

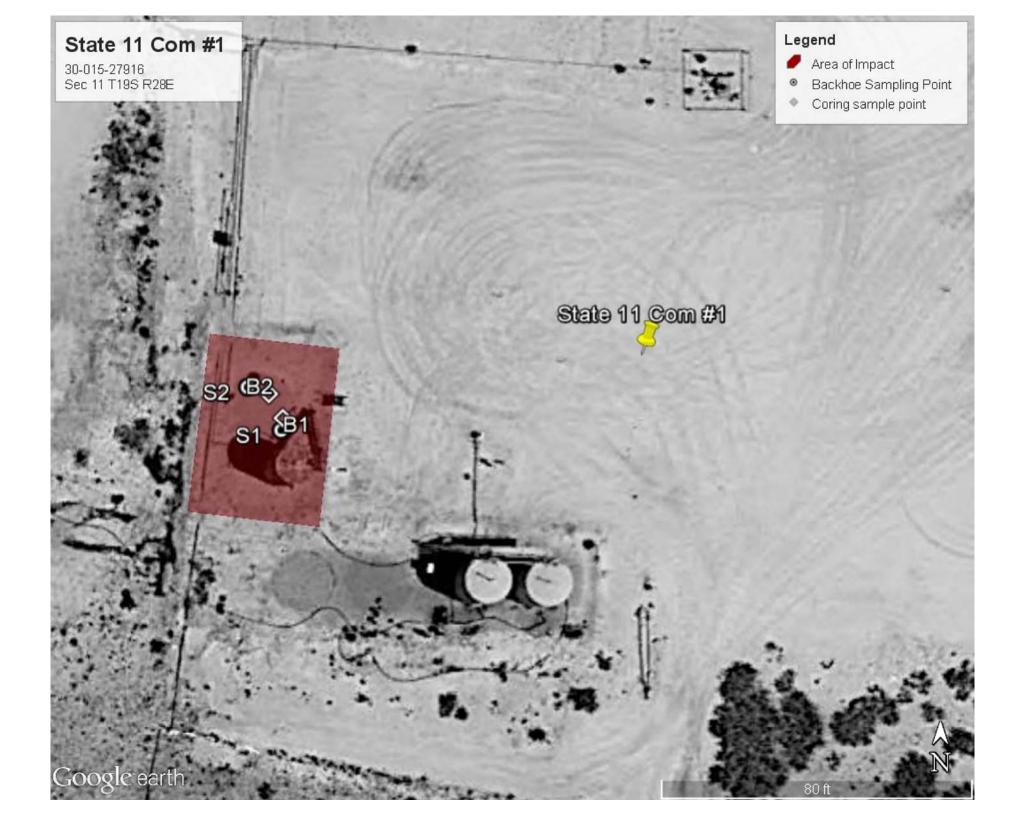
PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805 E-MAIL: cbrunson@bbcinternational.com

COG – STATE 11 COM #1

REMEDIATION PLAN

COG will excavate the spill area as depicted on the following site diagram. The entire spill area will be excavated to a depth of 4 feet then an impermeable liner will be placed into the excavation. All of the surface equipment will be removed prior to the excavation. The entire site will be backfilled with clean soil.

