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E-MAIL: cbrunson@bbcinternational.com

COG Operating LLC – Lightning P-38 State #002H (10/19/2016)

REMEDATION PLAN

Oxy will excavate the spill area as depicted on the following site diagram. The entire leak area will be excavated to a depth of 1.5 feet. The entire site will then be backfilled with clean soil. The overspray area will be mowed.

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

APPROVED

By Olivia Yu at 2:19 pm, Mar 09, 2017

NMOCD approves the delineation workplan for 1RP-4487 with these conditions:

- 1) Excavate contaminated soil in release area to a depth of 2 ft. bgs.
- 2) Obtain confirmation bottom and sidewall samples at SP1, SP2, and between SP1 and SP2.
- 3) Mowing of overspray area is approved. Like approval documentation from SLO is required in final report.
- 4) Provide in remediation closure report:
 - Documentation of OSE and Chevron trend map depth to water table search.
 - Scaled digital map with release point, dimensions of release area, and sample locations demarcated.



Groundwater Plot

COG Lightning P-38 State #002H

County
Lea

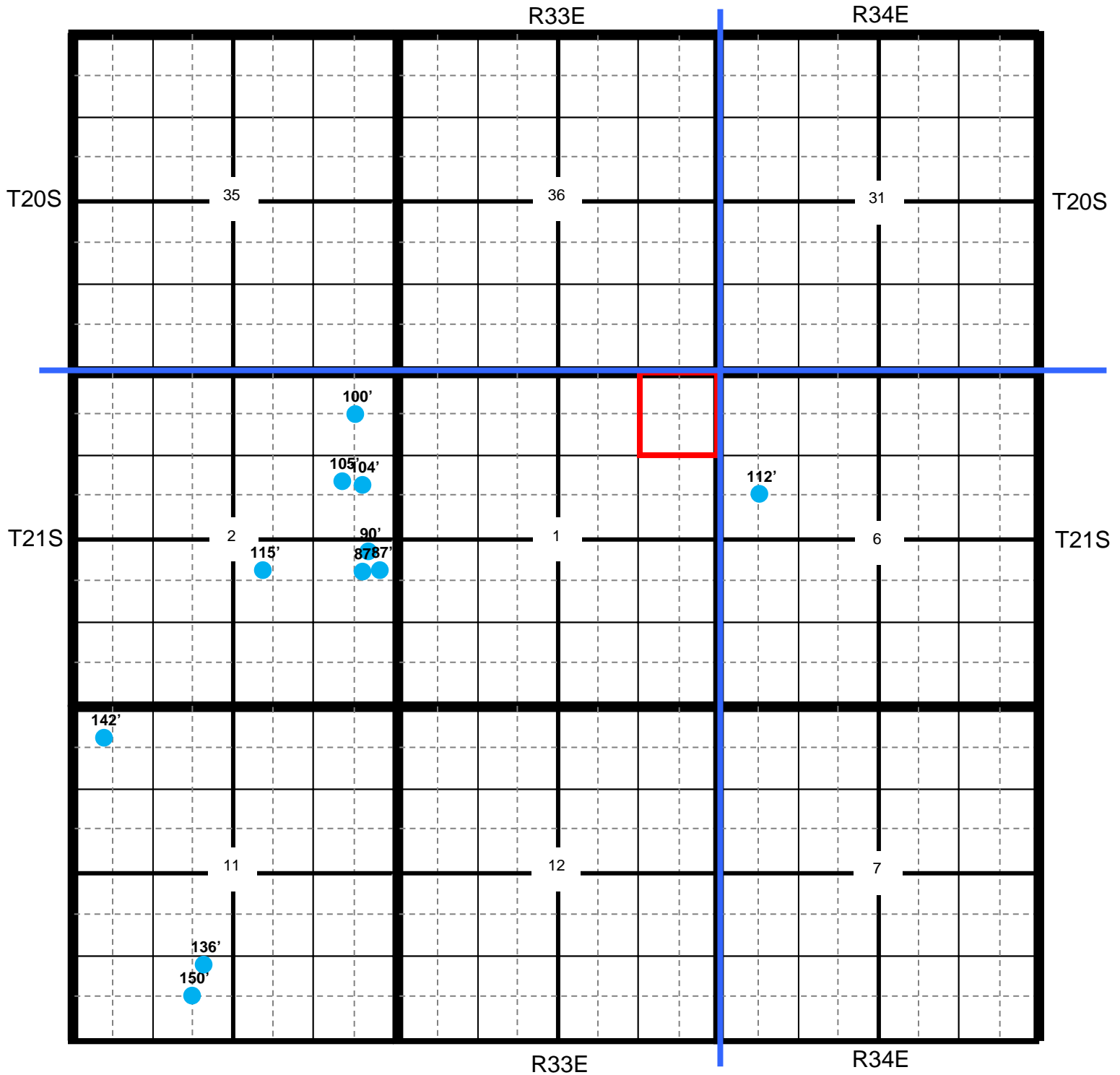
Unit Letter
A

Section
1

Township
21S

Range
33E

Trend Map 75'-100'



