



## **DELINEATION WORKPLAN**

### **CHEVRON – SJ SARKEYS 26 #001**

**(Leak Date: 3/13/17)**

**RP # 1RP-4656**  
**API # 30-025-06791**

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This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-4656.

The following information includes:

1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
2. GPS information for sample points and sample methodology
3. Depth to groundwater information (i.e., pdf of OSE search results and/or copy of Chevron groundwater trend map).
4. Laboratory analysis results summary table and original laboratory analysis reports
5. A copy of the initial C-141
6. 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 areas (shaded in yellow) will be excavated to a depth of 3 feet. This area is represented by sample points SP1 and SP2. The area near SP4 and SP5 (shaded in pink) will be excavated to a depth of 1 foot. The areas near SP3 and SP7 (shaded in purple) will be excavated to a depth of 2 feet. The area near SP6 (shaded in blue) will require no remediation.***

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.

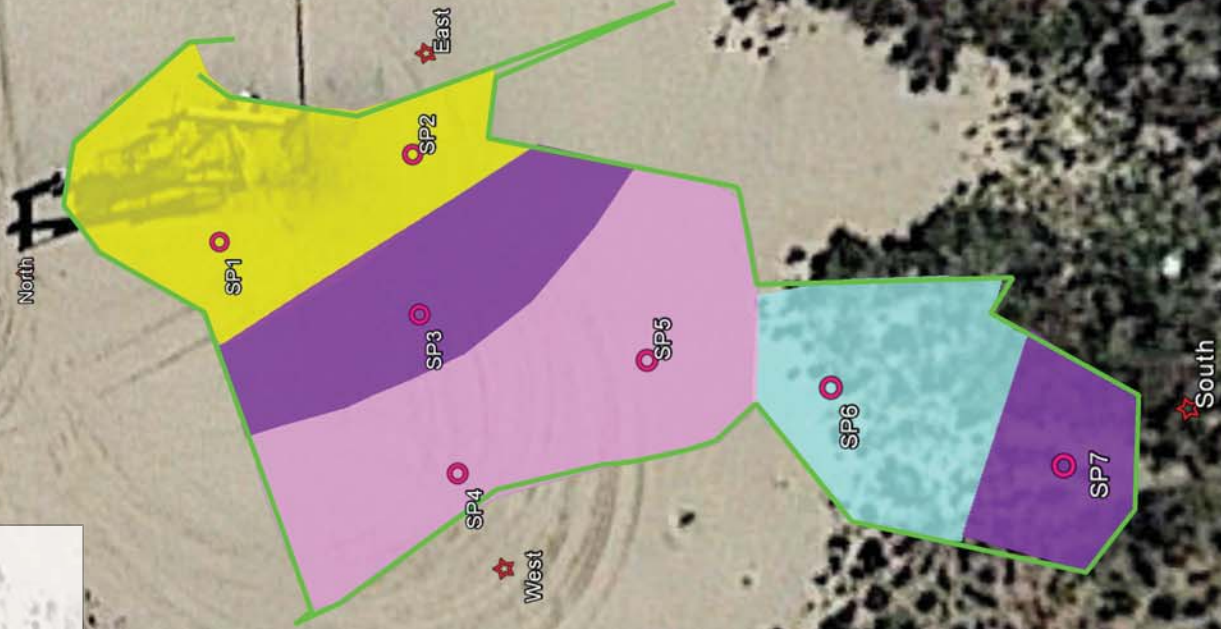


# Chevron, SJ Sarkeys 26 #001

Leak date: 03/13/2017  
Lea County, NM  
API# 30-025-06791  
1RP-4656

## Legend

- 1 ft Excavation
- 2 ft Excavation
- 3 ft Excavation
- Cardinal sample points
- Leak Area
- Sample points
- No Remediation Activities