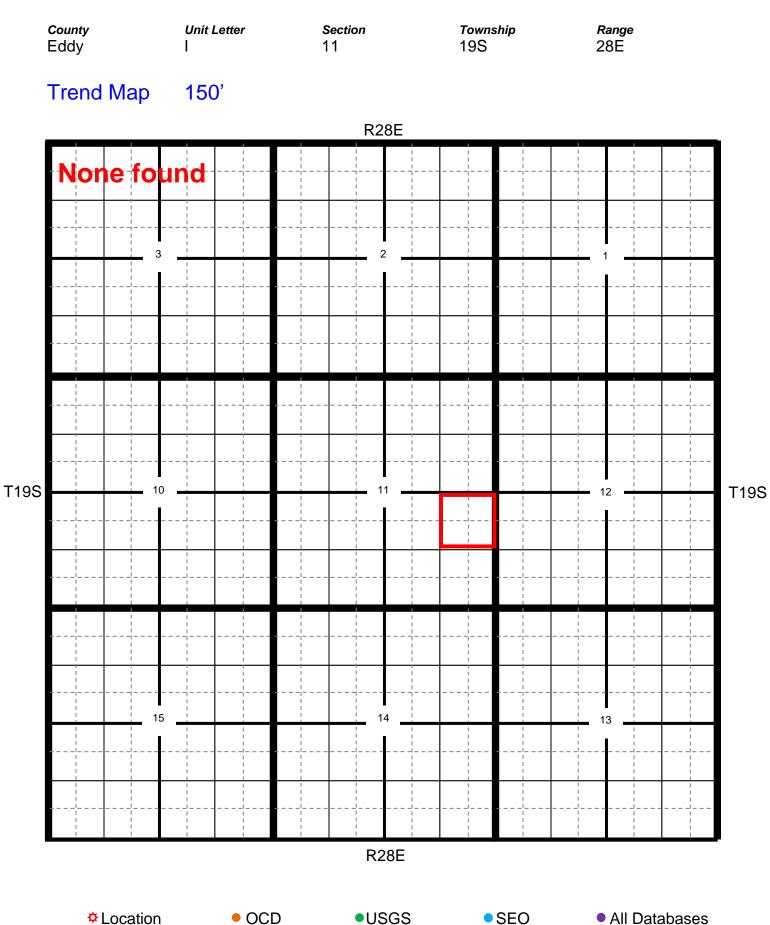
All excavated materials will be disposed of at an NMOCD-approved disposal facility.





Groundwater Plot

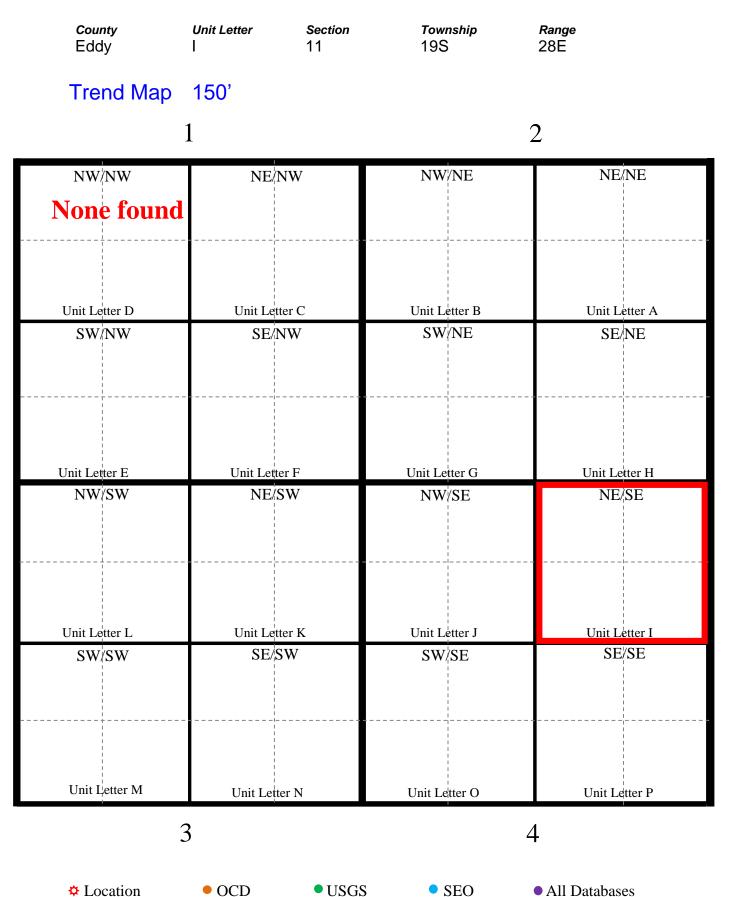
Concho State 11 Com #1





Section Quarters

Concho State 11 Com #1



		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	SM4500CI-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	SM4500CI-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

		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

		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

		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

		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

		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

		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 accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S1 1' (H502105-01)

BTEX 8021B	mg	/kg	Analyze	ed 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	% 85.6-13	7						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	Analyze	d 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 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	96.3	% 52.1-170	5						

Cardinal Laboratories

*=Accredited Analyte

1

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

t

Celler There -



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S1 2' (H502105-02)

BTEX 8021B	mg/	kg	Analyze	ed 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 (PIL	95.49	6 85.6-13	7						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	94.0%	6 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

1

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced executer in fail with mitter approval of Cardinal Laboraties.

