WORLD-WIDE ENVIRONMENTAL SPECIALISTS

BBC INTERNATIONAL INCORPORATED

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DELINEATION WORKPLAN

COG – COONSKIN FEE 28C CTB
(Leak Date: 3/6/18)

RP # 1RP-4988
API # 30-025-43683

This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-4988.

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:

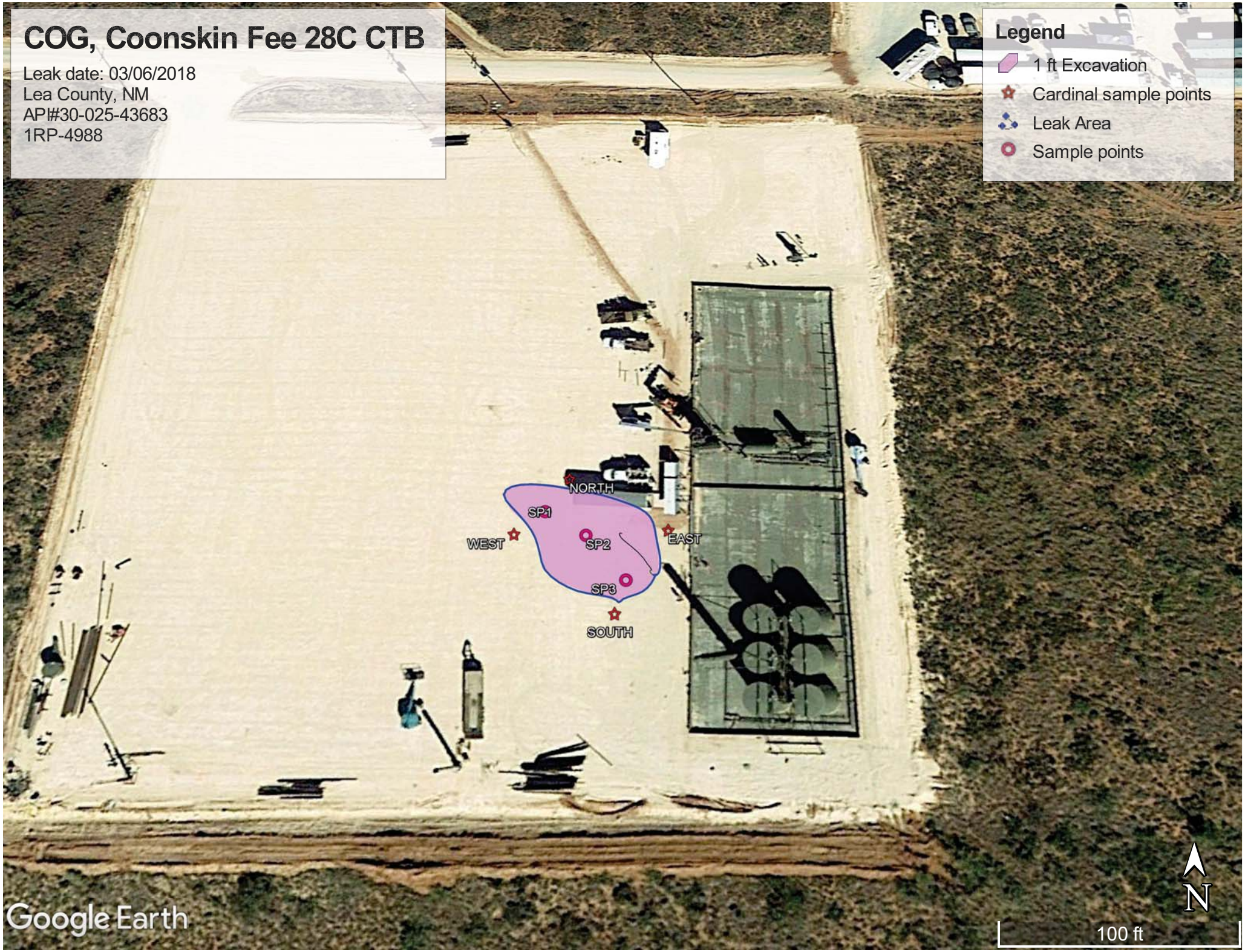
COG will excavate the spill area as depicted on the following site diagram. The entire leak area (pink shade on diagram) will be excavated to a depth of 1 foot.

