workplan and remediation proposal addresses the releases associated with RP # 1RP-5435.

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 guidelines, the following remediation is proposed:

Chevron will remediate the spill area as depicted on the following site diagram. The leak area near SP1 – SP3 (YELLOW shade on diagram) will be excavated to a depth of 2 feet. The leak area near SP4 (PINK shade on diagram) will be excavated to a depth of 4 feet. The leak areas near SP5 and SP6 (BLUE shade on diagram) will zero remediation.

Bottom and sidewall confirmation samples will be collected at no greater than 75 ft. intervals. Estimated volume of material to be removed is 133 cubic yards. The remediation will be completed within 90 days of plan approval.

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5435
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?	33 (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.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5435
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: Amy BarnhillTitle: Waste & Water SpecialisSignature: Date: 6-27-19email: ABarnhill@chevron.comTelephone: (432)687-7108**OCD Only**

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	1RP-5435
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: **Amy Barnhill**Title: **Waste & Water Specialist**Signature: Date: **6-27-19**email: **ABarnhill@chevron.com**Telephone: **(432) 687-7108****OCD Only**

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Chevron, Smith 4 Federal #001

Leak date: 3/14/19
Lea County, NM
1RP-5435

- Legend**
- 2 ft excavation
 - 4 ft excavation
 - Sample points
 - Leak area
 - No remediation activities



