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OXY – COG – STATE 11 COM #1

AMENDED REMEDIATION PLAN

COG will excavate the spill area as depicted on the following site diagram. In the area near S1 and B1 the excavation will be 15 feet. In the area near S2 and B2, the excavation will be 8 feet. The entire site will then be backfilled with clean soil.

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

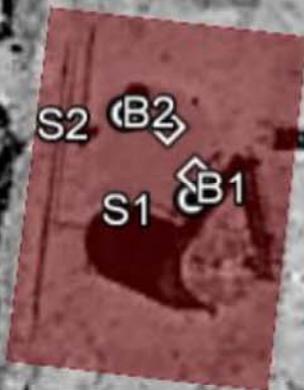
State 11 Com #1

30-015-27916
Sec 11 T19S R28E

Legend

-  Area of Impact
-  Backhoe Sampling Point
-  Coring sample point

State 11 Com #1

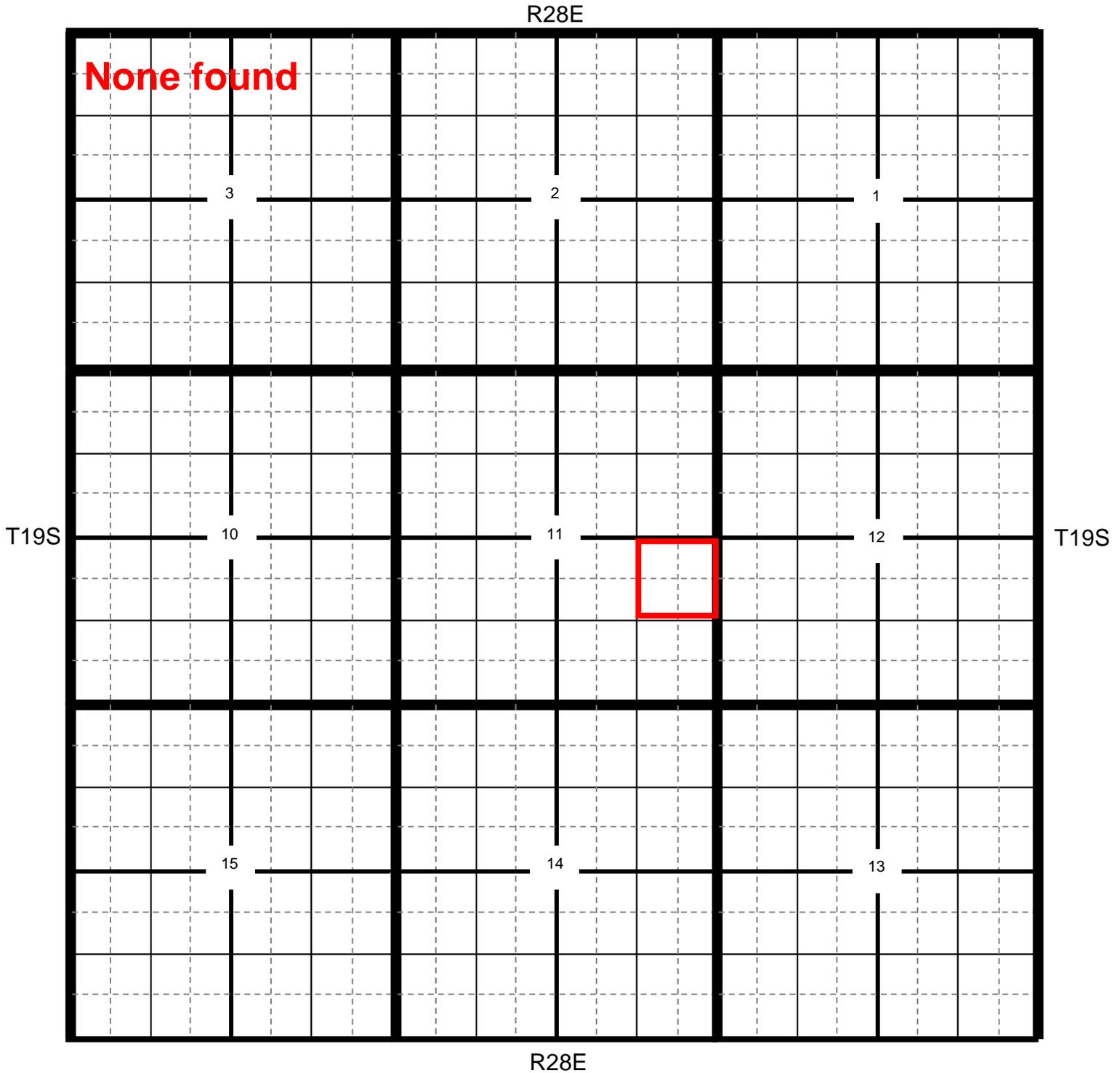


Groundwater Plot

Concho State 11 Com #1

County: Eddy Unit Letter: I Section: 11 Township: 19S Range: 28E

Trend Map 150'



Section Quarters

Concho State 11 Com #1

County Eddy Unit Letter I Section 11 Township 19S Range 28E

Trend Map 150'

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
State II Com #001**

		Sample	SP1 @ 1'	SP1 @ 2'	S1 @ 3'	S1 @ 4'
Analyte	Method	Date	1/18/16	1/18/16	1/18/16	1/18/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<2.00	<2.00	<5.00	<5.00
Toluene	BTEX 8021B		14	45.9	19	44.7
Ethylbenzene	BTEX 8021B		29.9	36.6	31.5	48
Total Xylenes	BTEX 8021B		281	311	293	418
Total BTEX	BTEX 8021B		324	393	344	511
Chloride	SM4500Cl-B		<16.0	32	<16	<16.0
GRO	TPH 8015M		5150	5510	6070	9120
DRO	TPH 8015M		2420	2150	2550	3790

		Sample	SP2 @ 1'	SP2 @ 2'	S2 @ 3'	S2 @ 4'	S2 @ 5'	S2 @ 6'
