



## **DELINEATION WORKPLAN**

### **COG – WEST BRUSHY 8 FEDERAL SWD #1 (Leak Date: 5/27/17)**

**RP # 2RP-4240  
API # 30-015-31675**

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This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4240.

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:***

***COG will excavate the spill area as depicted on the following site diagram. The leak area near SP1 – SP3 (green shade on diagram) will be excavated to a depth of 1 foot. The leak area near SP4 – SP7, SB1, and SB2 (pink shade on diagram) will be excavated to a depth of 4 feet with an impermeable liner placed in the bottom of the excavation. The leak area near SP8 – SP10 (blue shade on diagram) will require zero 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.

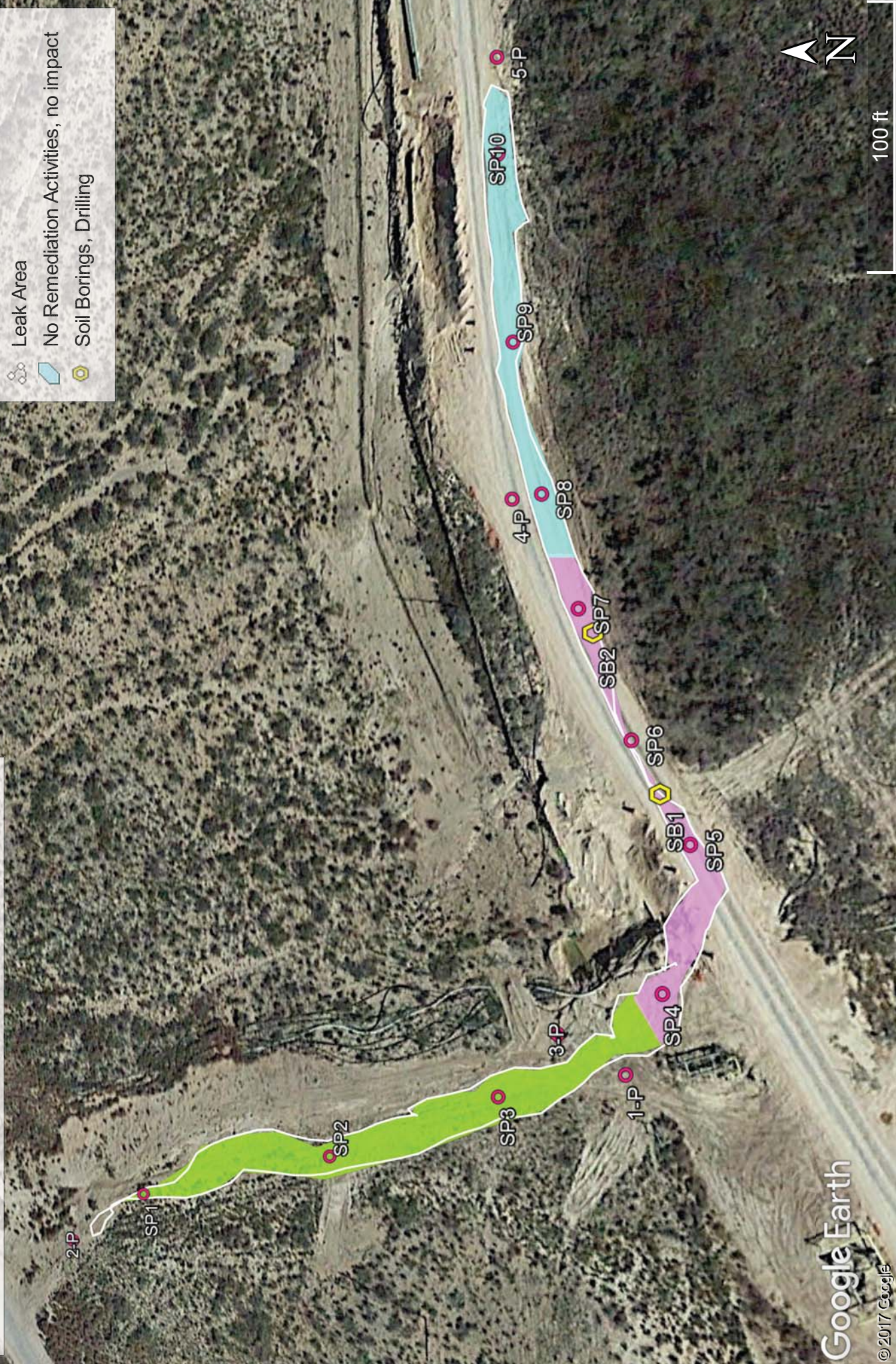


# COG, West Brushy 8 Federal SWD #1

Leak date: 05/27/2017 Eddy County,  
NM API# 30-015-31675, 2RP-4240

## Legend

- 1 ft Excavation
- 4 ft Excavation with liner
- Sample points
- Leak Area
- No Remediation Activities, no impact
- Soil Borings, Drilling





## COG, West Brushy 8 Federal SWD #1

### Sample points, hand auger

SP1, N 32.06473 W-103.99833

SP2, N 32.06442 W-103.99811

SP3, N 32.06418 W-103.99797

SP4, N 32.06397 W-103.99780

SP5, N 32.06394 W-103.99761

SP6, N 32.06400 W-103.99748

SP7, N 32.06407 W-103.99731

SP8, N 32.06411 W-103.99715

SP9, N 32.06415 W-103.99694

SP10, N 32.06417 W-103.99668

1-P, N 32.06402 W-103.99792

2-P, N 32.06486 W-103.99833

3-P, N 32.06410 W-103.99788

4-P, N 32.06415 W-103.99715

5-P, N 32.06417 W-103.99655

### Soil Borings, drilling

SB1, N 32.06397 W-103.99794

SB2, N 32.06405 W-103.99734