Chevron, SJ Sarkeys 26 #001

Sample points, hand auger

SP1, N 32.45176 W-103.14021

SP2, N 32.45166 W-103.14017

SP3, N 32.45166 W-103.14024

SP4, N 32.45164 W-103.14031

SP5, N 32.45155 W-103.14026

SP6, N 32.45148 W-103.14027

SP7, N 32.45140 W-103.14029

NORTH, N 32.45187 W-103.14023

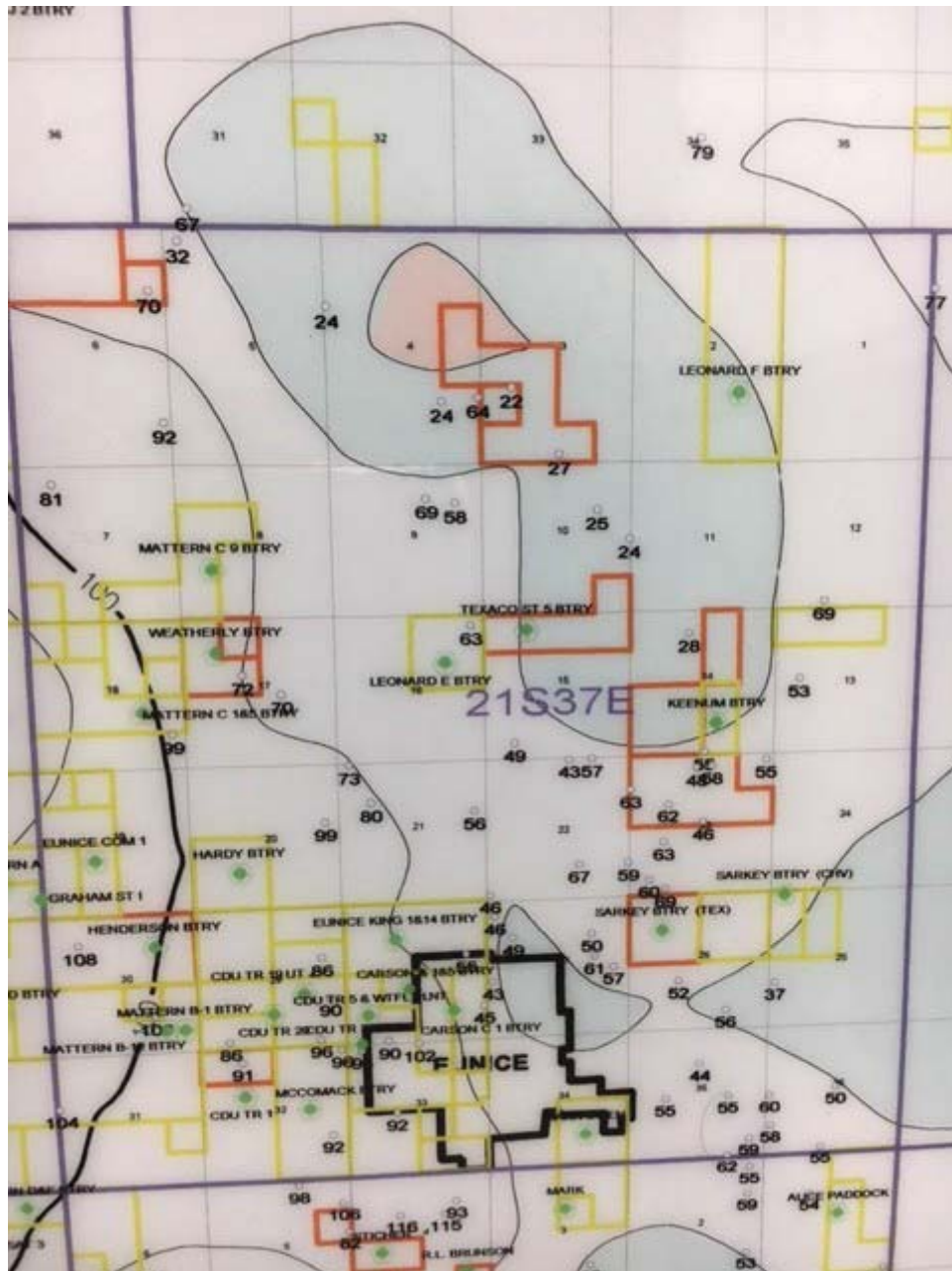
SOUTH, N 32.45135 W-103.14027

EAST, N 32.45165 W-103.14012

WEST, N 32.45162 W-103.14035



Chevron, SJ Sarkeys 26 #001  
U/L E, Section 26, T21S, R37E  
Groundwater: 50'-75'