Analyte	Method	Date	1/18/16	1/18/16	1/18/16	1/18/16	1/18/16	1/18/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<5.00	<5.00	<5.00	<5.00	<10.0	<5.00
Toluene	BTEX 8021B		25.7	92.9	149	91	272	94.1
Ethylbenzene	BTEX 8021B		31.5	65.3	84.8	53	110	53.3
Total Xylenes	BTEX 8021B		313	541	665	437	879	451
Total BTEX	BTEX 8021B		371	699	899	582	1260	598
Chloride	SM4500Cl-B		<16.0	80	64	<16.0	<16.0	32
GRO	TPH 8015M		5420	11700	10700	8620	16300	8480
DRO	TPH 8015M		2250	3840	2870	2710	4010	2780

**Laboratory Analytical Results Summary
State 11 Com #1**

		Sample	B1 @ 5'	B1 @ 6'	B1 @ 7'	B1 @ 8'	B1 @ 10'	B1 @ 11'	B1 @ 12'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<2.00	<2.00	<2.00	<2.50	<2.50	<2.00	<2.00
Toluene	BTEX 8021B		8.81	14.1	5.9	15	17.8	17.3	23.9
Ethylbenzene	BTEX 8021B		15.5	22.3	17.1	21.3	19	16.8	20.1
Total Xylenes	BTEX 8021B		156	215	164	191	164	136	162
Total BTEX	BTEX 8021B		181	252	187	227	201	171	206
GRO	TPH 8015M		2110	2560	2140	3870	3450	2870	3060
DRO	TPH 8015M		1710	1720	1810	2840	2530	2040	1980

**Laboratory Analytical Results Summary
State 11 Com #11**

		Sample	B1 @ 15'	B1 @ 18'	B1 @ 20'	B1 @ 25'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<2.00	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		16.8	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		15.7	<0.050	0.15	0.09
Total Xylenes	BTEX 8021B		127	<0.150	0.24	<0.150
Total BTEX	BTEX 8021B		159	<0.300	0.391	<0.300
GRO	TPH 8015M		2880	14.9	38.8	<10.0
DRO	TPH 8015M		1670	90.2	82.8	19