1

Celler L. Freene -



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

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

Sample ID: S1 3' (H502105-03)

BTEX 8021B	mg,	'kg	Analyze	d 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 (PIL	106 9	85.6-13	7						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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	1849	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	94.6	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

1

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by dient, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reprodued except in full with written approval of Cardinal Librations.

Celegit treene -

1



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S1 4' (H502105-04)

BTEX 8021B	mg/	/kg	Analyze	ed 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 (PIL	93.6	% 85.6-13	7						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d 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	Analyze	d 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 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	93.3	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate notive to the service in full with mittern approval of Cardinal Laboratives.

1

Celler L. Freene-

1



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 1' (H502105-05)

BTEX 8021B	mg/	kg	Analyze	ed 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 (PIL	108 %	6 85.6-13	7						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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/l	kg	Analyze	d By: MS			= <u>5</u>		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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	99.2 %	6 52.1-17	6						

Cardinal Laboratories

ŧ

*=Accredited Analyte

4

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or corsequential damages, including thouse of profits incidental subsidiaries, affiliates or subsidiaries and claims approval of Cardinal Laboratories.

1

Celler There-



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 2' (H502105-06)

BTEX 8021B	mg/	kg	Analyze	d 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	6.4 9	108	6.00	2.28	
Total BTEX	699	30.0	08/15/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	93.5	85.6-13	7	5 -					
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	
ТРН 8015М	mg/	kg	Analyze	d 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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	98.3 9	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

١

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptors, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based long on any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be performed except in full with written approval of Cardinal aborations.

Celleg L. Freene -

١



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 3' (H502105-07)

BTEX 8021B	mg/	kg	Analyze	ed 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 9	6 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	ed 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	Analyze	d 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%	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	88.3 %	6 52.1-17	6						

Cardinal Laboratories

1

*=Accredited Analyte

1

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or corsequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

1

Celeg the treene -



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 4' (H502105-08)

BTEX 8021B	mg/	′kg	Analyze	ed 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 (PIL	109 9	85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.0 9	52.1-170	5						

Cardinal Laboratories

*=Accredited Analyte

1

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or corsequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celler theme-

£



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 5' (H502105-09)

BTEX 8021B	mg/	kg	Analyze	ed 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 (PIL	103 %	6 85.6-13	7						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	96.3 %	6 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal writin thirty (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 the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratores.

١

Celler Litreene -

1



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

Received:	08/12/2015	Sampling Date:	08/05/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	STATE 11 COM #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

Sample ID: S2 6' (H502105-10)

BTEX 8021B	mg/	'kg	Analyze	ed 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	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	ed By: AP	-				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	6% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/17/2015	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS			2	1 ²	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 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	105 %	6 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

1

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

 \mathbf{A}

Celego treene_



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 SM4500CI-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

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 client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose the subsidiaries, attractions, attracti

١

Calley Litreene -

1

	the second of the second se
	AN INTERNAL
	A SAMPAGED C
	100
	En la constante de la constante
	the second second second
	and a second
Ŀ	
2	
	and the second se
	a second
ŀ	and the second s
۰.	Contraction of the second
	\$745005.0H
•	
ï	
	P 7405
	and the second se
	SAUSSAURIES
ċ	
1	
	540X-1055
1	and the second second
	and the second s
1	
ų	
1	
	A CONTRACTOR OF
J	