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">CP 01274 POD1</a>		CP	LE	2	1	26	21S	37E		674992	3591934	<input type="text"/>	196	60	
<a href="#">CP 01274 POD2</a>		CP	LE	2	1	26	21S	37E		674992	3591934	<input type="text"/>	196	60	
<a href="#">CP 00253 POD1</a>		CP	LE	3	4	2	27	21S	37E	674315	3591918*	<input type="text"/>	514	101	
<a href="#">CP 01004 POD1</a>		CP	LE	4	2	4	27	21S	37E	674616	3591478	<input type="text"/>	584	70	41 29
<a href="#">CP 00249 POD1</a>		CP	LE	2	3	2	27	21S	37E	674113	3592111*	<input type="text"/>	709	102	
<a href="#">CP 00250 POD1</a>		CP	LE	2	3	2	27	21S	37E	674113	3592111*	<input type="text"/>	709	101	
<a href="#">CP 01003 POD1</a>		CP	LE	1	3	3	26	21S	37E	674669	3591279	<input type="text"/>	762	79	43 36
<a href="#">CP 00017 POD1</a>		CP	LE	2	1	2	27	21S	37E	674106	3592513*	<input type="text"/>	862	101	
<a href="#">CP 00881</a>			LE	4	4	22	21S	37E		674402	3592824*	<input type="text"/>	899	95	53 42
<a href="#">CP 01001 POD1</a>		CP	LE	2	3	4	27	21S	37E	674108	3591371	<input type="text"/>	966	72	40 32
<a href="#">CP 01002 POD1</a>		CP	LE	3	4	4	27	21S	37E	674258	3591182	<input type="text"/>	1013	75	39 36
<a href="#">CP 00293 POD1</a>			LE	2	4	1	27	21S	37E	673711	3592104*	<input type="text"/>	1109	80	
<a href="#">CP 00251 POD1</a>		CP	LE	2	3	4	22	21S	37E	674099	3592915*	<input type="text"/>	1142	103	
<a href="#">CP 00252 POD1</a>		CP	LE	4	2	4	22	21S	37E	674493	3593125*	<input type="text"/>	1145	106	78 28
<a href="#">CP 01540 POD1</a>		CP	LE	1	1	1	35	21S	37E	674374	3590848	<input type="text"/>	1259	51	36 15
<a href="#">CP 01222 POD3</a>		CP	LE	2	4	4	23	21S	37E	676036	3592871	<input type="text"/>	1481	60	48 12
<a href="#">CP 00220 POD1</a>		CP	LE	1	1	3	25	21S	37E	676332	3591753*	<input type="text"/>	1538	75	
<a href="#">CP 00235 POD9</a>		CP	LE	3	4	1	23	21S	37E	675090	3593542*	<input type="text"/>	1539	94	58 36
<a href="#">CP 00736</a>			LE	3	1	27	21S	37E		673211	3591997*	<input type="text"/>	1607	120	76 44
<a href="#">CP 01222 POD2</a>		CP	LE	2	2	2	35	21S	37E	676071	3591014	<input type="text"/>	1611	60	48 12
<a href="#">CP 01222 POD1</a>		CP	LE	2	2	2	35	21S	37E	676081	3591023	<input type="text"/>	1613	58	48 10
<a href="#">CP 01222 POD4</a>		CP	LE	2	2	2	35	21S	37E	676102	3591017	<input type="text"/>	1633	59	44 15
<a href="#">CP 00238 POD1</a>		CP	LE	3	3	2	23	21S	37E	675492	3593549*	<input type="text"/>	1664	81	

Average Depth to Water: 50 feet

Minimum Depth: 36 feet

Maximum Depth: 78 feet

Record Count: 23

UTMNAD83 Radius Search (in meters):

Easting (X): 674818

Northing (Y): 3592027

Radius: 1700

\*UTM location was derived from PLSS - see Help

Public Land Survey System (PLSS)

Q64:

Q16:

SW

Q4:

NW

Sec:

26

Tws:

21S

Rng:

37E

State Plane Coordinate System - NAD27

X:

0

ft

Y:

0

ft

Zone:

State Plane Coordinate System - NAD83

X:

0

ft

Y:

0

ft

Zone:

Degrees/Minutes/Seconds

Longitude (X):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

Latitude (Y):

Degrees:

0

°

Minutes:

0

'

Seconds:

0

"

UTM - NAD27

Easting (X):

0

mtrs

Northing (Y):

0

mtrs

Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X):

674818.0

mtrs

Northing (Y):

3592027.0

mtrs

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

		Sample	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'	SP1 @ 5'	SP1 @ 6'	SP1 @ 11'	SP1 @ 16'
	Analyte	Date	mg/Kg	3/23/17	7/10/17	7/10/17	7/10/17	7/10/17	7/10/17	7/10/17	7/10/17
	Benzene	BTEX 8021B	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Toluene	BTEX 8021B	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Ethylbenzene	BTEX 8021B	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
	Total BTEX	BTEX 8021B	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
	Chloride	SM4500Cl-B	2320	144	1060	1060	304	336	64	64	80
	GRO	TPH 8015M	<100	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	DRO	TPH 8015M	22300	1130	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'	SP2 @ 9'	SP2 @ 14'
	Analyte	Date						
	Method							
	BTEX 8021B		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes			<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes			<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX			<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride			112	1010	672	48	48	48
GRO			<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
GRO			787	<10.0	<10.0	<10.0	<10.0	<10.0

		Sample	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'	SP3 @ 9'	SP3 @ 14'
	Analyte	Method	Date	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		<0.050	<0.050	<0.050	<0.050	<0.050
	Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
	Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150
	Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300
	Chloride	SM4500ClB		160	704	432	48	48
	GRO	TPH 8015M		<50.0	<10.0	<10.0	<10.0	<10.0
	DRO	TPH 8015M		3290	<10.0	<10.0	<10.0	<10.0

		Sample	SP4 @ 1'	SP4 @ 2'	SP4 @ 3	SP4 @ 4'	SP4 @ 9'	SP4 @ 14'
	Analyte	Method	Date					
			3/23/17	7/10/17	7/10/17	7/10/17	7/10/17	7/10/17
			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	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Total Xylenes	BTEX 8021B	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
	Total BTEX	BTEX 8021B	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
	Chloride	SM4500ClB	160	544	80	48	48	32
	GRO	TPH 8015M	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0
	DRO	TPH 8015M	3230	<10.0	<10.0	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	NORTH @ SURFACE	
			3/24/17	mg/Kg
Benzene	BTEX 8021B			<0.050
Toluene	BTEX 8021B			<0.050
Ethylbenzene	BTEX 8021B			<0.050
Total Xylenes	BTEX 8021B			<0.150
Total BTEX	BTEX 8021B			<0.300
Chloride	SM4500Cl-B			48
GRO				<10.0
DRO	TPH 8015M			<10.0