**Laboratory Analytical Results Summary
State 11 Com #11**

		Sample	B1 @ 28'	B1 @ 31'	B1 @ 34'	B1 @ 37'	B1 @ 40'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		0.073	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	<0.300
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		16.8	<10.0	<10.0	<10.0	<10.0

**Laboratory Analytical Results Summary
State 11 Com #1**

		Sample	B2 @ 7'	B2 @ 8'	B2 @ 9'	B2 @ 10'	B2 @ 11'	B2 @ 12'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.500	<0.050	<0.100	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		9.33	<0.050	<0.100	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		7.72	0.055	0.336	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		95	<0.150	4.36	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		112	<0.300	4.7	<0.300	<0.300	<0.300
GRO	TPH 8015M		773	<10.0	186	<10.0	<10.0	<10.0
DRO	TPH 8015M		550	28.6	322	28.2	<10.0	<10.0

**Laboratory Analytical Results Summary
State 11 Com #1**

		Sample	B2 @ 15'	B2 @ 18'	B2 @ 23'	B2 @ 25'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

Laboratory Analytical Results Summary
State 11 Com #1

		Sample	B2 @ 28'	B2 @ 34'	B2 @ 37'	B2 @ 41'
Analyte	Method	Date	8/19/15	8/19/15	8/19/15	8/19/15
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

August 18, 2015

AMANDA TRUJILLO
COG Operating, LLC
500 W. ILLINOIS
Midland, TX 79701

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/12/15 14:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S1 1' (H502105-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	14.0	2.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	29.9	2.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	281	6.00	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	324	12.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.3 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	5150	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2420	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 181 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.3 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S1 2' (H502105-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	45.9	2.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	36.6	2.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	311	6.00	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	393	12.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 95.4 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	5510	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2150	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 172 % 47.2-157

Surrogate: 1-Chlorooctadecane 94.0 % 52.1-176



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S1 3' (H502105-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	19.0	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	31.5	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	293	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	344	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 106 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	6070	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2550	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 184 % 47.2-157

Surrogate: 1-Chlorooctadecane 94.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S1 4' (H502105-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	44.7	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	48.0	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	418	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	511	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 93.6 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	9120	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	3790	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 228 % 47.2-157

Surrogate: 1-Chlorooctadecane 93.3 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 1' (H502105-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	25.7	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	31.5	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	313	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	371	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PII) 108 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	5420	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2250	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 175 % 47.2-157

Surrogate: 1-Chlorooctadecane 99.2 % 52.1-176

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 2' (H502105-06)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	92.9	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	65.3	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	541	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	699	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 93.5 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/17/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	11700	100	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	3840	100	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 260 % 47.2-157

Surrogate: 1-Chlorooctadecane 98.3 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 3' (H502105-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	149	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	84.8	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	665	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	899	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 93.5 % 85.6-137

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/17/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	10700	100	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2870	100	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 219 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.3 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 4' (H502105-08)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	91.0	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	53.0	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	437	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	582	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 109 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	8620	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2710	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 193 % 47.2-157

Surrogate: 1-Chlorooctadecane 92.0 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 5' (H502105-09)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<10.0	10.0	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	272	10.0	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	110	10.0	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	879	30.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	1260	60.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	16300	100	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	4010	100	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 275 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.3 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG Operating, LLC
 AMANDA TRUJILLO
 500 W. ILLINOIS
 Midland TX, 79701
 Fax To: None

 Received: 08/12/2015
 Reported: 08/18/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/05/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Judy Garcia

Sample ID: S2 6' (H502105-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<5.00	5.00	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	94.1	5.00	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	53.3	5.00	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	451	15.0	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTEX	598	30.0	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 92.2 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/17/2015	ND	416	104	400	0.00	

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	8480	10.0	08/14/2015	ND	182	91.0	200	0.523		
DRO >C10-C28	2780	10.0	08/14/2015	ND	191	95.7	200	0.645		

Surrogate: 1-Chlorooctane 203 % 47.2-157

Surrogate: 1-Chlorooctadecane 105 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- 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