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	8240 2476							
Company Name: COG Operating LLC		BIL	BILL TO				ANALYSIS REQUEST	
Project Manager: Amanda		P.O. #:		_		_		
Address: 2208 West Main		Company: C	COG Operating LLC					
City: Artesia State: NM	Zip 88210		Robert McNeill					
Phone #: (575) 748-6930 Fax #:	đ	Address:	600 W Illinois					
Project #: Project Owner:		City:	Midland					-
Project Name: State 11 Com #1		: TX	Zip: 79701					
Project Location:		Phone #: (432) 221-0388	221-0388					
Sampler Name: Amanda Trujilio		Fax #:		******				
FOR LAB USE ONLY	MATRIX	PRESERV.	SAMPLING	: 1				-
	S R						1	
Lab I.D. Sample I.D.	OR (C)(AINERS IDWATE WATER							
1502105	# CON	OTHER ACID/B ICE / CO OTHER	DATE TIME	BTEX	ТРН	Chloride		-
5 S1 1	1 .X		8/5/15 9:00 PM	×	×	×		
Nr. S1 2	×	×	8/5/15 9:00 PM	×	×	×		and the state
	×	×	8/5/15 9:00 PM	×	×	×		-
	× ->	×	9:00	PM ×	×	×		-
20 C2 -	× -	×	00.6	YM ×	×	×		-
2 22 . 2 20 .	× ×		9:00	Т	×	×		
S2 4	1 . X .:	×	8/5/15 9:00 PM		< >	< >		-
9. S2 5	-1 ×			Т	×	×		in the second
	1 ×	×	8/5/15 9:00 PM	×	×	×		-
FCC-Section CE: Luniony and Usingles. Lurismains aboutly and clients exclusive remedy for any durina arising whether based in contract or tort. Shall be einsted to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Causinal writin. 30 days after completion of the applicabl servere in no event shall Cardinal to rabin be hable for unodental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by Claim by subedianes. affiliates of successors arising out of or related to the pertitionance of serves hereinder by Cardinal regardless of whether sub-client caused unon any of the above criterious and affiliates of successors arising out of or related to the pertitionance of serves hereinder by Cardinal regardless of whether such claims is based inton a to of the above or theorem.	I's exclusive remedy for any claim arising whether based in contract or fort, shall be irrinted to the amount paid by the client for the use whatbower shall be deemed waved unless made in writing and received by Catingal Within 30 days after completion of the se entral damages, including without limitation, business interruptions, loss of user, it loss of profits incurred by client, its substations (services hereunder by Catifinal regardless of whether such claim is housed unon any of the alvois station assore or whenever	ir tort, shall be limited to the received by Cardinal within iss of use, in loss of profits based upon any of the abu	e amount paid by the client for the 30 days after completion of the incurred by client, its subsidiane	of the applica sidiaries	ble			l
Relinquished By: Time: 7111	Received By:		and showing the second second second	Phone Result: Fax Result: REMARKS:	□ Yes	No No	Add'l Phone #: Add'l Fax #:	
Relinquished By: Date: 215	Received By:						I a	
Delivered By: (Circle One)	Sample Condition	SAL CHECKED BY:						
Sampler - UPS - Bus - Other:	Yes Yes		J E					
PORM-000 R 2 0		VIN	1.					

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

井九十



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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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 5' (H502225-01)

BTEX 8021B	mg	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	79.8	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 6' (H502225-02)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg,	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	88.6	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 7' (H502225-03)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.7	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 8' (H502225-04)

BTEX 8021B	mg	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	93.1	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 10' (H502225-05)

BTEX 8021B	mg	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	82.2	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 11' (H502225-06)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg,	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.1	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 12' (H502225-07)

BTEX 8021B	mg	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	82.7	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including those of use, or loss of profits incurred by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

10	
1 Eas	
t Marl	
and, H	
lobbs,	
NM	tronga 's
101 East Marland, Hobbs, NM 88240	S