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.

APPROVED
By Olivia Yu at 9:39 am, Jun 06, 2018

NMOCD approves of the delineation completed and proposed remediation for 1RP-4988 with one condition: representative confirmation samples from the bottom of the excavated area and sidewalls.


COG, Coonskin Fee 28C CTB
Leak date: 03/06/2018
Lea County, NM
API#30-025-43683
1RP-4988
Legend
1 ft Excavation
Cardinal sample points
Leak Area
Sample points
NORTH
SP1
WEST
SP2
EAST
SP3
SOUTH
Google Earth
N
100 ft

COG, Coonskin Fee 28C CTB

Sample points

SP1, N 32.19384 W-103.37472

SP2, N 32.19380 W-103.37465

SP3, N 32.19374 W-103.37458

NORTH, N 32.19389 W-103.37468

SOUTH, N 32.19369 W-103.37461

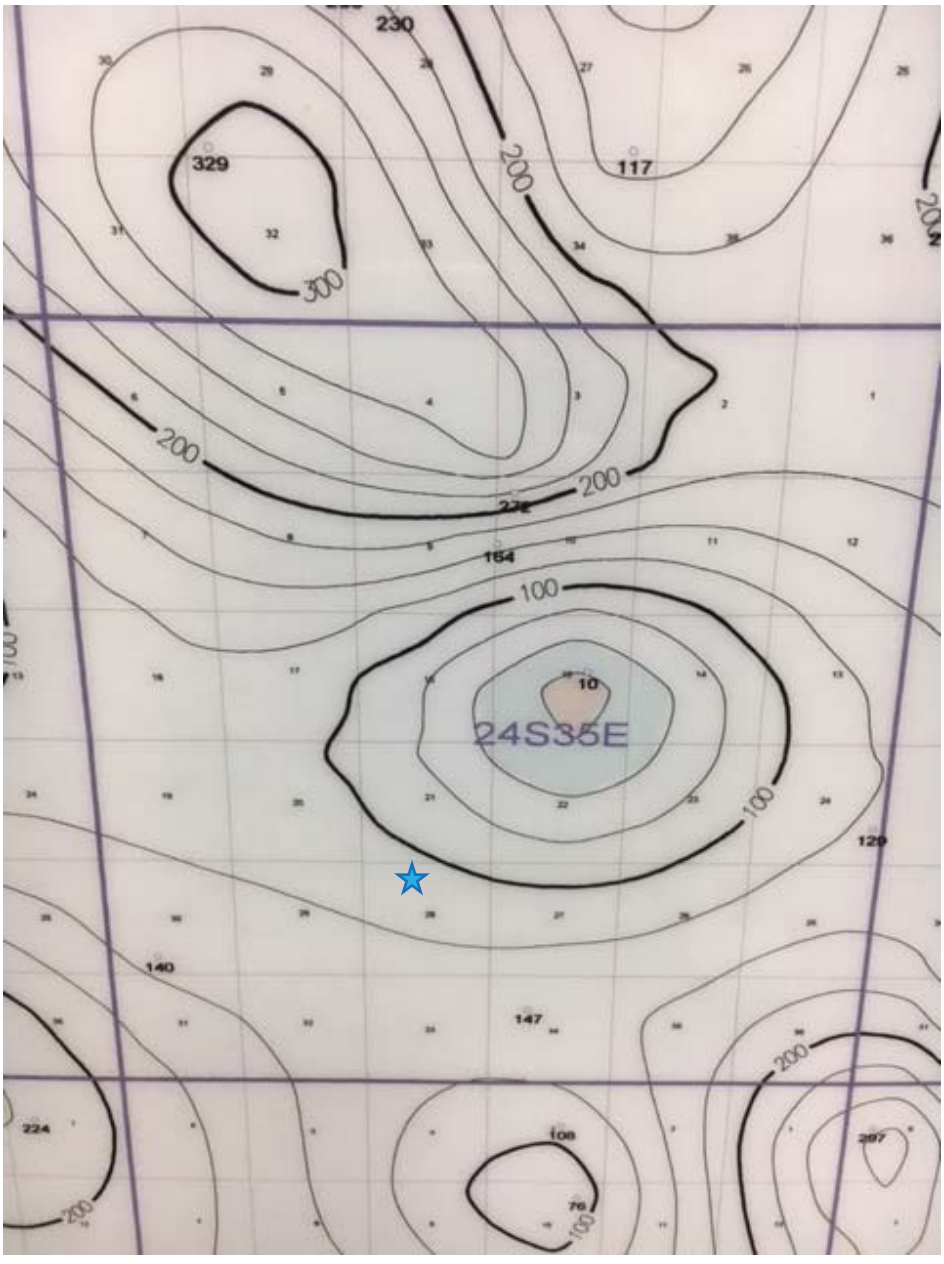
EAST, N 32.19381 W-103.37453

WEST, N 32.19380 W-103.37477

COG, Coonskin Fee 28C CTB

U/L C, Section 28, T24S, R35E

Groundwater: 100'-125'



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 653217 **Northing (Y):** 3563089 **Radius:** 1700

3/27/18 11:11 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Public Land Survey System (PLSS)

Q64: Q16: NE Q4: NW Sec: 28 Tws: 24S 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): 653217.0 mtrs Northing (Y): 3563089.0 mtrs

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

Laboratory Analytical Results Summary
Coonskin Fee 28C CTB

		Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 6'
Analyte	**Method**	**Date**	4/6/18	4/6/18	4/6/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<1.00	<0.050	<0.050
Toluene	BTEX 8021B		**12**	**0.099**	**0.085**
Ethylbenzene	BTEX 8021B		**11.5**	**0.098**	**0.117**
Total Xylenes	BTEX 8021B		**50.7**	**0.409**	**0.472**
Total BTEX	BTEX 8021B		**74.2**	**0.606**	**0.674**
Chloride	SM4500Cl-B		**176**	**16**	<16.0
GRO	TPH 8015M		**950**	<10.0	<10.0