Celey D. Keene, Lab Director/Quality Manager



August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 5' (H502225-01)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	8.81	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	15.5	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	156	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	181	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.9 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2110	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	1710	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 145 % 47.2-157

Surrogate: 1-Chlorooctadecane 79.8 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 6' (H502225-02)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	14.1	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	22.3	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	215	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	252	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.7 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2560	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	1720	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 149 % 47.2-157

Surrogate: 1-Chlorooctadecane 88.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 7' (H502225-03)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	5.90	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	17.1	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	164	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	187	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.0 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2140	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	1810	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 146 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.7 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 8' (H502225-04)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.50	2.50	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	15.0	2.50	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	21.3	2.50	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	191	7.50	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	227	15.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3870	10.0	08/25/2015	ND	193	96.5	200	1.10		
DRO >C10-C28	2840	10.0	08/25/2015	ND	198	99.2	200	1.84		

Surrogate: 1-Chlorooctane 184 % 47.2-157

Surrogate: 1-Chlorooctadecane 93.1 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 10' (H502225-05)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.50	2.50	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	17.8	2.50	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	19.0	2.50	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	164	7.50	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	201	15.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.8 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3450	10.0	08/25/2015	ND	193	96.5	200	1.10		
DRO >C10-C28	2530	10.0	08/25/2015	ND	198	99.2	200	1.84		

Surrogate: 1-Chlorooctane 167 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.2 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 11' (H502225-06)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	17.3	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	16.8	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	136	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	171	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.5 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2870	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	2040	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 154 % 47.2-157

Surrogate: 1-Chlorooctadecane 92.1 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 12' (H502225-07)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	23.9	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	20.1	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	162	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	206	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.7 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	3060	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	1980	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 152 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.7 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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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 SM450Cl-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





August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 15' (H502224-01)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	16.8	2.00	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	15.7	2.00	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	127	6.00	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	159	12.0	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 85.6 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2880	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	1670	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 148 % 47.2-157

Surrogate: 1-Chlorooctadecane 91.2 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 18' (H502224-02)

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	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	<0.050	0.050	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	14.9	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	90.2	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 85.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.3 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 20' (H502224-03)

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	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	<0.050	0.050	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	0.150	0.050	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	0.240	0.150	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	0.391	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	38.8	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	82.8	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 84.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 79.3 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 25' (H502224-04)

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	08/26/2015	ND	2.00	100	2.00	0.409	
Toluene*	<0.050	0.050	08/26/2015	ND	1.87	93.6	2.00	0.205	
Ethylbenzene*	0.090	0.050	08/26/2015	ND	1.97	98.5	2.00	1.30	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.76	96.1	6.00	0.693	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	19.0	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 80.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 70.2 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC		BILL TO		ANALYSIS REQUEST	
Project Manager: Lupe Carrasco	P.O. #:	Company: COG Operating LLC			
Address: 2208 West Main	Attn: Robert McNeill	Address: 600 W Illinois			
City: Artesia	State: NM Zip: 88210	City: Midland			
Phone #: (575) 748-6940	Fax #: Project Owner:	State: TX Zip: 79701			
Project #: State 11 Com #1	Project Location:	Phone #: (432) 221-0388			
Sampler Name: Lupe Carrasco	FOR LAB USE ONLY	Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H5012224	B1 15'	X	1	X		X				8/19/15	8:53am	X	X	
	B1 18'	X	1	X		X						X	X	
	B1 20'	X	1	X		X						X	X	
	B1 25'	X	1	X		X						X	X	

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>A. Trujillo</i>	Date: 8/19/15	Received By: <i>Judy Garcia</i>	Date: 8-21-15	Time: 11:07	Time: 8:00pm
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <i>7:20c</i>	Sample Condition <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHECKED BY: (Initials) <i>AG</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:	REMARKS: <i>gcarrasco@concho.com</i> <i>atrujillo@concho.com</i>

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 #54



August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received:	08/21/2015	Sampling Date:	08/19/2015
Reported:	08/27/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: B1 28' (H502223-01)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	0.073	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	16.8	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 83.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.8 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 31' (H502223-02)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 77.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 81.0 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 34' (H502223-03)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84		