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

City: Project Manager: Lupe Carrasco Company Name: Project Location: Project #: Phone #: Sampler Name: Project Name: State Address: analyses. All claims including those for negligence and any othe service. In no event shall Cardinal be liable for incidental Relinquished By: affiliates or successors arising out of or n Relinguished By: HSDIIIS FOR LAB USE ONLY LEASE NOTE: Liat Lab I.D. Delivered By: (Circle One) Artesia (JE GAN 2208 West Main 10 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 co ୟାରଙ୍କର ଅସ୍ଥ୍ୟ (575) 393-2326 FAX (575) 393-2476 (575) 748-6940 COG Operating LLC Lupe Carrasco Sample I.D. 100 ∞ 0 S. 11 Com# ity and client's exclusive remedy for any clain Fax #: Project Owner: PH Red Si copm ental damages, including without limitation, business inter State: NM Time nder by Ca \times \times \times \times \times \times \times (G)RAB OR (C)OMP Received By: Received By: Zip O **# CONTAINERS** GROUNDWATER Sample Condition Cool Intact Ves Yes of whether such claim is based upon any of the above WASTEWATER 88210 MATRIX SOIL XX $\times \times \times$ × × OIL ptions, loss of use, or loss of profits incurred by client, its subsidiaries SLUDGE P.O. #: Attn: City: Company: Fax #: Phone #: (432) 221-0388 State: TX OTHER Address: ACID/BASE PRESERV ICE / COOL $\times \times \times \times \times$ XX CHECKED BY: BILL TO OTHER (Initials) E Zip: 79701 COG Operating LLC 8/19115 2/8:53 Robert McNeill DATE 600 W Illinois SAMPLING Midland by the client for the Fax Result: REMARKS: atrujillo@concho.com Phone Result: TIME pletion of the applicable X BTEX × × × × × X :: Ves No Add'l Phone Pres No Add'l Fax #: Carrasco@concho.com × XX X × TPH X Chloride ANALYSIS Add'l Phone #: REQUEST

Sampler - UPS - Bus - Other: FORM-006 R 2.0

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

#rry

Page 10 of 10



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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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 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	% 85.6-13	7						
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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	91.2	% 52.1-17	76						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 18' (H502224-02)

BTEX 8021B	mg	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78. <i>3</i>	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 20' (H502224-03)

BTEX 8021B	mg/	kg	Analyze	d 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 9	85.6-13	7						
TPH 8015M	mg/	kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	79.3	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 25' (H502224-04)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	70.2	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7

1					
01 Ea:					
st Ma	ŏ IJ				
rland,					
101 East Marland, Hobbs, NM 88240					
MN					
88240	SF				

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

PLEASE NOTE: Liab analyses. All claims ir service. In no event sl Project Name: State || Som # Phone #: City: Artesia Project Manager: Lupe Carrasco Company Name: Project Location: Project #: Sampler Name: Address: H501224 FOR LAB USE ONLY Lab I.D. **T**(2)J 2208 West Main including those for negligence and any other cause what (575) 748-6940 (575) 393-2326 FAX (575) 393-2476 COG Operating LLC Lupe Carrasco Sample I.D. Fax #: Project Owner: State: NM ver shall be de dy for XX XX (G)RAB OR (C)OMP arising whether based in contract or tort, shall be limited to the amount paid by the client for the waived unless made in writing and received by Cardinal within 30 days after completion of the applicable **# CONTAINERS** Zip GROUNDWATER WASTEWATER 88210 MATRIX XXXX SOIL OIL SLUDGE P.O. #: City: Attn: OTHER Fax #: Phone #: (432) 221-0388 State: TX Address: Company: ACID/BASE: PRESERV ICE / COOL $X \times X \times$ BILL TO OTHER COG Operating LLC Zip: 79701 811915 8:53 Robert McNeill DATE 600 W Illinois SAMPLING Midland TIME BTEX ××× × × XX × TPH Chloride ANALYSIS REQUEST

event shall Cardinal be liable for incidental or conse ental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries

REMARKS: QC	onc
Fax Result: 2 Yes 2 No Add'I Fax #:	

#54

Page 7 of 7



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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.8	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 31' (H502223-02)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg,	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	81.0	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 34' (H502223-03)

BTEX 8021B	mg,	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	84.0	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 37' (H502223-04)

BTEX 8021B	mg/	'kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	'kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	82.9	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 40' (H502223-05)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	70.7	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