DRO	TPH 8015M		**18500**	**11**	<10.0
EXT DRO	TPH 8015M		**3870**	**15.2**	<10.0

		Sample ID	NORTH @ SURFACE
Analyte	**Method**	**Date**	4/6/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		**0.099**
Total Xylenes	BTEX 8021B		**0.411**
Total BTEX	BTEX 8021B		**0.51**
Chloride	SM4500Cl-B		**32**
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

		Sample ID	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 6'
Analyte	**Method**	**Date**	4/6/18	4/6/18	4/6/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<1.00	<0.050	<0.050
Toluene	BTEX 8021B		**12.6**	**0.062**	**0.08**
Ethylbenzene	BTEX 8021B		**12.8**	**0.065**	**0.141**
Total Xylenes	BTEX 8021B		**58.5**	**0.259**	**0.587**
Total BTEX	BTEX 8021B		**83.9**	**0.387**	**0.809**
Chloride	SM4500Cl-B		**144**	**32**	**16**
GRO	TPH 8015M		**1230**	<10.0	<10.0
DRO	TPH 8015M		**19800**	<10.0	<10.0
EXT DRO	TPH 8015M		**3730**	**10.3**	<10.0

		Sample ID	EAST @ SURFACE
Analyte	**Method**	**Date**	4/6/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		**0.066**
Ethylbenzene	BTEX 8021B		**0.141**
Total Xylenes	BTEX 8021B		**0.541**
Total BTEX	BTEX 8021B		**0.748**
Chloride	SM4500Cl-B		**16**
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

		Sample ID	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 6'
Analyte	**Method**	**Date**	4/6/18	4/6/18	4/6/18
			mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<1.00	<0.050	<0.050
Toluene	BTEX 8021B		**9.4**	**0.106**	<0.050
Ethylbenzene	BTEX 8021B		**10.9**	**0.156**	**0.064**
Total Xylenes	BTEX 8021B		**50**	**0.665**	**0.26**
Total BTEX	BTEX 8021B		**70.3**	**0.927**	**0.324**
Chloride	SM4500Cl-B		**144**	<16.0	**16**
GRO	TPH 8015M		**801**	<10.0	<10.0
DRO	TPH 8015M		**15400**	**14**	<10.0
EXT DRO	TPH 8015M		**3220**	**11.8**	<10.0