**COG, West Brushy 8 Federal SWD #1**

**U/L A, Section 8, T26S, R29E**

**Groundwater: 100'-125'**





# 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="#">C_03507_POD1</a>		C	ED	1	3	3	05	26S	29E	593064	3548313	<input type="text"/>	1445	140	78 62
<a href="#">C_03508_POD1</a>		C	ED	1	3	3	05	26S	29E	593063	3548361	<input type="text"/>	1464	140	75 65

Average Depth to Water: **76 feet**

Minimum Depth: **75 feet**

Maximum Depth: **78 feet**

**Record Count: 2**

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 594416

**Northing (Y):** 3547801

**Radius:** 1700

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

3/22/17 11:11 AM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER

Public Land Survey System (PLSS)

☐

Q64:

Q16:

NE

Q4:

NE

Sec:

08

Tws:

26S

Rng:

29E

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):

594416.0

mtrs

Northing (Y):

3547801.0

mtrs

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

Laboratory Analytical Results Summary  
West Brushy 8 Federal SWD #1

Analyte	Method	Sample		SP1 @ 1'	SP1 @ 2'	SP1 @ 7'
		Date		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a	n/a
Toluene	BTEX 8021B			<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a	n/a
Total BTEX	BTEX 8021B			<0.300	n/a	n/a
Chloride	SM4500Cl-B			2920	112	96
GRO	TPH 8015M			<10.0	n/a	n/a
DRO	TPH 8015M			<10.0	n/a	n/a

Analyte	Method	Sample		SP2 @ 1'	SP2 @ 2'	SP2 @ 7'
		Date		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a	n/a
Toluene	BTEX 8021B			<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a	n/a
Total BTEX	BTEX 8021B			<0.300	n/a	n/a
Chloride	SM4500Cl-B			2960	112	64
GRO	TPH 8015M			<10.0	n/a	n/a
DRO	TPH 8015M			<10.0	n/a	n/a