Chevron, Smith 4 Federal #001

Sample points

SP1, N 32.60284 W-103.66176

SP2, N 32.60279 W-103.66176

SP3, N 32.60282 W-103.66166

SP4, N 32.60279 W-103.66161

SP5, N 32.60286 W-103.66151

SP6, N 32.60280 W-103.66152

NORTH, N 32.60291 W-103.66150

SOUTH, N 32.60276 W-103.66157

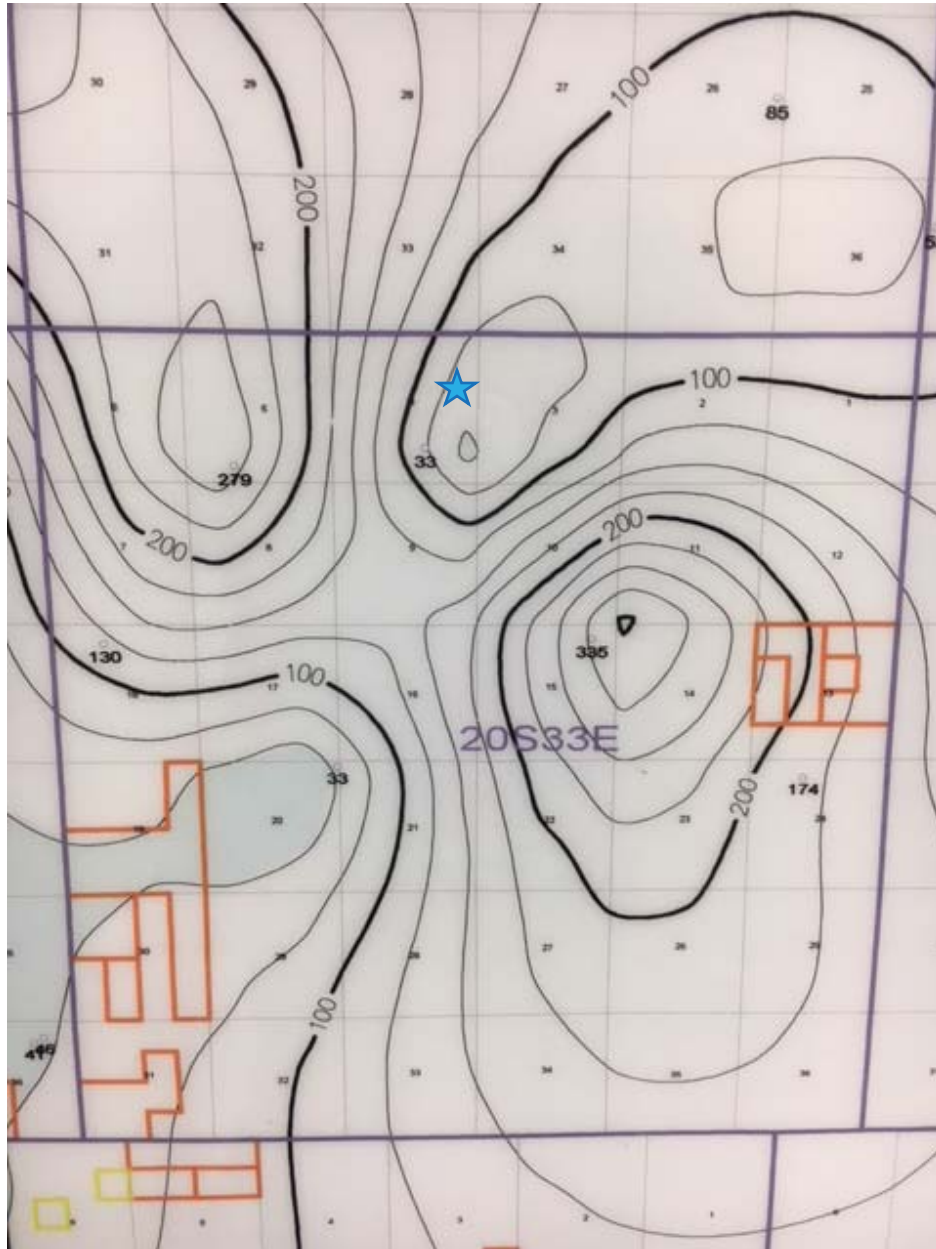
EAST, N 32.60283 W-103.66148

WEST, N 32.60282 W-103.66178

Chevron, Smith 4 Federal #001

U/L H, Section 4, T20S, R33E

Groundwater: 75'





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

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 =

- 323541103395501

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323541103395501 20S.33E.04.43211

Lea County, New Mexico

Latitude 32°35'41", Longitude 103°39'55" NAD27

Land-surface elevation 3,553 feet above NAVD88

The depth of the well is 58 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurem
1965-11-17		D	34.91			2	P		U	
1968-03-19		D	33.19			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
Status	P	Site was being pumped.
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?](#)

[Feedback on this web site](#)

[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)

