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DELINEATION WORKPLAN

COG – NM DW STATE #002
(Leak Date: 12/29/16)

RP # 1RP-4549
API # 30-025-34267

APPROVED

By Olivia Yu at 12:18 pm, Jun 14, 2017

NMOCD approves of the delineation and proposed remediation for 1RP-4549 with one condition: Confirmatory laboratory analyses of bottom and sidewall samples at 1 ft. bgs.

This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-4549.

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 entire leak area will be excavated to a depth of 1 foot.

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, NM DW State #002

Leak date: 12/29/2016
Lea County, NM
API# 30-025-34267
1RP-4549

Legend

- E** East Sample, hand auger
- N** North Sample, hand auger
- S** South Sample, hand auger
- W** West Sample, hand auger
- SP1** Sample points, hand auger
- Leak Point** Leak Point
- Spill Area** Spill Area



**1 ft Excavation across
entire spill area**

COG, NM DW State #002

Sample points, hand auger

SP1, N 32.42281 W-103.41286

SP2, N 32.42280 W-103.41293

SP3, N 32.42276 W-103.41292

SP4, N 32.42275 W-103.41288

SP5, N 32.42277 W-103.41283

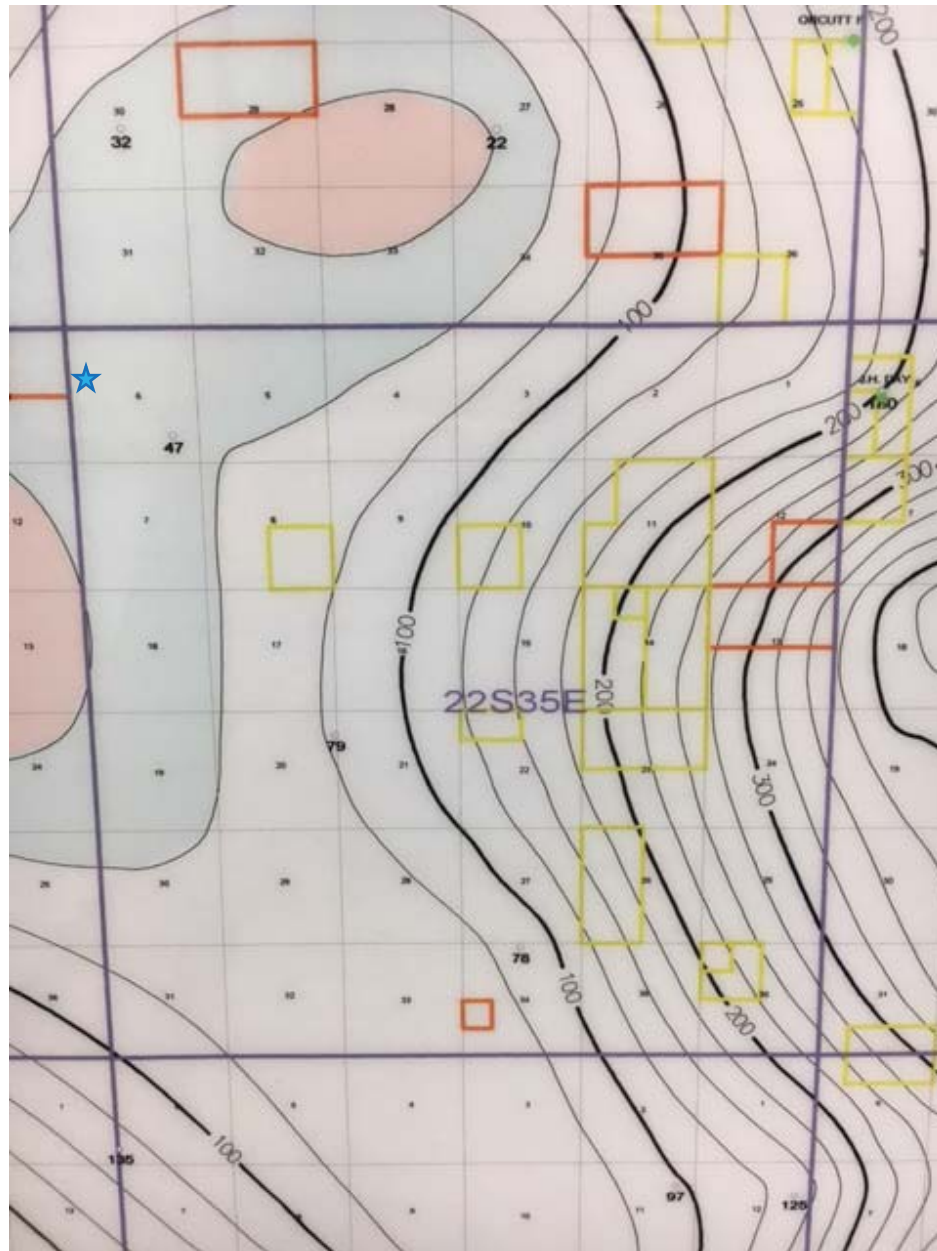
NORTH, N 32.42283 W-103.41288

SOUTH, N 32.42273 W-103.41287

EAST, N 32.42277 W-103.41279

WEST, N 32.42279 W-103.41295

COG, NM DW State #002
U/L E, Section 6, T 22S, R35E
Groundwater: <50'