(575) 393-2326	(575) 393-2326 FAX (575) 393-2476	RILITO	ANALYSIS REQUEST
Project Manager: Lupe Carrasco	P.O. #:	12	
S	Con	Company: COG Operating LLC	
vrtesia	State: NM Zip 88210 Attn:	n: Robert McNeill	
**		Address: 600 W Illinois	
	Project Owner: City:	/: Midland	
ame: StatelCont		State: TX Zip: 79701	
0	Pho	Phone #: (432) 221-0388	
Sampler Name: Lupe Carrasco	Fax #:		
Lab I.D. Sample I.D.	र :	BASE: COOL R :	de
H502223 - 8128 - 8128 - 81 81 - 81 81	GRC WAS XXXXXX OIL SLU OTH		X X TPI Ch
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 applicable analyses. All claims including those for negligence and any other cause whatsoever is hall be demond waived unless made in writing and received by Cardinal whin 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatsoever is hall be demond waived unless made in writing and received by Cardinal whin 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatsoever is half be demond whether unless made in writing and received by Cardinal whin 30 days after completion of the applicable analyses.	whatsoever shall be deemed waived unless made in writing and receiver whete based in contract or fort.	based in contract or fort, shall be limited to the amount paid by the client for the based in contract or fort, shall be limited to the amount paid by the client for the applicable devices informations loss of uses or forss of profits incurred by client, its subsclaries.	
Relinguished By:	Anvices hereunder by Cardinal, regardless of whether such claim is based upon any of the above Date:	8	Image: Pession of the second secon
Relinquished By:	Received	CHECKED BY:	
Sampler - UPS - Bus - Other: FORM-006 R 2.0	1.20 IV No I No	(167,	

 \dagger Cardinal cannot accept verbal changes. Please fax written changes to 575-393-247 \pm 54

Page 8 of 8

ł



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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg	/kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	84.3	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 8 (H502222-02)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	77.9	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 9 (H502222-03)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	80.6	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 10 (H502222-04)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	79.6	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 11 (H502222-05)

BTEX 8021B	mg,	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	84.7	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 12 (H502222-06)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	86.9	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 8 of 9

-	marker m
01 Ea	
ist Ma	d J
arland	
101 East Marland, Hobbs, NM 88240	
NM	energy a
88240	SF

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	(575) 393-2326 FAX (575) 393-2476)3-2476					
Company Name:	: COG Operating LLC		BILL TO			ANALYSIS REQUESI	1
Project Manager:	r: Lupe Carrasco	6	P.O. #:				
Address: 2208	2208 West Main		Company: COG Operating LLC	rating LLC			
Te	State: NM	M Zip 88210	Attn: Robert McNeill	cNeill			
le #	(575) 748-6940 Fax #:		Address: 600 W Illinois	Illinois			
Project #:	Project Owner:	wner:	City: Midland	đ			
Project Name: Sto	State 11 Com#1	-	State: TX Zip: 79701	01			-
Project Location:			Phone #: (432) 221-0388	00			
Complet Name	Line Carrasco		Fax #:				
EOPLARUSE ONLY		MATRIX	PRESERV. SAMPLING	LING			17
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER :	TIME BTEX	TPH Chloride		
7-1	R C C C C C C C C C C C C C C C C C C C	× × - 1 - × ×	× 8/108/5	5 9:00en X	-		
N	23	× 7	×	×	-		
5	0-	× :	*	×	×		
л-	र = :	×	×	×	-		
6	CI 23	×: - ×	×	- ×	×		
PLEASE NOTE: Liability an analyses. All claims includi	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 applicable analyses. All claims including those for regligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal which 30 days after completion of the applicable	ady for any claim arising whether based in contra shall be deemed waived unless made in writing a	ct or tort, shall be limited to the amount pa not received by Cardinal within 30 days aft	id by the client for the er completion of the applicab	ie -		
affiliates or successors arisi	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	m is based upon any of the above stated r	easons or otherwise.	No	Add'l Phone #:	
Relinquished By:	10-	Received by:		Fax Result: REMARKS: 0	Carrasco@concho	Add'I Fax #:	
St / La	with 5:0	Received By:	ſ	ğ	cho.com		
		Andre / LU	rGarria				

Sampler - UPS - Bus - Other: FORM-006 R 2.0

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

#27

Delivered By: (Circle One)