Surrogate: 1-Chlorooctane 80.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 84.0 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 37' (H502223-04)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 80.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.9 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B1 40' (H502223-05)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 78.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 70.7 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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



Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: COG Operating LLC
 Project Manager: Lupe Carrasco
 Address: 2208 West Main
 City: Artesia State: NM Zip: 88210
 Phone #: (575) 748-6940 Fax #:
 Project #: Project Owner:
 Project Name: *Stadalkom #1*
 Project Location:
 Sampler Name: Lupe Carrasco
 P.O. #:
 Company: COG Operating LLC
 Attn: Robert McNeill
 Address: 600 W Illinois
 City: Midland
 State: TX Zip: 79701
 Phone #: (432) 221-0388
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	BTEX	TPH	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<i>H502223</i>	<i>Bias'</i>	<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>1</i>	<i>B1 31'</i>	<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>2</i>	<i>B1 34'</i>	<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>3</i>	<i>B1 37'</i>	<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>4</i>	<i>B1 46'</i>	<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		
<i>5</i>		<i>X</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		

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Relinquished By: *Atrujillo*
 Date: *8/20/15*
 Time: *3:00 pm*
 Received By: *Judy Garza*
 Date: *8/21/15*
 Time: *11:07*

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: *7.2c*
 Sample Condition: Yes No
 Cool In tact: Yes No
 CHECKED BY: *Judy Garza*
 (Initials)

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS: *gcarrasco@concho.com*
atrujillo@concho.com

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476
#54



August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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, flowing style.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received:	08/21/2015	Sampling Date:	08/19/2015
Reported:	08/27/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: B2 7 (H502222-01)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	9.33	0.500	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	7.72	0.500	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	95.0	1.50	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	112	3.00	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	773	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	550	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 123 % 47.2-157
Surrogate: 1-Chlorooctadecane 84.3 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 8 (H502222-02)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	0.055	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	28.6	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 92.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 77.9 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 9 (H502222-03)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.100	0.100	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	0.336	0.100	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	4.36	0.300	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	4.70	0.600	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	186	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	322	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 106 % 47.2-157

Surrogate: 1-Chlorooctadecane 80.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 10 (H502222-04)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	28.2	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 89.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 79.6 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 11 (H502222-05)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84	

Surrogate: 1-Chlorooctane 89.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 84.7 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 12 (H502222-06)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	193	96.5	200	1.10		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	99.2	200	1.84		

Surrogate: 1-Chlorooctane 82.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 86.9 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: COG Operating LLC
 Project Manager: Lupe Carrasco
 Address: 2208 West Main
 City: Artesia State: NM Zip: 88210
 Phone #: (575) 748-6940 Fax #:
 Project #: Project Owner:
 Project Name: State 11 Com #1
 Project Location:
 Sampler Name: Lupe Carrasco
 P.O. #:
 Company: COG Operating LLC
 Attn: Robert McNeill
 Address: 600 W Illinois
 City: Midland
 State: TX Zip: 79701
 Phone #: (432) 221-0388
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :								
H507222	B27	X	1	X	X	X	X	X	X	X	X	8/21/15	9:00am	X	X	X	
	B28	X	1	X	X	X	X	X	X	X	X			X	X	X	
	B29	X	1	X	X	X	X	X	X	X	X			X	X	X	
	B210	X	1	X	X	X	X	X	X	X	X			X	X	X	
	B211	X	1	X	X	X	X	X	X	X	X			X	X	X	
	B212	X	1	X	X	X	X	X	X	X	X			X	X	X	

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Relinquished By: *[Signature]* Date: 8/20/15
 Received By: *[Signature]* Date: 8/21/15
 Time: 5:00pm
 Relinquished By: *[Signature]* Date: 8/21/15
 Received By: *[Signature]* Date: 11:07
 Time: 11:07

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: *726*
 FORM-006 R.2.0
 Sample Condition: Cool Intact
 Checked By: *[Signature]*
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS: *gcarrasco@concho.com*
 atrujillo@concho.com