★ Location

● OCD

● USGS

● SEO

● All Databases

COG Lightning P-38 State #002H

County Lea **Unit Letter** A **Section** 1 **Township** 21S **Range** 33E

Trend Map 75'-100'

1

2

NW/NW None found	NE/NW	NW/NE	NE/NE
Unit Letter D	Unit Letter C	Unit Letter B	Unit Letter A
SW/NW	SE/NW	SW/NE	SE/NE
Unit Letter E	Unit Letter F	Unit Letter G	Unit Letter H
NW/SW	NE/SW	NW/SE	NE/SE
Unit Letter L	Unit Letter K	Unit Letter J	Unit Letter I
SW/SW	SE/SW	SW/SE	SE/SE
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P

3

4

Laboratory Analytical Results Summary
Lightning P-38 State #002H

		Sample	SP1 @ 1'	SP1 @ 2'
Analyte	Method	Date	1/12/17	1/12/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050
Toluene	BTEX 8021B		0.13	<0.050
Ethylbenzene	BTEX 8021B		0.486	<0.050
Total Xylenes	BTEX 8021B		2.82	<0.150
Total BTEX	BTEX 8021B		3.44	<0.300
Chloride	SM4500Cl-B		n/a	128
GRO	TPH 8015M		320	<10.0
DRO	TPH 8015M		6980	468

		Sample	SP2 @ 1'	SP2 @ 2'
Analyte	Method	Date	1/12/17	1/12/17
			mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050
Toluene	BTEX 8021B		0.179	<0.050
Ethylbenzene	BTEX 8021B		0.407	<0.050
Total Xylenes	BTEX 8021B		2.22	<0.150
Total BTEX	BTEX 8021B		2.8	<0.300
Chloride	SM4500Cl-B		n/a	n/a
GRO	TPH 8015M		222	<10.0
DRO	TPH 8015M		6400	439

		Sample	SP3 @ SURFACE
Analyte	Method	Date	1/12/17
			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	SP4 @ SURFACE
Analyte	Method	Date	1/12/17
			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		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	NORTH SAMPLE
Analyte	Method	Date	1/12/17
			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		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	EAST SAMPLE
Analyte	Method	Date	1/12/17
			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		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	SOUTH SAMPLE
Analyte	Method	Date	1/12/17
			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		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0

		Sample	WEST SAMPLE
Analyte	Method	Date	1/12/17
			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		n/a
GRO	TPH 8015M		<10.0
DRO	TPH 8015M		<10.0



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

January 18, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: LIGHTNING P38 #2H

Enclosed are the results of analyses for samples received by the laboratory on 01/13/17 16:45.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

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: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 1 @ 1' (H700095-01)

BTX 8021B		mg/kg	Analyzed By: CK					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	0.130	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	0.486	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	2.82	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTX	3.44	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 159 % 73.6-140

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	320	10.0	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	6980	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 138 % 35-147

Surrogate: 1-Chlorooctadecane 197 % 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: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 1 @ 2' (H700095-02)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	<0.300	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	128	16.0	01/17/2017	ND	432	108	400	3.64		

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	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	468	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 75.9 % 35-147

Surrogate: 1-Chlorooctadecane 88.0 % 28-171

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Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 2 @ 1' (H700095-03)

BTEx 8021B		mg/kg	Analyzed By: CK					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	0.179	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	0.407	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	2.22	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	2.80	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 147 % 73.6-140

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	222	10.0	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	6400	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 129 % 35-147

Surrogate: 1-Chlorooctadecane 196 % 28-171

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Received: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 2 @ 2' (H700095-04)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	<0.300	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

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	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	439	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 91.3 % 35-147

Surrogate: 1-Chlorooctadecane 96.8 % 28-171

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Received: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 3 @ SURFACE (H700095-05)

BTEx 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346		
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116		
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289		
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427		
Total BTEx	<0.300	0.300	01/16/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	32.0	16.0	01/17/2017	ND	432	108	400	3.64		

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	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 93.7 % 35-147

Surrogate: 1-Chlorooctadecane 96.3 % 28-171

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BBC International, Inc.
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Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP 4 @ SURFACE (H700095-06)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	<0.300	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

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	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 87.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.0 % 28-171

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

Received: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: NORTH (H700095-07)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	<0.300	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

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	01/17/2017	ND	212	106	200	3.70	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	236	118	200	3.40	

Surrogate: 1-Chlorooctane 81.3 % 35-147

Surrogate: 1-Chlorooctadecane 87.8 % 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: 01/13/2017
 Reported: 01/18/2017
 Project Name: LIGHTNING P38 #2H
 Project Number: NONE GIVEN
 Project Location: COG

 Sampling Date: 01/12/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: EAST (H700095-08)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/16/2017	ND	2.25	113	2.00	0.346	
Toluene*	<0.050	0.050	01/16/2017	ND	2.22	111	2.00	0.116	
Ethylbenzene*	<0.050	0.050	01/16/2017	ND	2.24	112	2.00	0.289	
Total Xylenes*	<0.150	0.150	01/16/2017	ND	6.31	105	6.00	0.427	
Total BTEX	<0.300	0.300	01/16/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