Analyte	Method	Sample		SP3 @ 1'	SP3 @ 2'	SP3 @ 7'
		Date		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a	n/a
Toluene	BTEX 8021B			<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a	n/a
Total BTEX	BTEX 8021B			<0.300	n/a	n/a
Chloride	SM4500Cl-B			2840	16	32
GRO	TPH 8015M			<10.0	n/a	n/a
DRO	TPH 8015M			<10.0	n/a	n/a

Analyte	Method	Sample		SP4 @ 1'	SP4 @ 3'	SP4 @ 4'
		Date		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a	n/a
Toluene	BTEX 8021B			<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a	n/a
Total BTEX	BTEX 8021B			<0.300	n/a	n/a
Chloride	SM4500Cl-B			9460	4400	624
GRO	TPH 8015M			<10.0	n/a	n/a
DRO	TPH 8015M			<10.0	n/a	n/a

Analyte	Method	Sample		SP5 @ 1'	SP5 @ 3'	SP5 @ 4'
		Date		mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a	n/a
Toluene	BTEX 8021B			0.315	n/a	n/a
Ethylbenzene	BTEX 8021B			0.071	n/a	n/a
Total Xylenes	BTEX 8021B			0.428	n/a	n/a
Total BTEX	BTEX 8021B			0.814	n/a	n/a
Chloride	SM4500Cl-B			7330	7330	5200
GRO	TPH 8015M			<10.0	n/a	n/a
DRO	TPH 8015M			<10.0	n/a	n/a

Analyte	Method	Sample		SP6 @ 1'	SP6 @ 3'
		Date		mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a
Toluene	BTEX 8021B			<0.050	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a
Total BTEX	BTEX 8021B			<0.300	n/a
Chloride	SM4500Cl-B			8000	5860
GRO	TPH 8015M			<10.0	n/a
DRO	TPH 8015M			<10.0	n/a

Analyte	Method	Sample		SP7 @ 1'	SP7 @ 3'
		Date		mg/kg	mg/kg
Benzene	BTEX 8021B			<0.050	n/a
Toluene	BTEX 8021B			<0.050	n/a
Ethylbenzene	BTEX 8021B			<0.050	n/a
Total Xylenes	BTEX 8021B			<0.150	n/a
Total BTEX	BTEX 8021B			<0.300	n/a
Chloride	SM4500Cl-B			7200	3480
GRO	TPH 8015M			<10.0	n/a
DRO	TPH 8015M			<10.0	n/a

Analyte	Method	Sample		SP8 @ SURFACE
		Date		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			144
GRO	TPH 8015M			<10.0
DRO	TPH 8015M			125

Analyte	Method	Sample		SP9 @ SURFACE
		Date		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			176
GRO	TPH 8015M			<10.0
DRO	TPH 8015M			78.3

Analyte	Method	Sample		SP10 @ SURFACE
		Date		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			96
GRO	TPH 8015M			<10.0
DRO	TPH 8015M			35.7

		Sample	1-P @ SURFACE
Analyte	Method	Date	7/14/17
			mg/kg
Chloride	SM4500Cl-B		112

		Sample	2-P @ SURFACE
Analyte	Method	Date	7/14/17
			mg/kg
Chloride	SM4500Cl-B		64

		Sample	3-P @ SURFACE
Analyte	Method	Date	7/14/17
			mg/kg
Chloride	SM4500Cl-B		48

		Sample	4-P @ SURFACE
Analyte	Method	Date	7/14/17
			mg/kg
Chloride	SM4500Cl-B		64

		Sample	5-P @ SURFACE
Analyte	Method	Date	7/14/17
			mg/kg
Chloride	SM4500Cl-B		48



Laboratory Analytical Results Summary  
West Brushy 8 Fed #1 SWD

	Sample ID	SB1 @ 8'	SB1 @ 10'	SB1 @ 15'	SB1 @ 20'	SB1 @ 25'	SB1 @ 30'	SB1 @ 35'	SB1 @ 40'	SB1 @ 45'
Analyte	Method	Date	10/11/17	10/11/17	10/11/17	10/11/17	10/11/17	10/11/17	10/11/17	10/11/17
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Chloride	SM4500C1-B	1260	3680	752	944	928	688	592	544	416

	Sample ID	SB2 @ 8'	SB2 @ 10'	SB2 @ 15'	SB2 @ 20'	SB2 @ 25'
Analyte	Method	Date	10/11/17	10/11/17	10/11/17	10/11/17
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Chloride	SM4500C1-B	2920	176	144	304	544

July 20, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: W BRUSHY 8 FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 07/13/17 16:50.