#54

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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, flowing style.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received:	08/21/2015	Sampling Date:	08/19/2015
Reported:	08/27/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: B2 15' (H502221-01)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.3 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17		

Surrogate: 1-Chlorooctane 80.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 76.9 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 18 (H502221-02)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 81.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 75.1 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 23 (H502221-03)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17		

Surrogate: 1-Chlorooctane 81.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.3 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 25 (H502221-04)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17		

Surrogate: 1-Chlorooctane 79.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.7 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



August 27, 2015

LUPE CARRASCO
COG OPERATING
P. O. BOX 1630
ARTESIA, NM 88210

RE: STATE 11 COM #1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 11:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received:	08/21/2015	Sampling Date:	08/19/2015
Reported:	08/27/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: B2 28' (H502220-01)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/24/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	<10.0	10.0	08/24/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 75.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 71.6 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 34' (H502220-02)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 82.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 77.0 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 37' (H502220-03)

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	08/26/2015	ND	1.99	99.5	2.00	4.04	
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60	
Total BTEX	<0.300	0.300	08/26/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05	
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17	

Surrogate: 1-Chlorooctane 84.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 80.0 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 COG OPERATING
 LUPE CARRASCO
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

 Received: 08/21/2015
 Reported: 08/27/2015
 Project Name: STATE 11 COM #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/19/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: B2 41' (H502220-04)

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	08/26/2015	ND	1.99	99.5	2.00	4.04		
Toluene*	<0.050	0.050	08/26/2015	ND	1.85	92.6	2.00	3.26		
Ethylbenzene*	<0.050	0.050	08/26/2015	ND	1.97	98.4	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/26/2015	ND	5.67	94.4	6.00	2.60		
Total BTEX	<0.300	0.300	08/26/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/25/2015	ND	190	95.0	200	1.05		
DRO >C10-C28	<10.0	10.0	08/25/2015	ND	198	98.8	200	1.17		

Surrogate: 1-Chlorooctane 82.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.2 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Lupe Carrasco

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6940

Project #:

Project Name: Statelcom #1

Project Location:

Sampler Name: Lupe Carrasco

FOR LAB USE ONLY

Lab I.D. Sample I.D.

H50222D
 1 28'
 2 34'
 3 37'
 4 41'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

X X X X X
 1 1 1 1 1
 X X X X X
 X X X X X

8/19/15 9:00am

BTEX

TPH

Chloride

X X X X X
 X X X X X
 X X X X X

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Relinquished By: [Signature]

Relinquished By: [Signature]

Date: 8/20/15
 Time: 5:00pm
 Date: 8/21/15
 Time: 11:07

Received By: [Signature]

Received By: [Signature]

Sample Condition
 Yes No

CHECKED BY: [Signature]

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS: gcarrasco@concho.com
atrujillo@concho.com

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

+ Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

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

Form C-141
Revised August 8, 2011

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

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. 432-230-0077
Facility Name: STATE 11 COM #001	Facility Type: Battery

Surface Owner: State	Mineral Owner:	API No. 30-015-27916
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	11	19S	28E	2310	South	660	East	Eddy

Latitude 32.6744804 Longitude -104.1410294

NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 80 bbls oil	Volume Recovered: 80 bbls oil
Source of Release: Hole in tank	Date and Hour of Occurrence: 7/15/2015 11:34 am	Date and Hour of Discovery: 7/15/2015 11:34 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Amanda Trujillo	Date and Hour: 7/17/2015 3:57 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

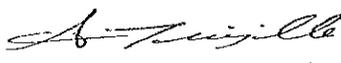
Describe Cause of Problem and Remedial Action Taken.*

This release was caused by a hole in the tank.

Describe Area Affected and Cleanup Action Taken.*

The release was contained within the bermed area. 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: 	OIL CONSERVATION DIVISION		
Printed Name: Amanda Trujillo	Approved by Environmental Specialist:		
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address: atrujillo@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 7/29/2015 Phone: 575-748-6940			

* Attach Additional Sheets If Necessary