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

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

Title: Groundwater for New Mexico: Water Levels

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

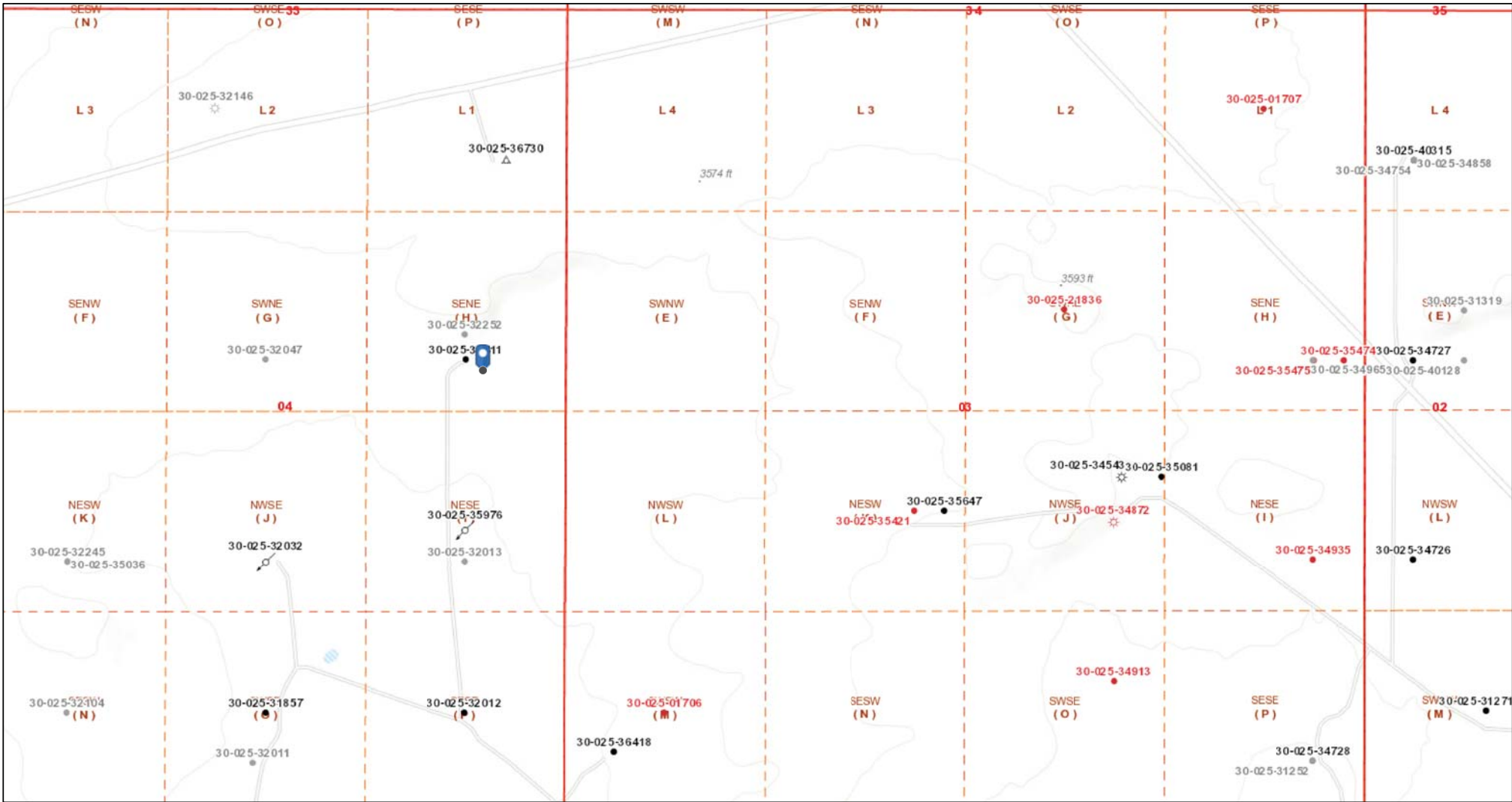


Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2019-04-01 14:12:05 EDT

0.65 0.59 nadww01

Chevron, Smith 4 Federal #001



4/1/2019 11:53:30 AM

1:9,028

Well Locations - Small Scale

Well Locations - Large Scale

Gas Active

Injection. Cancelled

- Oil. New

 Salt Water Injection, Plugged

● Active

● Miscellaneous

 See Cancelled, Never Drilled

 Integration: Mass

● Oil Bleeding

▲ Salt Water Injection Temporarily Abandoned

New

 CO2 Active

✓

● **二、**

Gas, flow

injection, 1 tagged

Oil, Temporarily Abundant

Water, Active

334

Gas, Plugged

Injection, Tem

Salt Water Injection, Active

- Water, Cancelled

Cancelled

CO2 New

Gas, Temporary

- Oil, Active

△ Salt Water Injection, Cancelled

 Water, New

- Temporarily Abandoned

 CO2, Plugged

Injection Active

- Oil Cancelled

 Salt Water Injection New

 Water Plugged

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



NM OCD Oil and Gas Map. <http://nm-emnrd.maps.arcgis.com/apps/webappviewer/> New Mexico Oil Conservation Division

Chevron, Smith 4 Federal #001

Leak date: 3/14/19
Lea County, NM

BLM CAVE KARST MAP

Legend

-  Leak area
-  Low potential

well

Google Earth

© 2018 Google



1000 ft

National Flood Hazard Layer FIRMette



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
		Regulatory Floodway
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		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