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:	07/13/2017	Sampling Date:	07/03/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP1 @ 1 (H701824-01)**

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	1.88	94.1	2.00	1.32	
Toluene*	<0.050	0.050	07/17/2017	ND	1.73	86.5	2.00	2.22	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.78	89.2	2.00	3.42	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.39	89.9	6.00	3.60	
Total BTEX	<0.300	0.300	07/17/2017	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	2920	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 85.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.1 % 34.7-157

**Sample ID: SP1 @ 2 (H701824-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/17/2017	ND	416	104	400	0.00	

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	Sampling Date:	07/03/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP1 @ 7 (H701824-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/17/2017	ND	416	104	400	0.00		

**Sample ID: SP2 @ 1 (H701824-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2017	ND	1.88	94.1	2.00	1.32	
Toluene*	<0.050	0.050	07/17/2017	ND	1.73	86.5	2.00	2.22	
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.78	89.2	2.00	3.42	
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.39	89.9	6.00	3.60	
Total BTEX	<0.300	0.300	07/17/2017	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	2960	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 79.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 75.0 % 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	Sampling Date:	07/03/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP2 @ 2 (H701824-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/17/2017	ND	416	104	400	0.00		

**Sample ID: SP2 @ 7 (H701824-06)**

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		

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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	Sampling Date:	07/03/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP3 @ 1 (H701824-07)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2017	ND	1.88	94.1	2.00	1.32		
Toluene*	<0.050	0.050	07/17/2017	ND	1.73	86.5	2.00	2.22		
Ethylbenzene*	<0.050	0.050	07/17/2017	ND	1.78	89.2	2.00	3.42		
Total Xylenes*	<0.150	0.150	07/17/2017	ND	5.39	89.9	6.00	3.60		
Total BTEx	<0.300	0.300	07/17/2017	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	2840	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 58.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 56.5 % 34.7-157

**Sample ID: SP3 @ 2 (H701824-08)**

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

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	Sampling Date:	07/03/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP3 @ 7 (H701824-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/17/2017	ND	416	104	400	0.00	

**Sample ID: SP4 @ 1 (H701824-10)**

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	07/19/2017	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	9460	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 86.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.7 % 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	Sampling Date:	07/10/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP4 @ 3 (H701824-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4400	16.0	07/17/2017	ND	416	104	400	0.00		

**Sample ID: SP4 @ 4 (H701824-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/17/2017	ND	416	104	400	0.00	

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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	Sampling Date:	07/10/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP5 @ 1 (H701824-13)**

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	07/19/2017	ND	1.89	94.3	2.00	2.20	
Toluene*	<b>0.315</b>	0.050	07/19/2017	ND	1.88	94.0	2.00	1.21	
Ethylbenzene*	<b>0.071</b>	0.050	07/19/2017	ND	2.05	102	2.00	1.07	
Total Xylenes*	<b>0.428</b>	0.150	07/19/2017	ND	6.09	102	6.00	0.563	
Total BTEX	<b>0.814</b>	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	<b>7330</b>	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 84.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.0 % 34.7-157

**Sample ID: SP5 @ 3 (H701824-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>7330</b>	16.0	07/17/2017	ND	416	104	400	0.00	

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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	Sampling Date:	07/10/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP5 @ 4 (H701824-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5200	16.0	07/17/2017	ND	416	104	400	0.00		

**Sample ID: SP6 @ 1 (H701824-16)**

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	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	8000	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 86.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.7 % 34.7-157

Cardinal Laboratories

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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	Sampling Date:	07/10/2017
Reported:	07/20/2017	Sampling Type:	Soil
Project Name:	W BRUSHY 8 FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - MALAGA		