		Sample ID	WEST @ SURFACE
Analyte	**Method**	**Date**	4/6/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		**0.096**
Ethylbenzene	BTEX 8021B		**0.15**
Total Xylenes	BTEX 8021B		**0.596**
Total BTEX	BTEX 8021B		**0.843**
Chloride	SM4500Cl-B		<16.0
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

		Sample ID	SOUTH @ SURFACE
Analyte	**Method**	**Date**	4/6/18
			mg/kg
Benzene	BTEX 8021B		<0.050
Toluene	BTEX 8021B		<0.050
Ethylbenzene	BTEX 8021B		**0.071**
Total Xylenes	BTEX 8021B		**0.274**
Total BTEX	BTEX 8021B		**0.345**
Chloride	SM4500Cl-B		**32**
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0
EXT DRO	TPH 8015M		<10.0

CARDINAL Laboratories

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

April 13, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: COONSKIN FEE 28C CTB

Enclosed are the results of analyses for samples received by the laboratory on 04/09/18 9:42.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. 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 accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 1 @ SURFACE (H800964-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**12.0**	1.00	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**11.5**	1.00	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**50.7**	3.00	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**74.2**	6.00	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**176**	16.0	04/11/2018	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**950**	50.0	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	**18500**	50.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**3870**	50.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *178 %* *41-142*

Surrogate: 1-Chlorooctadecane *769 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 1 @ 1' (H800964-02)

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	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**0.099**	0.050	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**0.098**	0.050	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**0.409**	0.150	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**0.606**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.6 %* *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	**16.0**	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	**11.0**	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**15.2**	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *82.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *77.8 %* *37.6-147*

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Analytical Results For:

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 1 @ 6' (H800964-03)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**0.085**	0.050	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**0.117**	0.050	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**0.472**	0.150	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**0.674**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *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	<16.0	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *84.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *77.1 %* *37.6-147*

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Analytical Results For:

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 2 @ SURFACE (H800964-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**12.6**	1.00	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**12.8**	1.00	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**58.5**	3.00	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**83.9**	6.00	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *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	04/11/2018	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1230**	50.0	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	**19800**	50.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**3730**	50.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *212 %* *41-142*

Surrogate: 1-Chlorooctadecane *784 %* *37.6-147*

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Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 2 @ 1' (H800964-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**0.062**	0.050	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**0.065**	0.050	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**0.259**	0.150	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**0.387**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.1 %* *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	**32.0**	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**10.3**	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *77.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *73.4 %* *37.6-147*

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Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 2 @ 6' (H800964-06)

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	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**0.080**	0.050	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**0.141**	0.050	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**0.587**	0.150	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**0.809**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.0 %* *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	**16.0**	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *78.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.0 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 3 @ SURFACE (H800964-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**9.40**	1.00	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**10.9**	1.00	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**50.0**	3.00	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**70.3**	6.00	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *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	04/11/2018	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**801**	50.0	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	**15400**	50.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**3220**	50.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *170 %* *41-142*

Surrogate: 1-Chlorooctadecane *629 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 3 @ 1' (H800964-08)

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	04/11/2018	ND	2.01	100	2.00	1.45	
Toluene*	**0.106**	0.050	04/11/2018	ND	1.99	99.7	2.00	0.263	
Ethylbenzene*	**0.156**	0.050	04/11/2018	ND	1.97	98.6	2.00	2.28	
Total Xylenes*	**0.665**	0.150	04/11/2018	ND	6.03	101	6.00	2.01	
Total BTEX	**0.927**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.2 %* *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	<16.0	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	**14.0**	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	**11.8**	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *78.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.8 %* *37.6-147*

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CARDINAL Laboratories

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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:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SP 3 @ 6' (H800964-09)