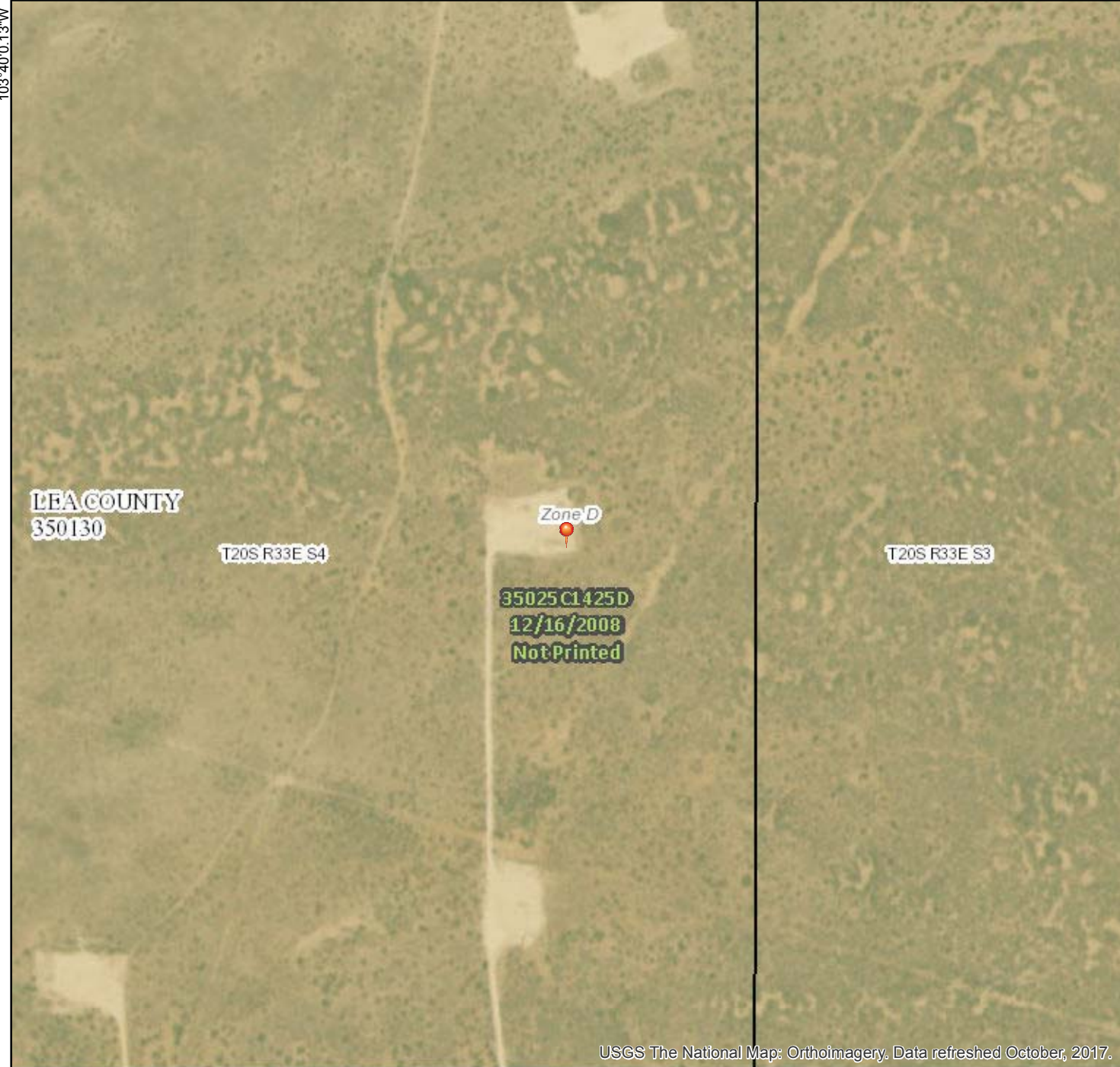
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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 4/1/2019 at 2:19:42 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.

32°36'25.60"N



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

0 250 500 1,000 1,500 2,000 Feet 1:6,000

32°35'55.28"N

103°39'22.67"W

Laboratory Analytical Results Summary
Smith 4 Federal #001 (3/14/19)

		Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19	6/5/19	6/5/19
			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		0.231	0.376	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.287	1.69	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		1.79	5.71	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		2.31	7.78	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		64	32	<16.0	<16.0	<16.0
GRO	TPH 8015M		57.8	163	<10.0	<10.0	<10.0
DRO	TPH 8015M		4120	2130	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		584	82.1	<10.0	<10.0	<10.0

		Sample ID	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19	6/5/19
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.073	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.082	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.635	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		0.79	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		128	32	16	16
GRO	TPH 8015M		12.6	<10.0	<10.0	<10.0
DRO	TPH 8015M		910	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		340	<10.0	<10.0	<10.0

		Sample ID	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19	6/5/19	6/5/19
			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		0.107	0.205	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.141	0.848	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.817	2.5	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		1.07	3.55	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		112	32	32	48	32
GRO	TPH 8015M		30.5	59.5	<10.0	<10.0	<10.0
DRO	TPH 8015M		3370	1100	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		923	197	<10.0	<10.0	<10.0