Analyte	Method	Sample Date	EAST @ SURFACE	
			3/24/17	mg/Kg
Benzene	BTEX 8021B			<0.050
Toluene	BTEX 8021B			<0.050
Ethylbenzene	BTEX 8021B			<0.050
Total Xylenes	BTEX 8021B			<0.150
Total BTEX	BTEX 8021B			<0.300
Chloride	SM4500Cl-B			32
GRO				<10.0
DRO	TPH 8015M			<10.0

Analyte	Method	Sample Date	SOUTH @ SURFACE	
			3/24/17	mg/Kg
Benzene	BTEX 8021B			<0.050
Toluene	BTEX 8021B			<0.050
Ethylbenzene	BTEX 8021B			<0.050
Total Xylenes	BTEX 8021B			<0.150
Total BTEX	BTEX 8021B			<0.300
Chloride	SM4500Cl-B			16
GRO				<10.0
DRO	TPH 8015M			<10.0

Analyte	Method	Sample Date	WEST @ SURFACE	
			3/24/17	mg/Kg
Benzene	BTEX 8021B			<0.050
Toluene	BTEX 8021B			<0.050
Ethylbenzene	BTEX 8021B			<0.050
Total Xylenes	BTEX 8021B			<0.150
Total BTEX	BTEX 8021B			<0.300
Chloride	SM4500Cl-B			16
GRO				<10.0
DRO	TPH 8015M			<10.0

Analyte	Method	Sample Date	SP5 @ SURFACE	SP5 @ 1'	SP5 @ 2'	SP5 @ 3'	SP5 @ 8'	SP5 @ 13'
			3/23/17 mg/Kg	3/23/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 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		0.064	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.26	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		0.324	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500C-B		800	192	416	64	32	32
GRO	TPH 8015M		<100	<50.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		24400	4930	<10.0	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	SP6 @ 1'	SP6 @ 2'	SP6 @ 3'	SP6 @ 4'	SP6 @ 9'	SP6 @ 14'
			3/23/17 mg/Kg	3/24/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 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		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500C-B		176	48	464	432	64	48
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		127	<10.0	<10.0	<10.0	<10.0	<10.0

Analyte	Method	Sample Date	SP7 @ SURFACE	SP7 @ 1'	SP7 @ 2'	SP7 @ 3'	SP7 @ 4'	SP7 @ 5'	SP7 @ 10'	SP7 @ 15'
			3/23/17 mg/Kg	3/23/17 mg/Kg	3/24/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg	7/10/17 mg/Kg
Benzene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.200	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		1.17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		4.41	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		5.58	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500C-B		368	160	32	3200	512	48	64	48
GRO	TPH 8015M		405	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		39900	121	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0



April 04, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SJ SARKEY

Enclosed are the results of analyses for samples received by the laboratory on 03/28/17 11:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



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: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ SURFACE (H700805-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/29/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/29/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/29/2017	ND	4.88	81.3	6.00	1.89	
Total BTEX	<0.300	0.300	03/29/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.2 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2320	16.0	03/29/2017	ND	448	112	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	<100	100	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	22300	100	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 98.2 % 25.1-158

Surrogate: 1-Chlorooctadecane 661 % 26.8-170

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: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 1 (H700805-02)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/29/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/29/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/29/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	<0.300	0.300	03/29/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/29/2017	ND	448	112	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	<50.0	50.0	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	1130	50.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 85.0 % 25.1-158

Surrogate: 1-Chlorooctadecane 70.0 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 1 (H700805-03)**

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	03/29/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/29/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/29/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/29/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	<0.300	0.300	03/29/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/29/2017	ND	448	112	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	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	787	10.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 95.1 % 25.1-158

Surrogate: 1-Chlorooctadecane 85.7 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 1 (H700805-04)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36		
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89		
Total BTX	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/29/2017	ND	448	112	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	<50.0	50.0	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	3290	50.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 80.4 % 25.1-158

Surrogate: 1-Chlorooctadecane 94.2 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 1 (H700805-05)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	<0.300	0.300	03/30/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/29/2017	ND	448	112	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	<50.0	50.0	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	3230	50.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 79.6 % 25.1-158

Surrogate: 1-Chlorooctadecane 95.0 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ SURFACE (H700805-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	0.064	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	0.260	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	0.324	0.300	03/30/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	03/29/2017	ND	448	112	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	<100	100	03/29/2017	ND	196	98.1	200	1.89		
DRO >C10-C28	24400	100	03/29/2017	ND	206	103	200	4.62		

Surrogate: 1-Chlorooctane 108 % 25.1-158

Surrogate: 1-Chlorooctadecane 652 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ 1 (H700805-07)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36		
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89		
Total BTX	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	03/29/2017	ND	448	112	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	<50.0	50.0	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	4930	50.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 87.8 % 25.1-158