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	04/11/2018	ND	2.07	104	2.00	0.0860	QM-07
Toluene*	<0.050	0.050	04/11/2018	ND	2.07	104	2.00	0.108	
Ethylbenzene*	**0.064**	0.050	04/11/2018	ND	2.08	104	2.00	1.26	
Total Xylenes*	**0.260**	0.150	04/11/2018	ND	6.44	107	6.00	1.37	
Total BTEX	**0.324**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.9 %* *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	**16.0**	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *84.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *85.8 %* *37.6-147*

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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:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: NORTH @ SURFACE (H800964-10)

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	04/11/2018	ND	2.07	104	2.00	0.0860	
Toluene*	<0.050	0.050	04/11/2018	ND	2.07	104	2.00	0.108	
Ethylbenzene*	**0.099**	0.050	04/11/2018	ND	2.08	104	2.00	1.26	
Total Xylenes*	**0.411**	0.150	04/11/2018	ND	6.44	107	6.00	1.37	
Total BTEX	**0.510**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.8 %* *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	**32.0**	16.0	04/11/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *70.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *72.1 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: EAST @ SURFACE (H800964-11)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/12/2018	ND	2.07	104	2.00	0.0860	
Toluene*	**0.066**	0.050	04/12/2018	ND	2.07	104	2.00	0.108	
Ethylbenzene*	**0.141**	0.050	04/12/2018	ND	2.08	104	2.00	1.26	
Total Xylenes*	**0.541**	0.150	04/12/2018	ND	6.44	107	6.00	1.37	
Total BTEX	**0.748**	0.300	04/12/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.1 %* *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	**16.0**	16.0	04/12/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *62.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *59.9 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: WEST @ SURFACE (H800964-12)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/12/2018	ND	2.07	104	2.00	0.0860	
Toluene*	**0.096**	0.050	04/12/2018	ND	2.07	104	2.00	0.108	
Ethylbenzene*	**0.150**	0.050	04/12/2018	ND	2.08	104	2.00	1.26	
Total Xylenes*	**0.596**	0.150	04/12/2018	ND	6.44	107	6.00	1.37	
Total BTEX	**0.843**	0.300	04/12/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.6 %* *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	<16.0	16.0	04/12/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *71.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *67.4 %* *37.6-147*

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CARDINAL Laboratories

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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:	04/09/2018	Sampling Date:	04/06/2018
Reported:	04/13/2018	Sampling Type:	Soil
Project Name:	COONSKIN FEE 28C CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG /BLADE - LEA CO NM		

Sample ID: SOUTH @ SURFACE (H800964-13)

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	04/11/2018	ND	2.18	109	2.00	0.00399	
Toluene*	<0.050	0.050	04/11/2018	ND	2.19	109	2.00	1.43	
Ethylbenzene*	**0.071**	0.050	04/11/2018	ND	2.16	108	2.00	1.20	
Total Xylenes*	**0.274**	0.150	04/11/2018	ND	6.64	111	6.00	1.36	
Total BTEX	**0.345**	0.300	04/11/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.2 %* *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	**32.0**	16.0	04/12/2018	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	04/13/2018	ND	206	103	200	1.31	
DRO >C10-C28*	<10.0	10.0	04/13/2018	ND	210	105	200	1.12	
EXT DRO >C28-C36	<10.0	10.0	04/13/2018	ND					

Surrogate: 1-Chlorooctane *72.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *68.9 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