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	01/17/2017	ND	211	105	200	3.72	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	231	116	200	1.17	

Surrogate: 1-Chlorooctane 85.8 % 35-147

Surrogate: 1-Chlorooctadecane 89.2 % 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: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SOUTH (H700095-09)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/17/2017	ND	2.25	112	2.00	1.42	
Toluene*	<0.050	0.050	01/17/2017	ND	2.22	111	2.00	1.47	
Ethylbenzene*	<0.050	0.050	01/17/2017	ND	2.24	112	2.00	1.26	
Total Xylenes*	<0.150	0.150	01/17/2017	ND	6.34	106	6.00	1.39	
Total BTEX	<0.300	0.300	01/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

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	01/17/2017	ND	211	105	200	3.72	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	231	116	200	1.17	

Surrogate: 1-Chlorooctane 84.7 % 35-147

Surrogate: 1-Chlorooctadecane 87.4 % 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: 01/13/2017
Reported: 01/18/2017
Project Name: LIGHTNING P38 #2H
Project Number: NONE GIVEN
Project Location: COG

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: WEST (H700095-10)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/17/2017	ND	2.25	112	2.00	1.42	
Toluene*	<0.050	0.050	01/17/2017	ND	2.22	111	2.00	1.47	
Ethylbenzene*	<0.050	0.050	01/17/2017	ND	2.24	112	2.00	1.26	
Total Xylenes*	<0.150	0.150	01/17/2017	ND	6.34	106	6.00	1.39	
Total BTEX	<0.300	0.300	01/17/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

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	01/17/2017	ND	211	105	200	3.72	
DRO >C10-C28	<10.0	10.0	01/17/2017	ND	231	116	200	1.17	

Surrogate: 1-Chlorooctane 77.6 % 35-147

Surrogate: 1-Chlorooctadecane 79.0 % 28-171

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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.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		BILL TO		ANALYSIS REQUEST																																	
Project Manager: Cliff Brunson		P.O. #:																																			
Address: P.O. Box 805		Company:																																			
City: Hobbs		Attn:																																			
State: NM Zip: 88241		Address:																																			
Phone #: 575-397-6388 Fax #: 575-397-0397		City:																																			
Project #:		State:																																			
Project Name: Lightning #24		Zip:																																			
Project Location:		Phone #:																																			
Sampler Name: Roger Hernandez		Fax #:																																			
FOR LAB USE ONLY		PRESERV		SAMPLING																																	
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											
H100095		SP102		G-1		X		X		X		X		X		X		X		X		X		11/2		8:50		TPH									
1		SP201		G-1		X		X		X		X		X		X		X		X		X		11/2		10:20		BT									
2		SP202		G-1		X		X		X		X		X		X		X		X		X		11/2		11:15		BT									
3		SP305		G-1		X		X		X		X		X		X		X		X		X		11/2		11:40		BT									
4		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
5		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
6		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
7		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
8		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
9		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									
10		SP405		G-1		X		X		X		X		X		X		X		X		X		11/2		12:00		BT									

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Relinquished By: [Signature] Date: 11-13-17 Time: 4:45
Received By: [Signature] Date: 11-13-17 Time: 4:45

Delivered By: (Circle One) ☒ UPS ☐ Bus ☐ Other: #752.22

Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No

Checked By: [Signature]

REMARKS: [Blank]

† 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:	LIGHTNING P-38 STATE #002H	Facility Type:	Tank Battery
Surface Owner:	State	Mineral Owner:	API No. 30-025-40302

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	01	21S	33E	1980'	North	330'	East	Lea

Latitude 32.5168495 Longitude 103.5184784

NATURE OF RELEASE

Type of Release:	Oil	Volume of Release:	15bbls	Volume Recovered:	10bbls
Source of Release:	FWKO	Date and Hour of Occurrence:	10-19-2016 08:30 am	Date and Hour of Discovery:	10-19-2016 08:30 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.*

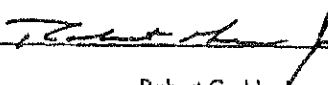
Describe Cause of Problem and Remedial Action Taken.*

Mechanical failure on the oil dump valve linkage attached to the FWKO sending to fluid to the flare. Repaired the dump valve linkage on the FWKO.

Describe Area Affected and Cleanup Action Taken.*

Most of the release was contained within the bermed area of the flare. Due to high winds a mist area of 300' X 100' is located in the pasture. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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:			
Printed Name:	Robert Grubbs Jr.	OIL CONSERVATION DIVISION	
Title:	Senior Environmental Coordinator	Approved by Environmental Specialist:	
E-mail Address:	rgrubbs@concho.com	Approval Date:	Expiration Date:
Date:	October 27, 2016	Conditions of Approval:	Attached <input type="checkbox"/>
Phone:	432-683-7443		

* Attach Additional Sheets If Necessary