		Sample ID	SP4 @ SURFACE	SP4 @ 1'	SP4 @ 2'	SP4 @ 3'	SP4 @ 4'	SP4 @ 4'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19	6/5/19	6/5/19	6/5/19
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.106	<0.050	<0.050	0.114	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		736	1640	992	448	32	32
GRO	TPH 8015M		13.7	289	195	<10.0	<10.0	<10.0
DRO	TPH 8015M		1460	11800	12700	647	<10.0	<10.0
EXT DRO	TPH 8015M		362	2060	2610	239	<10.0	<10.0

		Sample ID	SP5 @ SURFACE	SP5 @ 1'	SP5 @ 2'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		<16.0	<16.0	16
GRO	TPH 8015M		<10.0	<10.0	<10.0
DRO	TPH 8015M		20.7	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0

		Sample ID	SP6 @ SURFACE	SP6 @ 1'	SP6 @ 2'
Analyte	Method	Date	6/5/19	6/5/19	6/5/19
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		32	<16.0	16
GRO	TPH 8015M		<10.0	<10.0	<10.0
DRO	TPH 8015M		24.2	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0

		Sample ID	NORTH @ SURFACE	EAST @ SURFACE	WEST @ SURFACE	SOUTH @ SURFACE
Analyte	Method	Date	6/5/19	6/5/19	6/5/19	6/5/19
			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	32	32
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

June 17, 2019

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SMITH 4 FEDERAL #001

Enclosed are the results of analyses for samples received by the laboratory on 06/10/19 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 1 @ SURFACE (H902014-01)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2019	ND	2.23	111	2.00	1.86	
Toluene*	0.231	0.050	06/13/2019	ND	2.24	112	2.00	2.52	
Ethylbenzene*	0.287	0.050	06/13/2019	ND	2.15	107	2.00	0.197	
Total Xylenes*	1.79	0.150	06/13/2019	ND	6.41	107	6.00	0.159	
Total BTX	2.31	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 129 % 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	64.0	16.0	06/11/2019	ND	416	104	400	3.92	

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*	57.8	50.0	06/11/2019	ND	237	119	200	0.447		
DRO >C10-C28*	4120	50.0	06/11/2019	ND	209	104	200	0.556	QR-03	
EXT DRO >C28-C36	584	50.0	06/11/2019	ND						

Surrogate: 1-Chlorooctane 130 % 41-142

Surrogate: 1-Chlorooctadecane 285 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 1 @ 1' (H902014-02)

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	06/13/2019	ND	2.23	111	2.00	1.86	
Toluene*	0.376	0.050	06/13/2019	ND	2.24	112	2.00	2.52	
Ethylbenzene*	1.69	0.050	06/13/2019	ND	2.15	107	2.00	0.197	
Total Xylenes*	5.71	0.150	06/13/2019	ND	6.41	107	6.00	0.159	
Total BTEX	7.78	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	06/11/2019	ND	416	104	400	3.92	
TPH 8015M		mg/kg		Analyzed By: MS					
				S-06					

Surrogate: 1-Chlorooctane 120 % 41-142

Surrogate: 1-Chlorooctadecane 180 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 1 @ 2' (H902014-03)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/13/2019	ND	2.23	111	2.00	1.86		
Toluene*	<0.050	0.050	06/13/2019	ND	2.24	112	2.00	2.52		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.15	107	2.00	0.197		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.41	107	6.00	0.159		
Total BTX	<0.300	0.300	06/13/2019	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447		
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556		
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND						

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 1 @ 3' (H902014-04)

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	06/13/2019	ND	2.23	111	2.00	1.86		
Toluene*	<0.050	0.050	06/13/2019	ND	2.24	112	2.00	2.52		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.15	107	2.00	0.197		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.41	107	6.00	0.159		
Total BTEX	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 111 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 1 @ 4' (H902014-05)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/13/2019	ND	2.23	111	2.00	1.86		
Toluene*	<0.050	0.050	06/13/2019	ND	2.24	112	2.00	2.52		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.15	107	2.00	0.197		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.41	107	6.00	0.159		
Total BTEX	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 115 % 41-142