Surrogate: 1-Chlorooctadecane 145 % 26.8-170

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 1 (H700805-08)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	<0.300	0.300	03/30/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/29/2017	ND	448	112	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	03/29/2017	ND	196	98.1	200	1.89	
DRO >C10-C28	127	10.0	03/29/2017	ND	206	103	200	4.62	

Surrogate: 1-Chlorooctane 96.4 % 25.1-158

Surrogate: 1-Chlorooctadecane 99.3 % 26.8-170

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 2 (H700805-09)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36		
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89		
Total BTEX	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/29/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 90.7 % 25.1-158

Surrogate: 1-Chlorooctadecane 101 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ SURFACE (H700805-10)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	03/30/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.200	0.200	03/30/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	1.17	0.200	03/30/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	4.41	0.600	03/30/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	5.58	1.20	03/30/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	03/29/2017	ND	448	112	400	3.51		

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	405	100	03/29/2017	ND	183	91.5	200	1.44		
DRO >C10-C28	39900	100	03/29/2017	ND	196	98.0	200	1.72		

Surrogate: 1-Chlorooctane 176 % 25.1-158

Surrogate: 1-Chlorooctadecane 1080 % 26.8-170

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**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/23/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 1 (H700805-11)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36	
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39	
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83	
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89	
Total BTX	<0.300	0.300	03/30/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/29/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	121	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 88.6 % 25.1-158

Surrogate: 1-Chlorooctadecane 94.8 % 26.8-170

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 2 (H700805-12)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36		
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89		
Total BTX	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/29/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 82.7 % 25.1-158

Surrogate: 1-Chlorooctadecane 81.2 % 26.8-170

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: NORTH SAMPLE @ SURFACE (H700805-13)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.71	85.4	2.00	1.36		
Toluene*	<0.050	0.050	03/30/2017	ND	1.66	82.9	2.00	1.39		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.71	85.6	2.00	1.83		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	4.88	81.3	6.00	1.89		
Total BTEx	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/29/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 88.4 % 25.1-158

Surrogate: 1-Chlorooctadecane 91.2 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: EAST SAMPLE @ SURFACE (H700805-14)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.97	98.4	2.00	0.122		
Toluene*	<0.050	0.050	03/30/2017	ND	1.82	91.1	2.00	0.367		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.80	89.8	2.00	0.165		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	5.13	85.5	6.00	0.155		
Total BTEx	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/29/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 88.9 % 25.1-158

Surrogate: 1-Chlorooctadecane 95.8 % 26.8-170

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SOUTH SAMPLE @ SURFACE (H700805-15)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.97	98.4	2.00	0.122		
Toluene*	<0.050	0.050	03/30/2017	ND	1.82	91.1	2.00	0.367		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.80	89.8	2.00	0.165		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	5.13	85.5	6.00	0.155		
Total BTEx	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/29/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 81.7 % 25.1-158

Surrogate: 1-Chlorooctadecane 86.4 % 26.8-170

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 03/28/2017  
Reported: 04/04/2017  
Project Name: SJ SARKEY  
Project Number: NONE GIVEN  
Project Location: CHEVRON

Sampling Date: 03/24/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: WEST SAMPLE @ SURFACE (H700805-16)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2017	ND	1.97	98.4	2.00	0.122		
Toluene*	<0.050	0.050	03/30/2017	ND	1.82	91.1	2.00	0.367		
Ethylbenzene*	<0.050	0.050	03/30/2017	ND	1.80	89.8	2.00	0.165		
Total Xylenes*	<0.150	0.150	03/30/2017	ND	5.13	85.5	6.00	0.155		
Total BTEx	<0.300	0.300	03/30/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/29/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/29/2017	ND	183	91.5	200	1.44	
DRO >C10-C28	<10.0	10.0	03/29/2017	ND	196	98.0	200	1.72	

Surrogate: 1-Chlorooctane 88.2 % 25.1-158

Surrogate: 1-Chlorooctadecane 93.3 % 26.8-170

Cardinal Laboratories

\*=Accredited Analyte

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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.
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

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\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

# ORDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



July 20, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: SJ SARKEY 26 #1

Enclosed are the results of analyses for samples received by the laboratory on 07/13/17 16:35.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



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: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 2 (H701823-01)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/17/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.80	96.6	6.00	1.33	
Total BTEx	<0.300	0.300	07/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 125 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1060	16.0	07/15/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 89.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.8 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 3 (H701823-02)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/17/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.80	96.6	6.00	1.33	
Total BTX	<0.300	0.300	07/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 128 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	07/15/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 83.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.3 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 4 (H701823-03)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2017	ND	1.72	86.1	2.00	0.932		
Toluene*	<0.050	0.050	07/17/2017	ND	1.84	92.0	2.00	1.38		
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.92	95.8	2.00	1.69		
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.80	96.6	6.00	1.33		
Total BTEX	<0.300	0.300	07/17/2017	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	07/15/2017	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 90.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 5 (H701823-04)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/17/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.80	96.6	6.00	1.33	
Total BTX	<0.300	0.300	07/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 128 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/15/2017	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 69.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.1 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 6 (H701823-05)**