1 of 2

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	BBC International, Inc.	BILL TO	
Project Manager:	Cliff Brunson	P.O. #:	
Address:	P.O. Box 805	Company:	BBC
City:	Hobbs	State: NM Zip: 88241	Attn: J. Gilley
Phone #:	575-397-6388	Fax #: 575-397-0397	Address:
Project #:		Project Owner: COG/Blade	City:
Project Name:	Coonskin Fee 28C CTB		State: Zip:
Project Location:	Lea County, NM		Phone #:
Sampler Name:	Roger Hernandez		Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	Cl	TPH EXT								
H800964																									
1	SP1 @ SURFACE	G	1			✓					✓		4/6/18	9:30 AM	✓	✓	✓								
2	SP1 @ 1'	G	1			✓					✓		4/6/18	9:45 AM	✓	✓	✓								
3	SP1 @ 6'	G	1			✓					✓		4/6/18	10:35 AM	✓	✓	✓								
4	SP2 @ SURFACE	G	1			✓					✓		4/6/18	10:50 AM	✓	✓	✓								
5	SP2 @ 1'	G	1			✓					✓		4/6/18	11:08 AM	✓	✓	✓								
6	SP2 @ 6'	G	1			✓					✓		4/6/18	12:30 PM	✓	✓	✓								
7	SP3 @ SURFACE	G	1			✓					✓		4/6/18	12:45 PM	✓	✓	✓								
8	SP3 @ 1'	G	1			✓					✓		4/6/18	1:00 PM	✓	✓	✓								
9	SP3 @ 6'	G	1			✓					✓		4/6/18	1:50 PM	✓	✓	✓								
10	NORTH @ SURFACE	G	1			✓					✓		4/6/18	2:00 PM	✓	✓	✓								

Relinquished By: Roger Hernandez	Date: 4/6/18 Time: 5:00pm	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: 4/9/18 Time: 9:42	Received By: Jodi Henson	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) #75 Sampler - UPS - Bus - Other: -3.9°c - 3.95°c	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)	REMARKS:

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

Corrected -.05°c

2 of 2

CARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	BBC International, Inc.	**BILL TO**	
Project Manager:	Cliff Brunson	**P.O. #:**	
Address:	P.O. Box 805	**Company:**	BBC
City:	Hobbs **State:** NM **Zip:** 88241	**Attn:**	J. Gilkey
Phone #:	575-397-6388 **Fax #:** 575-397-0397	**Address:**	
Project #:	**Project Owner:** COG/Blade	**City:**	
Project Name:	Coonskin Fee 28C CTB	**State:** **Zip:**	
Project Location:	Lea County, NM	**Phone #:**	
Sampler Name:	Roger Hernandez	**Fax #:**	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	Cl	TPH EXT								
H800964																									
11	EAST @ SURFACE	G	1			✓					✓		4/6/18	2:10 PM	✓	✓	✓								
12	WEST @ SURFACE	G	1			✓					✓		4/6/18	2:20 PM	✓	✓	✓								
13	SOUTH @ SURFACE	G	1			✓					✓		4/6/18	2:30 PM	✓	✓	✓								

ICAM 4/9/18

Relinquished By:	**Date:** 4/6/18 **Time:** 5:00pm	**Received By:**	
Relinquished By:	**Date:** 4/9/18 **Time:** 9:42	**Received By:**	Jodi Henson
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #75 -3.9°/-3.95°	**Sample Condition** Cool: ☑ Yes ☐ No; Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)**	

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

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

corrected -.05°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

Form C-141
Revised April 3, 2017

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 OGRID 229137	Contact: Robert McNeil
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: **Coonskin Fee 28C CTB**	Facility Type: Tank Battery

Surface Owner: Private	Mineral Owner: Private	API No. 30-025-43683

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	28	24S	35E					Lea

Latitude 32.194011 **Longitude** -103.374809 NAD83

NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 8 bbl.	Volume Recovered: 0 bbl.
Source of Release: Oil Hauler	Date and Hour of Occurrence: March 6, 2018 12:00 am	Date and Hour of Discovery: March 6, 2018 12:00 am
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 8:45 am, Mar 09, 2018

Describe Cause of Problem and Remedial Action Taken.*

The release was due to an oil hauler overfilling his truck. Met with oil hauler and discussed issues.

Describe Area Affected and Cleanup Action Taken.*

The release remained on location. 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: OH
Title: Senior HSE Coordinator	Approval Date: 3/9/2018 Expiration Date:
E-mail Address: rhaskell@concho.com	Conditions of Approval: see attached directive Attached ☐
Date: March 7, 2017 Phone: 432-683-7443	

* Attach Additional Sheets If Necessary

1RP-4988 nOY1806831882

pOY1806832042

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/7/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4988__ has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/9/2018_. 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_6 thru C_{36}), 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_6 thru C_{36}), 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.

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