Surrogate: 1-Chlorooctadecane 117 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 2 @ SURFACE (H902014-06)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2019	ND	2.23	111	2.00	1.86	
Toluene*	0.073	0.050	06/13/2019	ND	2.24	112	2.00	2.52	
Ethylbenzene*	0.082	0.050	06/13/2019	ND	2.15	107	2.00	0.197	
Total Xylenes*	0.635	0.150	06/13/2019	ND	6.41	107	6.00	0.159	
Total BTX	0.790	0.300	06/13/2019	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	06/11/2019	ND	400	100	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*	12.6	10.0	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	910	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	340	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 141 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 2 @ 1' (H902014-07)

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	06/13/2019	ND	2.23	111	2.00	1.86	
Toluene*	<0.050	0.050	06/13/2019	ND	2.24	112	2.00	2.52	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.15	107	2.00	0.197	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.41	107	6.00	0.159	
Total BTEx	<0.300	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 107 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 2 @ 2' (H902014-08)

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	06/13/2019	ND	2.23	111	2.00	1.86		
Toluene*	<0.050	0.050	06/13/2019	ND	2.24	112	2.00	2.52		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.15	107	2.00	0.197		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.41	107	6.00	0.159		
Total BTEx	<0.300	0.300	06/13/2019	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 109 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 2 @ 3' (H902014-09)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/12/2019	ND	2.27	113	2.00	2.44		
Toluene*	<0.050	0.050	06/12/2019	ND	2.28	114	2.00	1.68		
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	2.12	106	2.00	0.539		
Total Xylenes*	<0.150	0.150	06/12/2019	ND	6.38	106	6.00	1.54		
Total BTEx	<0.300	0.300	06/12/2019	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 3 @ SURFACE (H902014-10)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/13/2019	ND	1.96	98.0	2.00	2.67	
Toluene*	0.107	0.050	06/13/2019	ND	1.97	98.7	2.00	2.72	
Ethylbenzene*	0.141	0.050	06/13/2019	ND	1.82	91.2	2.00	0.756	
Total Xylenes*	0.817	0.150	06/13/2019	ND	5.53	92.1	6.00	1.39	
Total BTEx	1.07	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	112	16.0	06/11/2019	ND	400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	30.5	10.0	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	3370	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	923	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 255 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 3 @ 1' (H902014-11)

BTX 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	06/13/2019	ND	1.96	98.0	2.00	2.67	
Toluene*	0.205	0.050	06/13/2019	ND	1.97	98.7	2.00	2.72	
Ethylbenzene*	0.848	0.050	06/13/2019	ND	1.82	91.2	2.00	0.756	
Total Xylenes*	2.50	0.150	06/13/2019	ND	5.53	92.1	6.00	1.39	
Total BTX	3.55	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 171 % 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	06/11/2019	ND	400	100	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*	59.5	10.0	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	1100	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	197	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 122 % 41-142

Surrogate: 1-Chlorooctadecane 142 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 3 @ 2' (H902014-12)

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	06/13/2019	ND	1.96	98.0	2.00	2.67		
Toluene*	<0.050	0.050	06/13/2019	ND	1.97	98.7	2.00	2.72		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.82	91.2	2.00	0.756		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.53	92.1	6.00	1.39		
Total BTEX	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 98.6 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 3 @ 3' (H902014-13)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 110 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 3 @ 4' (H902014-14)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 73.3-129

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 95.2 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ SURFACE (H902014-15)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	0.106	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	06/11/2019	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	13.7	10.0	06/11/2019	ND	237	119	200	0.447		
DRO >C10-C28*	1460	10.0	06/11/2019	ND	209	104	200	0.556		
EXT DRO >C28-C36	362	10.0	06/11/2019	ND						

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 167 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ 1' (H902014-16)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 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	1640	16.0	06/11/2019	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	289	50.0	06/12/2019	ND	237	119	200	0.447	
DRO >C10-C28*	11800	50.0	06/12/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	2060	50.0	06/12/2019	ND					

Surrogate: 1-Chlorooctane 164 % 41-142

Surrogate: 1-Chlorooctadecane 497 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ 2' (H902014-17)