**Sample ID: SP6 @ 3 (H701824-17)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5860	16.0	07/17/2017	ND	416	104	400	0.00	

**Sample ID: SP7 @ 1 (H701824-18)**

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	07/19/2017	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) 107 % 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	7200	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 88.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.3 % 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: W BRUSHY 8 FEDERAL #1  
Project Number: NOT GIVEN  
Project Location: COG - MALAGA

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

**Sample ID: SP7 @ 3 (H701824-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3480	16.0	07/17/2017	ND	416	104	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

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



ARDINAL LABORATORIES

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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>(505) 393-2326 FAX (505) 393-2476</b>									
<b>Company Name:</b> BBC International, Inc.					<b>P.O. #:</b>				
<b>Project Manager:</b> Cliff Brunson					<b>Company:</b>				
<b>Address:</b> P.O. Box 805					<b>Attn:</b>				
<b>City:</b> Hobbs					<b>State:</b> NM	<b>Zip:</b> 88241			
<b>Phone #:</b> 575-397-6388					<b>Fax #:</b> 575-397-0397				
<b>Project #:</b>					<b>Project Owner:</b> COG				
<b>Project Name:</b> W. Brushy & Federal #1					<b>City:</b>	<b>State:</b>	<b>Zip:</b>		
<b>Project Location:</b> MZBpc					<b>Phone #:</b>				
<b>Sample Name:</b> L.D.					<b>Fax #:</b>				

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	Cl-		
H701824	Splc Z	C-1	X							7-3	1130	X	X	X			
1	Splc Z	C-1	X								1151	X	X	X			
2	Splc Z	C-1	X								1244	X	X	X			
3	Splc Z	C-1	X								1222	X	X	X			
4	Splc Z	C-1	X								1501	X	X	X			
5	Splc Z	C-1	X								201	X	X	X			
6	Splc Z	C-1	X								215	X	X	X			
7	Splc Z	C-1	X								240	X	X	X			
8	Splc Z	C-1	X								7-10 930	X	X	X			
9	Splc Z	C-1	X									X	X	X			
10	Splc Z	C-1	X									X	X	X			

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<b>Relinquished By:</b> [Signature]	<b>Date:</b> 7-13-17	<b>Received By:</b> [Signature]	<b>Date:</b> 7-13-17
<b>Time:</b>	<b>Time:</b>	<b>Time:</b>	<b>Time:</b>

**Delivered By:** (Circle One) S.G.E.      **Checked By:** [Signature]      **Initials:** [Signature]

**Sampler - UPS - Bus - Other:** [Signature]      **Weighted S.C.S?** [Signature]      **No** ☒ **Yes** ☐

<b>REMARKS:</b>	<b>PHONE RESULT:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Add'l Phone #:</b>
	<b>FAX RESULT:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Add'l Fax #:</b>



ARDINAL LABORATORIES

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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

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:

Project Location:

Sample Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H701824

SP403

SP501

SP601

SP701

SP801

SP901

SP1001

SP1101

SP1201

SP1301

SP1401

SP1501

SP1601

SP1701

SP1801

SP1901

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

PRESERV

SAMPLING

MATRIX

COMPANY

ATTN

ADDRESS

CITY

STATE

ZIP

PHONE #

FAX #

REMARKS

PHONE RESULT

ADD'l PHONE #

FAX RESULT

ADD'l FAX #

REMARKS

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Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Delivered By:

Circle One

UPS

Bus

Other

Sample Condition

Cool

Intact

Checked By:

Initials

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No



July 24, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: WEST BRUSHY 8 FEDERAL SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 07/17/17 11:31.