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
CP 00934			LE	2	1	2	01	22S	34E	648682	3588822	<input type="text"/>	711	60	42 18
CP 00604			LE	1	4	4	01	22S	34E	648743	3587666*	<input type="text"/>	865	135	
CC 00212 POD3			CU	3	4	2	07	02N	34E	649365	3587386	<input type="text"/>	998	368	
CP 00593 POD1		CP	LE		4	4	06	22S	35E	650422	3587591*	<input type="text"/>	1421	62	

Average Depth to Water: 42 feet

Minimum Depth: 42 feet

Maximum Depth: 42 feet

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 649237

Northing (Y): 3588377

Radius: 1700

*UTM location was derived from PLSS - see Help

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.

5/16/17 10:15 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Public Land Survey System (PLSS)

☐

Q64:

Q16:

SW

Q4:

NW

Sec:

06

Tws:

22S

Rng:

35E

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):

649237.0

mtrs

Northing (Y):

3588377.0

mtrs

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

**Laboratory Analytical Results Summary
NM DW State #002**

		Sample	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 6'	SP1 @ 11'
Analyte	Method	Date	2/8/17	2/8/17	4/26/17	4/26/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	n/a
Chloride	SM4500Cl-B		1170	80	144	112
GRO	TPH 8015M		<100	<10.0	<10.0	n/a
DRO	TPH 8015M		7030	179	<10.0	n/a

		Sample	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 6'	SP2 @ 11'
Analyte	Method	Date	2/8/17	2/8/17	4/26/17	4/26/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	n/a
Chloride	SM4500Cl-B		160	144	160	128
GRO	TPH 8015M		<10.0	<10.0	<10.0	n/a
DRO	TPH 8015M		121	<10.0	<10.0	n/a

		Sample	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 6'	SP3 @ 11'
Analyte	Method	Date	2/8/17	2/8/17	4/26/17	4/26/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		0.816	<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		0.816	<0.300	<0.300	n/a
Chloride	SM4500Cl-B		1010	32	128	144
GRO	TPH 8015M		<100	<10.0	<10.0	n/a
DRO	TPH 8015M		3480	22	<10.0	n/a

		Sample	SP4 @ 1'	SP4 @ 6'	SP4 @ 11'
Analyte	Method	Date	4/26/17	4/26/17	4/26/17
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a
Chloride	SM4500Cl-B		144	160	144
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a

		Sample	SP5 @ 1'	SP5 @ 6'	SP5 @ 11'
Analyte	Method	Date	4/26/17	4/26/17	4/26/17
			mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a
Chloride	SM4500Cl-B		128	128	128
GRO	TPH 8015M		<10.0	<10.0	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a

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

		Sample	SOUTH @ SURFACE
Analyte	Method	Date	2/8/17
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500Cl-B		32
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		20.7

		Sample	NORTH @ SURFACE
Analyte	Method	Date	2/8/17
			mg/Kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		<0.050
Total Xylenes	BTEX 8021B		<0.150
Total BTEX	BTEX 8021B		<0.300
Chloride	SM4500Cl-B		144
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

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

February 22, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: NM DW STATE #02

Enclosed are the results of analyses for samples received by the laboratory on 02/15/17 10:40.

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.

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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 1 @ SURFACE (H700384-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTX	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1170	16.0	02/17/2017	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	<100	100	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	7030	100	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 89.5 % 35-147

Surrogate: 1-Chlorooctadecane 159 % 28-171

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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 1 @ 1' (H700384-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.6-140

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	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	179	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 89.6 % 35-147

Surrogate: 1-Chlorooctadecane 96.5 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 2 @ SURFACE (H700384-03)

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	02/17/2017	ND	1.94	96.9	2.00	1.83		
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29		
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10		
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30		
Total BTX	<0.300	0.300	02/17/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	121	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 83.9 % 35-147

Surrogate: 1-Chlorooctadecane 92.0 % 28-171

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

Received: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 2 @ 1' (H700384-04)

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	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 73.6-140

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	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	<10.0	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 78.4 % 35-147

Surrogate: 1-Chlorooctadecane 84.0 % 28-171

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Analytical Results For:

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

Received: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 3 @ SURFACE (H700384-05)

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	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	0.816	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTX	0.816	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 137 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1010	16.0	02/17/2017	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	<100	100	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	3480	100	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 89.4 % 35-147

Surrogate: 1-Chlorooctadecane 126 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 3 @ 1' (H700384-06)

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	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

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	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	22.0	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 78.7 % 35-147

Surrogate: 1-Chlorooctadecane 88.6 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: NORTH @ SURFACE (H700384-07)

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	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	<10.0	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 80.4 % 35-147

Surrogate: 1-Chlorooctadecane 85.4 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: EAST @ SURFACE (H700384-08)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/17/2017	ND	1.94	96.9	2.00	1.83		
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29		
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10		
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30		
Total BTEx	<0.300	0.300	02/17/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 73.6-140

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	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	<10.0	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 67.8 % 35-147

Surrogate: 1-Chlorooctadecane 77.8 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SOUTH @ SURFACE (H700384-09)

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	02/17/2017	ND	1.94	96.9	2.00	1.83	
Toluene*	<0.050	0.050	02/17/2017	ND	1.82	91.0	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.83	91.4	2.00	2.10	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.21	86.9	6.00	2.30	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

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	02/17/2017	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	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	20.7	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 76.2 % 35-147

Surrogate: 1-Chlorooctadecane 86.8 % 28-171

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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: 02/15/2017
Reported: 02/22/2017
Project Name: NM DW STATE #02
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 02/08/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: WEST @ SURFACE (H700384-10)

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	02/17/2017	ND	1.94	96.9	2.00	0.421	
Toluene*	<0.050	0.050	02/17/2017	ND	1.81	90.4	2.00	0.542	
Ethylbenzene*	<0.050	0.050	02/17/2017	ND	1.81	90.7	2.00	1.02	
Total Xylenes*	<0.150	0.150	02/17/2017	ND	5.19	86.4	6.00	1.12	
Total BTEx	<0.300	0.300	02/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 73.6-140

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	02/17/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/16/2017	ND	193	96.5	200	7.02	
DRO >C10-C28	<10.0	10.0	02/16/2017	ND	203	102	200	6.69	

Surrogate: 1-Chlorooctane 80.6 % 35-147

Surrogate: 1-Chlorooctadecane 90.5 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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



ARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

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:																									
Phone #: 575-397-6388		City:																									
Project #:		State:																									
Project Name:		Zip:																									
Project Location: NM DM STATE # 02		Phone #:																									
Sampler Name: RAGNER HERMANDEL		Fax #:																									
FOR LAB USE ONLY		PRESERV		SAMPLING																							
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	TPH	BTEX	CL-										
H700344	SP1 @ SURFACE	G	1										2 8 17	945													
2	SP2 @ SURFACE	G	1										2 8 17	1010													
3	SP3 @ SURFACE	G	1										2 8 17	1035													
4	SP3 @ SURFACE	G	1										2 8 17	1048													
5	SP3 @ SURFACE	G	1										2 8 17	1127													
6	NORTH @ SURFACE	G	1										2 8 17	1205													
7	EAST @ SURFACE	G	1										2 8 17	1235													
8	SOUTH @ SURFACE	G	1										2 8 17	240													
9	WEST @ SURFACE	G	1										2 8 17	250													
10	WEST @ SURFACE	G	1										2 8 17	305													
Relinquished By: Ragner Hermandel		Date: 8/14/17		Received By: Ragner Hermandel		Time: 10:40		Sample Condition		CHECKED BY: (Initials)																	
Relinquished By:		Date:		Received By:		Time:		Cool		Intact																	
Delivered By: (Circle One)		2.12						<input checked="" type="checkbox"/> Yes		<input checked="" type="checkbox"/> Yes																	
Sampler - UPS - Bus - Other:								<input type="checkbox"/> Yes		<input type="checkbox"/> No																	

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

May 15, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: NM DW STATE #002

Enclosed are the results of analyses for samples received by the laboratory on 05/05/17 10:40.

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.