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	06/12/2019	ND	2.12	106	2.00	0.0388		
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28		
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28		
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68		
Total BTEX	<0.300	0.300	06/12/2019	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	06/11/2019	ND	400	100	400	0.00	

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	195	50.0	06/12/2019	ND	237	119	200	0.447	
DRO >C10-C28*	12700	50.0	06/12/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	2610	50.0	06/12/2019	ND					

Surrogate: 1-Chlorooctane 152 % 41-142

Surrogate: 1-Chlorooctadecane 536 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ 3' (H902014-18)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	0.114	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 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	448	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	647	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	239	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 121 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ 4' (H902014-19)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 107 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 4 @ 5' (H902014-20)

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	06/12/2019	ND	2.12	106	2.00	0.0388	
Toluene*	<0.050	0.050	06/12/2019	ND	1.52	75.8	2.00	3.28	
Ethylbenzene*	<0.050	0.050	06/12/2019	ND	1.83	91.4	2.00	4.28	
Total Xylenes*	<0.150	0.150	06/12/2019	ND	4.56	76.0	6.00	4.68	
Total BTEX	<0.300	0.300	06/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.2 % 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	32.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	237	119	200	0.447	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	209	104	200	0.556	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 5 @ SURFACE (H902014-21)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/14/2019	ND	1.96	98.0	2.00	2.67		
Toluene*	<0.050	0.050	06/14/2019	ND	1.97	98.7	2.00	2.72		
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.82	91.2	2.00	0.756		
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.53	92.1	6.00	1.39		
Total BTEx	<0.300	0.300	06/14/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	251	125	200	1.49	QM-07
DRO >C10-C28*	20.7	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 122 % 41-142

Surrogate: 1-Chlorooctadecane 127 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 5 @ 1' (H902014-22)

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	06/13/2019	ND	2.20	110	2.00	7.28		
Toluene*	<0.050	0.050	06/13/2019	ND	2.06	103	2.00	2.21		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.36	118	2.00	5.72		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.59	110	6.00	20.8		
Total BTEx	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/11/2019	ND	400	100	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	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 107 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 5 @ 2' (H902014-23)

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	06/13/2019	ND	2.20	110	2.00	7.28		
Toluene*	<0.050	0.050	06/13/2019	ND	2.06	103	2.00	2.21		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.36	118	2.00	5.72		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.59	110	6.00	20.8		
Total BTEx	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	06/12/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 6 @ SURFACE (H902014-24)

BTX 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	06/13/2019	ND	2.20	110	2.00	7.28	
Toluene*	<0.050	0.050	06/13/2019	ND	2.06	103	2.00	2.21	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	2.36	118	2.00	5.72	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	6.59	110	6.00	20.8	
Total BTX	<0.300	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	24.2	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 119 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 6 @ 1' (H902014-25)

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	06/13/2019	ND	1.93	96.5	2.00	1.01		
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20		
Total BTEX	<0.300	0.300	06/13/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	06/12/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 115 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SP 6 @ 2' (H902014-26)

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	06/13/2019	ND	1.93	96.5	2.00	1.01	
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20	
Total BTEx	<0.300	0.300	06/13/2019	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/12/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 120 % 41-142

Surrogate: 1-Chlorooctadecane 122 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: NORTH @ SURFACE (H902014-27)

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	06/13/2019	ND	1.93	96.5	2.00	1.01		
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61		
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53		
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20		
Total BTEx	<0.300	0.300	06/13/2019	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: EAST @ SURFACE (H902014-28)

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	06/13/2019	ND	1.93	96.5	2.00	1.01	
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20	
Total BTEX	<0.300	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	06/12/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/11/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/11/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/11/2019	ND					

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: WEST @ SURFACE (H902014-29)

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	06/13/2019	ND	1.93	96.5	2.00	1.01	
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20	
Total BTEX	<0.300	0.300	06/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	06/12/2019	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					

Surrogate: 1-Chlorooctane 109 % 41-142

Surrogate: 1-Chlorooctadecane 111 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/10/2019	Sampling Date:	06/05/2019
Reported:	06/17/2019	Sampling Type:	Soil
Project Name:	SMITH 4 FEDERAL #001	Sampling Condition:	Cool & Intact
Project Number:	(3/14/19)	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - LEA CO NM		