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:	07/17/2017	Sampling Date:	07/14/2017
Reported:	07/24/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA		

**Sample ID: SP 8 @ SURFACE (H701846-01)**

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	07/19/2017	ND	1.88	93.8	2.00	0.312	
Toluene*	<0.050	0.050	07/19/2017	ND	1.92	96.1	2.00	0.0471	
Ethylbenzene*	<0.050	0.050	07/19/2017	ND	2.09	105	2.00	0.472	
Total Xylenes*	<0.150	0.150	07/19/2017	ND	6.23	104	6.00	0.302	
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	144	16.0	07/18/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	2.81	
DRO >C10-C28	125	10.0	07/18/2017	ND	207	104	200	3.44	

Surrogate: 1-Chlorooctane 96.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 113 % 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:	07/17/2017	Sampling Date:	07/14/2017
Reported:	07/24/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA		

**Sample ID: SP 9 @ SURFACE (H701846-02)**

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	07/20/2017	ND	1.88	93.8	2.00	0.312	
Toluene*	<0.050	0.050	07/20/2017	ND	1.92	96.1	2.00	0.0471	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.09	105	2.00	0.472	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.23	104	6.00	0.302	
Total BTX	<0.300	0.300	07/20/2017	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	176	16.0	07/18/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	2.81	
DRO >C10-C28	78.3	10.0	07/18/2017	ND	207	104	200	3.44	

Surrogate: 1-Chlorooctane 91.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 102 % 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:	07/17/2017	Sampling Date:	07/14/2017
Reported:	07/24/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA		

**Sample ID: SP 10 @ SURFACE (H701846-03)**

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	07/20/2017	ND	1.88	93.8	2.00	0.312	
Toluene*	<0.050	0.050	07/20/2017	ND	1.92	96.1	2.00	0.0471	
Ethylbenzene*	<0.050	0.050	07/20/2017	ND	2.09	105	2.00	0.472	
Total Xylenes*	<0.150	0.150	07/20/2017	ND	6.23	104	6.00	0.302	
Total BTX	<0.300	0.300	07/20/2017	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	96.0	16.0	07/18/2017	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/18/2017	ND	199	99.5	200	2.81	
DRO >C10-C28	35.7	10.0	07/18/2017	ND	207	104	200	3.44	

Surrogate: 1-Chlorooctane 90.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 96.8 % 34.7-157

**Sample ID: 1 - P @ SURFACE (H701846-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/18/2017	ND	432	108	400	0.00		

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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:	07/17/2017	Sampling Date:	07/14/2017
Reported:	07/24/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALAGA		

**Sample ID: 2 - P @ SURFACE (H701846-05)**

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	07/18/2017	ND	432	108	400	0.00		

**Sample ID: 3 - P @ SURFACE (H701846-06)**

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	07/18/2017	ND	432	108	400	0.00	

**Sample ID: 4 - P @ SURFACE (H701846-07)**

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	07/18/2017	ND	432	108	400	0.00		

**Sample ID: 5 - P @ SURFACE (H701846-08)**

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	07/18/2017	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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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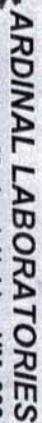
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Celey D. Keene, Lab Director/Quality Manager





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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476  
corrected 7.25



October 19, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: WEST BRUSHY 8 FEDERAL #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/13/17 13:33.

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:	10/13/2017	Sampling Date:	10/11/2017
Reported:	10/19/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

**Sample ID: SB 1 @ 8 (H702782-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	10/18/2017	ND	432	108	400	3.64	

**Sample ID: SB 1 @ 10 (H702782-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	10/18/2017	ND	432	108	400	3.64	

**Sample ID: SB 1 @ 15 (H702782-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	10/18/2017	ND	432	108	400	3.64	

**Sample ID: SB 1 @ 20 (H702782-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	10/18/2017	ND	432	108	400	3.64	

Cardinal Laboratories

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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:	10/13/2017	Sampling Date:	10/11/2017
Reported:	10/19/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

**Sample ID: SB 1 @ 25 (H702782-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	928	16.0	10/18/2017	ND	432	108	400	3.64		