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: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 1 @ 6' (H701215-01)

BTEX 8021B		mg/kg	Analyzed By: BF					I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTEX	<0.300	0.300	05/12/2017	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	144	16.0	05/09/2017	ND	400	100	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 69.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 73.5 % 34.7-157

Sample ID: 1 @ 11' (H701215-02)

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	05/09/2017	ND	400	100	400	3.92	

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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:	05/05/2017	Sampling Date:	04/26/2017
Reported:	05/15/2017	Sampling Type:	Soil
Project Name:	NM DW STATE #002	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: 2 @ 6' (H701215-03)

BTEx 8021B		mg/kg		Analyzed By: BF				I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTEX	<0.300	0.300	05/12/2017	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	160	16.0	05/09/2017	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 66.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 63.6 % 34.7-157

Sample ID: 2 @ 11' (H701215-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/09/2017	ND	400	100	400	3.92	

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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: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 3 @ 6' (H701215-05)

BTEx 8021B		mg/kg	Analyzed By: BF					I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTEX	<0.300	0.300	05/12/2017	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	128	16.0	05/09/2017	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	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 71.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 71.8 % 34.7-157

Sample ID: 3@ 11' (H701215-06)

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	05/09/2017	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

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

Received: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 4 @ 1' (H701215-07)

BTX 8021B		mg/kg		Analyzed By: BF				I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTX	<0.300	0.300	05/12/2017	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	144	16.0	05/09/2017	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	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 69.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 62.8 % 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: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 4 @ 6' (H701215-08)

BTEx 8021B		mg/kg		Analyzed By: BF				I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTEx	<0.300	0.300	05/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 127 % 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	160	16.0	05/09/2017	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	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 80.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.3 % 34.7-157

Sample ID: 4 @ 11' (H701215-09)

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	05/09/2017	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: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 5 @ 1' (H701215-10)

BTX 8021B		mg/kg		Analyzed By: BF				I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTX	<0.300	0.300	05/12/2017	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	128	16.0	05/09/2017	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	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 70.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 74.7 % 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: 05/05/2017
Reported: 05/15/2017
Project Name: NM DW STATE #002
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 04/26/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 5 @ 6' (H701215-11)

BTX 8021B		mg/kg		Analyzed By: BF				I-02	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/12/2017	ND	2.08	104	2.00	1.17	
Toluene*	<0.050	0.050	05/12/2017	ND	2.10	105	2.00	1.84	
Ethylbenzene*	<0.050	0.050	05/12/2017	ND	2.12	106	2.00	2.63	
Total Xylenes*	<0.150	0.150	05/12/2017	ND	6.23	104	6.00	1.86	
Total BTX	<0.300	0.300	05/12/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 127 % 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	128	16.0	05/09/2017	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	05/11/2017	ND	193	96.6	200	2.84	
DRO >C10-C28	<10.0	10.0	05/11/2017	ND	196	97.8	200	1.26	

Surrogate: 1-Chlorooctane 78.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 69.3 % 34.7-157

Sample ID: 5@ 11' (H701215-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/09/2017	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

I-02	This result was analyzed outside of the EPA recommended holding time.
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

2 of 2

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 #: NM OW Site #002

Project Location:

Sampler Name: Price Brunson

FOR LAB USE ONLY

Lab I.D. Sample I.D.

#10125
11 595061
12 150111

(G)RAB OR (C)OMP.
CONTAINERS
GROUNDWATER
WASTEWATER
SOIL
OIL
SLUDGE
OTHER :
ACID/BASE:
ICE / COOL
OTHER :

DATE TIME
4/21/17 11:10
4/21/17 11:30

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Relinquished By: [Signature] Date: 4/21/17 Received By: [Signature] Date: 4/21/17

Relinquished By: [Signature] Date: 5-5-17 Received By: [Signature] Date: 5-5-17

Delivered By: (Circle One) Sampler - UPS - Bus - Other: -12.88

Sample Condition Cool Intact Checked By: [Signature] (Initials) 7-2-17

REMARKS: Phone Result: Yes No Add'l Phone #: Fax Result: Yes No Add'l Fax #:

* 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:	COG Operating LLC	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	New Mexico DW State #002	Facility Type:	Flowline

Surface Owner:	State	Mineral Owner:	API No. 30-025-32467
----------------	-------	----------------	----------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	06	22S	35E	1980	North	660	West	Lea

Latitude 32.4227219 Longitude 103.4127121

NATURE OF RELEASE

Type of Release:	Oil and Produced Water	Volume of Release:	15 bbls Oil & 6 bbls PW	Volume Recovered:	11 bbls Oil & 0 bbls PW
Source of Release:	Flowline	Date and Hour of Occurrence:	December 29, 2016 7:30 am	Date and Hour of Discovery:	December 29, 2016 7:30 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour:			
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.*

There was a leak at the steel to poly transition. The steel to poly transition section was replaced.

Describe Area Affected and Cleanup Action Taken.*

The release occurred on the well pad. 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: <i>Rebecca Haskell</i>	OIL CONSERVATION DIVISION		
Printed Name: Rebecca Haskell	Approved by Environmental Specialist:		
Title: Senior HSE Coordinator	Approval Date:	Expiration Date:	
E-mail Address: rhaskell@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 12/30/16 Phone: 432-683-7443			

* Attach Additional Sheets If Necessary