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	07/17/2017	ND	1.72	86.1	2.00	0.932		
Toluene*	<0.050	0.050	07/17/2017	ND	1.84	92.0	2.00	1.38		
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.92	95.8	2.00	1.69		
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.80	96.6	6.00	1.33		
Total BTEx	<0.300	0.300	07/17/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 130 % 72-148

Chloride, SM4500CI-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	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 83.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.0 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 11 (H701823-06)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.72	86.1	2.00	0.932		
Toluene*	<0.050	0.050	07/18/2017	ND	1.84	92.0	2.00	1.38		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	1.92	95.8	2.00	1.69		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	5.80	96.6	6.00	1.33		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 130 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 87.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 89.3 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP1 @ 16 (H701823-07)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/18/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/18/2017	ND	5.80	96.6	6.00	1.33	
Total BTX	<0.300	0.300	07/18/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 95.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.2 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 2 (H701823-08)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/18/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/18/2017	ND	5.80	96.6	6.00	1.33	
Total BTX	<0.300	0.300	07/18/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 134 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 95.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.8 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 3 (H701823-09)**

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	07/18/2017	ND	1.72	86.1	2.00	0.932	
Toluene*	<0.050	0.050	07/18/2017	ND	1.84	92.0	2.00	1.38	
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	1.92	95.8	2.00	1.69	
Total Xylenes*	<0.150	0.150	07/18/2017	ND	5.80	96.6	6.00	1.33	
Total BTX	<0.300	0.300	07/18/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 84.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.8 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 4 (H701823-10)**

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	07/18/2017	ND	1.72	86.1	2.00	0.932		
Toluene*	<0.050	0.050	07/18/2017	ND	1.84	92.0	2.00	1.38		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	1.92	95.8	2.00	1.69		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	5.80	96.6	6.00	1.33		
Total BTEx	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 135 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 89.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.0 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 9 (H701823-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2017	ND	2.00	100	2.00	2.61	
Toluene*	<0.050	0.050	07/17/2017	ND	1.95	97.7	2.00	2.27	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	2.09	105	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	6.27	105	6.00	2.63	
Total BTEX	<0.300	0.300	07/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-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	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 91.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 91.1 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 14 (H701823-12)**

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	07/18/2017	ND	2.00	100	2.00	2.61	
Toluene*	<0.050	0.050	07/18/2017	ND	1.95	97.7	2.00	2.27	
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.09	105	2.00	3.14	
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.27	105	6.00	2.63	
Total BTX	<0.300	0.300	07/18/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 72-148

Chloride, SM4500CI-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	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 88.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.4 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 2 (H701823-13)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 76.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 77.7 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 3 (H701823-14)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 90.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 93.7 % 34.7-157

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**Analytical Results For:**

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

 Received: 07/13/2017  
 Reported: 07/20/2017  
 Project Name: SJ SARKEY 26 #1  
 Project Number: NONE GIVEN  
 Project Location: CHEVRON, EUNICE, NM

 Sampling Date: 07/10/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 4 (H701823-15)**

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	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/18/2017	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 82.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.7 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 9 (H701823-16)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20	
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30	
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73	
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86	
Total BTX	<0.300	0.300	07/18/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 72-148

Chloride, SM4500CI-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	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 85.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.4 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 14 (H701823-17)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	194	97.1	200	1.66	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	204	102	200	1.07	

Surrogate: 1-Chlorooctane 87.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.1 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 2 (H701823-18)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 125 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 83.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.2 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 3 (H701823-19)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 128 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 84.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 78.8 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 4 (H701823-20)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 128 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 86.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.4 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 9 (H701823-21)**

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	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 129 % 72-148

Chloride, SM4500CI-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	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 92.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.4 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP4 @ 14 (H701823-22)**

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	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 131 % 72-148

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	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 86.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.5 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ 2 (H701823-23)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/18/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/18/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/18/2017	ND	6.19	103	6.00	1.86		
Total BTEX	<0.300	0.300	07/18/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 132 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 90.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 94.1 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ 3 (H701823-24)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/19/2017	ND	1.79	89.7	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86	
Total BTX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 72-148

Chloride, SM4500CI-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	07/16/2017	ND	448	112	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	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 94.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 92.8 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ 8 (H701823-25)**

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	07/19/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 135 % 72-148

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	07/16/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 90.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.0 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP5 @ 13 (H701823-26)**

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	07/19/2017	ND	1.79	89.7	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86	
Total BTX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 72-148

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	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 96.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 96.2 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 2 (H701823-27)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/19/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 138 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 86.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.7 % 34.7-157

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**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 3 (H701823-28)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/19/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86		
Total BTX	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 139 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/17/2017	ND	184	92.1	200	0.578	
DRO >C10-C28	<10.0	10.0	07/17/2017	ND	190	95.2	200	1.77	