**Sample ID: SB 1 @ 30 (H702782-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	10/18/2017	ND	432	108	400	3.64		

**Sample ID: SB 1 @ 35 (H702782-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	10/19/2017	ND	432	108	400	3.64		

**Sample ID: SB 1 @ 40 (H702782-08)**

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	10/19/2017	ND	432	108	400	3.64		

**Sample ID: SB 1 @ 45 (H702782-09)**

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	10/19/2017	ND	432	108	400	3.64	

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:	10/13/2017	Sampling Date:	10/11/2017
Reported:	10/19/2017	Sampling Type:	Soil
Project Name:	WEST BRUSHY 8 FEDERAL #1 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

**Sample ID: SB 2 @ 8 (H702782-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2920	16.0	10/19/2017	ND	432	108	400	3.64		

**Sample ID: SB 2 @ 10 (H702782-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	10/19/2017	ND	432	108	400	3.64	

**Sample ID: SB 2 @ 15 (H702782-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	10/19/2017	ND	432	108	400	3.64	

**Sample ID: SB 2 @ 20 (H702782-13)**

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	10/19/2017	ND	432	108	400	3.64	

**Sample ID: SB 2 @ 25 (H702782-14)**

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	10/19/2017	ND	432	108	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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





# ARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

Phone #: 575-397-6388

Project #:

Project Name: W. Brushy 8 Fed # 1 SWD

Project Location: Eddy County

Sample Name: Jeff Bruneau

### BILL TO

P.O. #:

Company: *Scg*

Attn:

Address: *370*

City:

State: Zip:

Phone #:

Fax #:

### ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

HTD2762

SB 1 6

2 SB 1 10

3 SB 1 15

4 SB 1 20

5 SB 1 25

6 SB 1 30

7 SB 1 35

8 SB 1 40

9 SB 1 45

10 SB 1 50

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

10/11/17

9:00

9:11

9:37

9:41

10:10

10:20

10:45

10:56

11:11

11:58

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Relinquished By:

Date:

Time:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Relinquished By:

Date:

Time:

Delivered By: (Circle One)

UPS

Bus

Other

Sample Condition

Cool Intact

Yes

No

Checked By:

Initials

Signature

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Relinquished By:

Date:

Time:

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

#75

Corrected +.85°C



# ARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs

Phone #: 575-397-6388

Project #:

Project Name: W. Brushy & Fed #1 SWD

Project Location: Eddy County

Sample Name: Jeff Ornelas

### BILL TO

P.O. #:

Company: Sanyo

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

### ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D. Sample I.D.

H7D7982

SB2 @ 10  
SB2 @ 15  
SB2 @ 20  
SB2 @ 25

10.13.17  
J. Ornelas

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

DATE

TIME

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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:

Date:

Received By:

REMARKS:

Time:

Time:

Phone Result:

☐ Yes ☐ No

☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

Relinquished By:

Date:

Received By:

Phone Result:

☐ Yes ☐ No

☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

Relinquished By:

Date:

Received By:

Phone Result:

☐ Yes ☐ No

☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

Delivered By: (Circle One)

Date:

Received By:

Phone Result:

☐ Yes ☐ No

☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

Sampler - UPS - Bus - Other:

Date:

Received By:

Phone Result:

☐ Yes ☐ No

☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

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

#25 Corrected +.85°C



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

NM OIL CONSERVATION  
ARTESIA DISTRICT

JUN 01 2017

Form C-141  
Revised August 8, 2011

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

RECEIVED

Release Notification and Corrective Action

NAB1715742101

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company:	COG Operating LLC 229137	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	West Brushy 8 Federal SWD #001	Facility Type:	SWD

Surface Owner:	Federal	Mineral Owner:		API No.	30-015-31675
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	08	26S	29E	660	North	330	East	Eddy

Latitude 32.063037 Longitude -103.997621

NATURE OF RELEASE

Type of Release:	Produced Water	Volume of Release:	30 bbls	Volume Recovered:	20 bbls
Source of Release:	Flowline	Date and Hour of Occurrence:	May 27, 2017 4:00 pm	Date and Hour of Discovery:	May 27, 2017 4:00 pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Ms. Weaver - NMOCD / Shelly Tucker - BLM		
By Whom?	Rebecca Haskell	Date and Hour:	May 27, 2017 7:41 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The release was due to a hole in the bottom of a fitting in a flowline. The fitting was replaced