I

5 0 0

Sample Condition Cool Intact Ves I Ves

CHECKED BY: (Initials) C

Page 9 of 9



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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	'kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	76.9	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 18 (H502221-02)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	75.1	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 23 (H502221-03)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.3	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 25 (H502221-04)

BTEX 8021B	mg/	′kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.7	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7

Project Manager: Line Carrason	FC	BILL TO	ANALYSIS REQUEST
Address: 2200 What Main		P.O. #:	
City: Artesia	State: NM Zin 88210	Attn: COG Operating LLC	
Phone #: (575) 748-6940		Address: 600 W Illinois	
1	Project Owner:		
State II	Com#1	State: TX Zip: 79701	
Project Location:		Phone #: (432) 221-0388	
Sampler Name: Lupe Carrasco		Fax #:	
FOR LAB USE ONLY	P. MATRIX	PRESERV. SAMPLING	
Lab I.D. Sample I.D.	G)RAB OR (C)OMF CONTAINERS ROUNDWATER VASTEWATER SOIL DIL SLUDGE	OTHER : CID/BASE: CE / COOL OTHER :	TEX PH nloride
8	<pre>/* / / / / / / / / / / / / / / / / / /</pre>		TF
	< × < ×		
Ø	x 1 x	× :	
Damages. Cardinal's liability and cli hose for negligence and any other inal be liable for incidental or conse ut of or relaged to the performance	ent's exclusive remedy for any claim alising whether based in contract or fort, shall be limited to the amount paid by the client for the cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable equential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, to forfore the client for the volume transmission of services hereunde by Cardinal within 30 days after completion of the applicable to for services hereunde by Cardinal within 50 days after completion of the applicable of services hereunde by Cardinal within 50 days after completion of the applicable of services hereunde by Cardinal within 50 days after completion of the applicable of services hereunde by Cardinal within 50 days after completion of the applicable of the client for the applicable of	ether based in contract or fort, shall be limited to the amount paid by the client for the ess made in writing and received by Cardinal within 30 days after completion of the ap business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, of unable created by the subsidiaries.	
Relinquished By:	Time: 5:0001/S Pate: Dat		Phone Result: Yes No Add'I Phone #: Fax Result: Yes No Add'I Fax #: REMARKS: gcarrasco@concho.com atrujillo@concho.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006 R 2.0	Time , n Time , n 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	on CHECKED BY: Unitials)	
	† 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/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	′kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	71.6	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 34' (H502220-02)

BTEX 8021B	mg/	kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	'kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	77.0	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 37' (H502220-03)

BTEX 8021B	mg/	kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	'kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	80.0	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 41' (H502220-04)

BTEX 8021B	mg/	'kg	Analyze	d 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	% 85.6-13	7						
TPH 8015M	mg/	'kg	Analyze	d 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	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	78.2	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7