Sample ID: SOUTH @ SURFACE (H902014-30)

BTX 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	06/13/2019	ND	1.93	96.5	2.00	1.01	
Toluene*	<0.050	0.050	06/13/2019	ND	1.90	95.2	2.00	2.61	
Ethylbenzene*	<0.050	0.050	06/13/2019	ND	1.85	92.3	2.00	2.53	
Total Xylenes*	<0.150	0.150	06/13/2019	ND	5.70	95.0	6.00	2.20	
Total BTX	<0.300	0.300	06/13/2019	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/12/2019	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2019	ND	251	125	200	1.49	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	220	110	200	7.15	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
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.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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



Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 3

[illegible]

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

Relinquished By: <i>Jeff Ornelas</i>		Date: <i>6/5/19</i>	Received By: <i>Israel Pena</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Time: <i>5:30pm</i>				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>Israel Pena</i>		Date: <i>6/10/19</i>	Received By: <i>Tamara Alda-Kel</i>	REMARKS:	
Time: <i>4:30pm</i>					
Delivered By: (Circle One)		Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:		Cool <input type="checkbox"/> Intact <input type="checkbox"/>	(Initials)		
<i>2.3c #97</i>		Yes <input type="checkbox"/> No <input type="checkbox"/>	<i>to</i>		

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

**CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2 of 3

Company Name: BBC International, Inc.				BILL TO				ANALYSIS REQUEST																	
Project Manager: Cliff Brunson				P.O. #:																					
Address: P.O. Box 805				Company: <i>BBC</i>																					
City: Hobbs State: NM Zip: 88241				Attn: <i>Gilkey</i>																					
Phone #: 575-397-6388 Fax #: 575-397-0397				Address:																					
Project #: Project Owner: <i>Chesron</i>				City:																					
Project Name: Smith 4 Federal #001 (3/14/19)				State: Zip:																					
Project Location: Lea County, NM				Phone #:																					
Sampler Name: Jeff Ornelas				Fax #:																					
FOR LAB USE ONLY																									
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.	SAMPLING																
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME											
<i>H902014</i>																									
<i>11</i>	SP3 @ 1'												6/5/19	10:25 AM	<i>BTX</i>	<i>CI</i>	<i>TPH</i>								
<i>12</i>	SP3 @ 2'												6/5/19	10:40 AM	✓	✓	✓								
<i>13</i>	SP3 @ 3'												6/5/19	10:50 AM	✓	✓	✓								
<i>14</i>	SP3 @ 4'												6/5/19	11:11 AM	✓	✓	✓								
<i>15</i>	SP4 @ SURFACE												6/5/19	11:15 AM	✓	✓	✓								
<i>16</i>	SP4 @ 1'												6/5/19	11:20 AM	✓	✓	✓								
<i>17</i>	SP4 @ 2'												6/5/19	11:30 AM	✓	✓	✓								
<i>18</i>	SP4 @ 3'												6/5/19	11:46 AM	✓	✓	✓								
<i>19</i>	SP4 @ 4'												6/5/19	11:50 AM	✓	✓	✓								
<i>20</i>	SP4 @ 5'												6/5/19	12:12 PM	✓	✓	✓								

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

Relinquished By: <i>Jeff Ornelas</i>	Date: <i>6/5/19</i>	Received By: <i>Ismael Pena</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <i>3:30pm</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>Ismael Pena</i>	Date: <i>6/10/19</i>	Received By: <i>Ismael Pena</i>	REMARKS:	
	Time: <i>4:30PM</i>			
Delivered By: (Circle One)	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	Cool Intact	(Initials)		
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>TO</i>		
	<i>2.3c H97</i>			

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

(505) 393-2326 FAX (505) 393-2476

3 of 3

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

Relinquished By: <i>Veff Orndorff</i>		Date: <i>6/5/19</i>	Received By: <i>Israel Hena</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
		Time: <i>5:30 PM</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>Israel Hena</i>		Date: <i>6/10/19</i>	Received By: <i>Jamara Aldas</i>	REMARKS:	
		Time: <i>7:30 PM</i>			
Delivered By: (Circle One)		Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:		Cool Intact		(Initials)	
<i>2.30 #97</i>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<i>JO</i>	

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