Describe Area Affected and Cleanup Action Taken.\*

The release was within a pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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:	Rebecca Haskell	OIL CONSERVATION DIVISION	
Printed Name:	Rebecca Haskell	Approved by Environmental Specialist	Christa Wren
Title:	Senior HSE Coordinator	Approval Date:	6/5/17
E-mail Address:	rhaskell@concho.com	Expiration Date:	NIA
Date: June 1, 2017	Phone: 432-683-7443	Conditions of Approval:	See attached
		Attached	<input checked="" type="checkbox"/>

\* Attach Additional Sheets If Necessary

New forms can be found in the  
New Mexico State Website in forms:  
[http://www.emnrd.state.nm.us/  
oCD/forms.html](http://www.emnrd.state.nm.us/oCD/forms.html)

2RP-4240



Operator/Responsible Party,

The OCD has received the form C-141 you provided on **6/1/17** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP-4248 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 II office in Artesia on or before 7/1/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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



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

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

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

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

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

**Jim Griswold**

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

## Weaver, Crystal, EMNRD

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**From:** Rebecca Haskell <RHaskell@concho.com>  
**Sent:** Thursday, June 1, 2017 12:26 PM  
**To:** Weaver, Crystal, EMNRD; stucker@blm.gov  
**Cc:** Bratcher, Mike, EMNRD; Jim Amos (jamos@blm.gov)  
**Subject:** (C-141 Initial) West Brushy 8 Federal SWD #001 5/27/17 30-015-31675  
**Attachments:** West Brushy 8 Federal SWD #001 Initial C-141 5-27-17 (30-015-31675).pdf

Ms. Weaver / Ms. Tucker,

Please see the attached C-141 for your consideration. Please let me know if you have any questions or concerns.

Thank You,

Becky Haskell  
Senior HSE Coordinator  
COG Operating LLC  
600 W Illinois Avenue | Midland, TX 79701  
Direct: 432-818-2372 | Main: 432.683.7443  
Cell: 432-556-5130  
[rhaskell@concho.com](mailto:rhaskell@concho.com)



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**From:** Rebecca Haskell  
**Sent:** Saturday, May 27, 2017 8:41 PM  
**To:** Weaver, Crystal, EMNRD; stucker@blm.gov  
**Cc:** Mike Bratcher (Mike.Bratcher@state.nm.us); Jim Amos (jamos@blm.gov)  
**Subject:** (Notification) West Brushy 8 Federal SWD #001 5/27/17 30-015-31675

MS. WEAVER / MS. TUCKER,

COG OPERATING LLC IS REPORTING A RELEASE AT THE WEST BRUSHY 8 FEDERAL SWD #001 (30-015-31675)  
UNIT A SECTION 08 TOWNSHIP 26S RANGE 29E  
THE RELEASE OCCURRED AT APPROXIMATELY 4:00 PM ON 5-27-2017  
ESTIMATED RELEASED: APPROX. 30 BBLS PRODUCED WATER  
ESTIMATED RECOVERED: UNKNOWN AT THIS TIME

THE RELEASE WAS DUE TO A HOLE IN THE BOTTOM IN A FITTING IN A FLOWLINE. THE FITTING WAS REPLACED. THIS AREA IS BEING EVALUATED AND A C-141 WILL BE SUBMITTED. IF YOU HAVE ANY ADDITIONAL QUESTIONS PLEASE FEEL FREE TO CONTACT ME.

THANK YOU,



Becky Haskell  
Senior HSE Coordinator  
COG Operating LLC  
600 W Illinois Avenue | Midland, TX 79701  
Direct: 432-818-2372 | Main: 432.683.7443  
Cell: 432-556-5130  
[rhaskell@concho.com](mailto:rhaskell@concho.com)



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