Surrogate: 1-Chlorooctane 83.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.6 % 34.7-157

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**Analytical Results For:**

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

 Received: 07/13/2017  
 Reported: 07/20/2017  
 Project Name: SJ SARKEY 26 #1  
 Project Number: NONE GIVEN  
 Project Location: CHEVRON, EUNICE, NM

 Sampling Date: 07/10/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 4 (H701823-29)**

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	07/19/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86		
Total BTEx	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 141 % 72-148

Chloride, SM4500CI-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	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 96.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 96.3 % 34.7-157

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 9 (H701823-30)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/19/2017	ND	1.79	89.7	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86		
Total BTEx	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 141 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 99.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 97.0 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP6 @ 14 (H701823-31)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/19/2017	ND	1.79	89.7	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86	
Total BTX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 144 % 72-148

Chloride, SM4500CI-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	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 84.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.0 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 2 (H701823-32)**

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	07/19/2017	ND	1.79	89.7	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.94	96.8	2.00	2.30	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.73	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.19	103	6.00	1.86	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 146 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3200	16.0	07/17/2017	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 96.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 97.9 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 3 (H701823-33)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 90.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 90.4 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 4 (H701823-34)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20		
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21		
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07		
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563		
Total BTEx	<0.300	0.300	07/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 100 % 28.3-164

Surrogate: 1-Chlorooctadecane 101 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 5 (H701823-35)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 93.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.3 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 10 (H701823-36)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 104 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/13/2017  
Reported: 07/20/2017  
Project Name: SJ SARKEY 26 #1  
Project Number: NONE GIVEN  
Project Location: CHEVRON, EUNICE, NM

Sampling Date: 07/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SP7 @ 15 (H701823-37)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<0.050	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<0.300	0.300	07/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/17/2017	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	4.26	
DRO >C10-C28	<10.0	10.0	07/18/2017	ND	214	107	200	3.63	

Surrogate: 1-Chlorooctane 86.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.8 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager



# CARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		P.O. #:		BILL TO										ANALYSIS REQUEST																					
Project Manager: Cliff Brunson		Company: <i>Chivon</i>																																	
Address: P.O. Box 805		Attn:																																	
City: Hobbs		Address:																																	
Phone #: 575-397-6388		City:																																	
Fax #: 575-397-0397		State:																																	
Project #:		Zip:																																	
Project Name: <i>S.I. Survey 26 #1</i>																																			
Project Location: <i>Espey, NM</i>																																			
Sampler Name:		Fax #:																																	
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		BTEX		TPH		C/-	
<i>H701823</i>		<i>SP102</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>7/10</i>		<i>951</i>		<i>X</i>		<i>X</i>		<i>X</i>	
<i>2</i>		<i>SP103</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1002</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>3</i>		<i>SP104</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1017</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>4</i>		<i>SP105</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1030</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>5</i>		<i>SP106</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1041</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>6</i>		<i>SP107</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1058</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>7</i>		<i>SP108</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1114</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>8</i>		<i>SP109</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1125</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>9</i>		<i>SP110</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1129</i>		<i>X</i>		<i>X</i>		<i>X</i>			
<i>10</i>		<i>SP111</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>		<i>1129</i>		<i>X</i>		<i>X</i>		<i>X</i>			
PLEASE NOTE: Laboratory 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>Cliff Brunson</i>		Date: <i>7-13-17</i>		Time: <i>4:35</i>		Received By: <i>Jawana Clark</i>		Date: <i>7-13-17</i>		Time: <i>4:35</i>		Sample Condition: <i>Cool</i>		Intact: <i>Yes</i>		Checked By: <i>(Initials)</i>		Phone Result: <i>7-13-17</i>		Fax Result: <i>7-13-17</i>		Add'l Phone #: <i>7-13-17</i>		Add'l Fax #: <i>7-13-17</i>		REMARKS:							
Delivered By: (Circle One) <i>0.42</i>		Sampler - UPS - Bus - Other: <i>Corrected-0.452</i>																																	

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



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**Company Name:** BBC International, Inc.

**Project Manager:** Cliff Brunson

**Address:** P.O. Box 805

**City:** Hobbs

**Phone #:** 575-397-6388

**Project #:**

**Project Name:** SW Survey 26-1

**Project Location:** Eagle

**Sample Name:** V.O

**State:** NM **Zip:** 88241

**Fax #:** 575-397-0397

**Project Owner:** Chevron

**City:**

**State:** **Zip:**

**Phone #:**

**Fax #:**

**FOR LAB USE ONLY**

**Lab I.D.**

**Sample I.D.**

**BILL TO**

**P.O. #:**

**Company:** Chevron

**Attn:**

**Address:**

**City:**

**State:** **Zip:**

**Phone #:**

**Fax #:**

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:			ACID/BASE:	ICE / COOL	OTHER:	BTEX	TPH	C/-
H701823	SP209	C	1	X						7/10	1140	X	X	X			
11	SP209	C	1	X							1155	X	X	X			
12	SP303	C	1	X							1209	X	X	X			
13	SP303	C	1	X							1251	X	X	X			
14	SP403	C	1	X							10/1	X	X	X			
15	SP403	C	1	X							11/1	X	X	X			
16	SP403	C	1	X							122	X	X	X			
17	SP403	C	1	X							129	X	X	X			
18	SP403	C	1	X							133	X	X	X			
19	SP403	C	1	X							140	X	X	X			
20	SP403	C	1	X													

**Relinquished By:** Cliff Brunson

**Date:** 7-13-17

**Time:** 4:35

**Received By:** [Signature]

**Date:** 7-13-17

**Time:** 4:35

**Sample Condition:** Cool ☒ Intact ☒

**Checked By:** [Signature]

**Remarks:**





# CARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

5/4

Company Name: BBC International, Inc.		P.O. #:		BILL TO																					
Project Manager: Cliff Brunson		Company:		ANALYSIS REQUEST																					
Address: P.O. Box 805		Attn:																							
City: Hobbs		Address:																							
State: NM Zip: 88241		City:																							
Phone #: 575-397-6388		State:																							
Fax #: 575-397-0397		Zip:																							
Project #:		Project Owner:																							
Project Name: S.T. Sackey #26-1		City:																							
Project Location: Ence		State:																							
Sampler Name: v.e.		Phone #:																							
FOR LAB USE ONLY		Fax #:																							
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																	
H101823		SP409		7/10		147								BTEX											
21		SP409		153		153								TPH											
22		SP502		154		154								C-											
23		SP502		155		155																			
24		SP602		215		215																			
25		SP602		222		222																			
26		SP602		225		225																			
27		SP602		230		230																			
28		SP602		235		235																			
29		SP602																							
30		SP602																							

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients' exclusive remedy for any claim arising whether caused in contract or tort, shall be limited to the amount paid by the client for the analysis. 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>W.H. Conley</i>	Date: 7-13-14	Received By: <i>Guerra</i>	Sample Condition: <input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact	CHECKED BY: <i>Guerra</i>
Relinquished By: <i>W.H. Conley</i>	Date: 7-13-14	Received By: <i>Guerra</i>	Sample Condition: <input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact	CHECKED BY: <i>Guerra</i>
Delivered By: (Circle One) <i>UPS</i>	Date: 7-13-14	Received By: <i>Guerra</i>	Sample Condition: <input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact	CHECKED BY: <i>Guerra</i>
Sampler - UPS - Bus - Other: <i>Guerra</i>	Date: 7-13-14	Received By: <i>Guerra</i>	Sample Condition: <input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact	CHECKED BY: <i>Guerra</i>

REMARKS:

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





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### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

9/9

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

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Chevron USA Inc.	Contact: Josepha DeLeon	
Address: 6301 Deauville Blvd., Midland, TX 79706	Telephone No.: wk: 575-263-0424 Cell: 432-425-1528	
Facility Name: SJ Sarkeys 26 #001	Facility Type: Oil Well	
Surface Owner: Private	Mineral Owner: Private	API No. 30-025-06791

### LOCATION OF RELEASE

Unit Letter E	Section 26	Township 21S	Range 37E	Feet from the 1980	North/South Line North	Feet from the 660	East/West Line West	County Lea
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Latitude: 32.4516792 Longitude: 103.1401596

### NATURE OF RELEASE



Type of Release: Spill	Volume of Release: 3 barrels oil 34.83 barrels produced water	Volume Recovered: 3 barrels oil 34 barrels produced water
Source of Release: Stuffing Box	Date and Hour of Occurrence: 03/13/2017: 10:00 AM	Date and Hour of Discovery: 03/13/2017: 10:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu - NMOCD Shelly Tucker - BLM	
By Whom? Josie DeLeon	Date and Hour: 03/13/2017; 12:00 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

**By Olivia Yu at 8:34 am, Mar 27, 2017**

If a Watercourse was Impacted, Describe Fully.* NA
Describe Cause of Problem and Remedial Action Taken.* Oil and produced water spill due to stuffing box
Describe Area Affected and Cleanup Action Taken.*  Fluid was released onto caliche well pad. Vacuum truck extracted standing liquid. Recovered 3 barrels oil and 34 barrels produced water.

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

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Josepha DeLeon	Approved by Environmental Specialist: 	
Title: HES Specialist - Compliance Support - Environmental	Approval Date: <u>3/27/2017</u>	Expiration Date:
E-mail Address: jdx@chevron.com	Conditions of Approval: <u>see attached directive</u>	Attached <input checked="" type="checkbox"/>
Date: 03/24/2017 Phone: 575-263-0424		

\* Attach Additional Sheets If Necessary

1RP-4656

nOY1708631119

pOY1708631295



Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/27/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1R-4656 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 4/27/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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

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

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

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

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

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

**Jim Griswold**

OCD Environmental Bureau Chief  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
505-476-3465  
jim.griswold@state.nm.us