Of East Marland, Hobbs, NM 602 COG Operating LLC Lupe Carrasco West Main State: NM (575) 748-6940 Fax #: (575) 748-6940 Fax #: Project Owner Import Carrasco Lupe Carrasco Saga 1 Saga 2 Saga 3 Saga 3 <td< th=""><th>Of East Marland, Hobbs, NM 88240 BIL TO BIL TO ANALYSIS COOR Operating LLC Po.B.# Company: Coo Operating LLC Po.B.# Company: Coo Operating LLC Winet Man State: NM Zip 98210 Attrastic Score Score (CSD) 718-0904 Fax # Note Main Rate: NM Zip 98210 Attrastic Score Note Main (CSD) 718-0904 Fax # Note Main Rate: N Note Main Note Note (CSD) 718-0904 Fax # Note Main Note Note Note Note (CSD) 718-0904 Fax # Note Note Note Note Note Note (CSD) 718-0904 Fax # Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Note Note Note Note Note Note Note Note Note Note (CSD) Note Note Note Note</th><th>PO.#: State: NM Zip 88210 Attn:: Fax #: Robert McNell Project Owner: Clip: Robert McNell Fax #: Maland Project Owner: State: TX Zip: 79701 State: NM Zip: 79701 Project Owner: Provide State: TX Maland Fax #: Maland Fax #: Maland Fax #: Maland Fax: Fax: Fax: Maland Fax:</th><th>1 I I No I to be please fax written changes to 575-393-2476</th><th>Sampler - UPS - Bus - Outer.</th></td<>	Of East Marland, Hobbs, NM 88240 BIL TO BIL TO ANALYSIS COOR Operating LLC Po.B.# Company: Coo Operating LLC Po.B.# Company: Coo Operating LLC Winet Man State: NM Zip 98210 Attrastic Score Score (CSD) 718-0904 Fax # Note Main Rate: NM Zip 98210 Attrastic Score Note Main (CSD) 718-0904 Fax # Note Main Rate: N Note Main Note Note (CSD) 718-0904 Fax # Note Main Note Note Note Note (CSD) 718-0904 Fax # Note Note Note Note Note Note (CSD) 718-0904 Fax # Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Fax Fax Note Note Note Note Note Note Note Note (CSD) Note Note Note Note Note Note Note Note Note Note (CSD) Note Note Note Note	PO.#: State: NM Zip 88210 Attn:: Fax #: Robert McNell Project Owner: Clip: Robert McNell Fax #: Maland Project Owner: State: TX Zip: 79701 State: NM Zip: 79701 Project Owner: Provide State: TX Maland Fax #: Maland Fax #: Maland Fax #: Maland Fax: Fax: Fax: Maland Fax:	1 I I No I to be please fax written changes to 575-393-2476	Sampler - UPS - Bus - Outer.
Corp C Fask Markand, Hoobs, NW occave Sult. TO ANALYSIS Corp Operating LC Corp Art (STS) 393-2216 C	Or East Mariand, Hobbs, NM 88240 BILL TO AMATYSIS COG Operating LLC PD. #: Company: Cod Operating LLC INVest Main State: NM Zip 88210 Attrastic (FS) 748-9940 Fox #: Cod Operating LLC Attrastic Nate: NM (FS) 748-9940 Fox #: Cod Operating LLC Attrastic Nate: NM Zip Road (FS) 748-9940 Fox #: Cod Operating LLC Attrastic Nate: NM Zip: 79701 Road Inter Cod Comme: Fox #: Cod Operating LLC Attrastic Nate: NM Zip: 79701 Inter Cod Comme: Fox #: Cod Operating LLC Nate: NM Zip: 79701 Inter Cod Code Fox #: Fox #: Nate: NM Zip: 79701 Inter Code Code Fox #: Fox #: Nate: NM Zip: 79701 Inter Code Code Fox #: Fox #: Nate: NM Zip: 79701 Inter Code Code Fox #: Fox #: Fox #: Nate: NM Inter Code Code Fox #: Fox #: For For #: For For #: Inter Code Code For For #: For For #: For For #: For For #: Inter Code Code For For #: For For #: For For #	State: NM Zip B8210 Atten: Robert Movieling LLC Fax #: City: Robert Mineling Robert Mineling Project Owner: State: TX Zip: 79701 Phone #: (432) Z1:0388 Fax #: MATRIX PRESERV State: TX Zip: 79701 Project Owner: G(G)RAB OR (C)OMP. Fax #: Robert Mineling Project Owner: Nation Fax #: Robert Mineling Project Owner: State: TX Zip: 79701 Phone #: (432) Z1:0388 Fax #: Project Owner: State: TX Zip: 79701 Project Owner: Nation Preservice State: TX Zip: 79701 Project Ownere: Nation Preservice <td>dondition CHECKED BY: Intact (Initials)</td> <td>(Circle One)</td>	dondition CHECKED BY: Intact (Initials)	(Circle One)
Op TE gast Mariand, Hobbs, NM Oxeword BILL TO ANALYSIS (675) 393-2326 FAX (575) 393-2476 FO. #: Corporating LLC Address: Exact Tity: Midland Midland Project Owner: Fax #1 State: TX Tity: Midland Project Owner: State: TX State: TX State: TX State: TX Midland Project Owner: Fax #1 Project Owner: Fax #1 State: TX State: TX<	Of East Marland, Hobbs, NM 88240 BILL TO ANALYSIS COG Operating LLC PO.#: Company: COG Operating LLC Company: COG Operating LLC 1 Uppe Carrasco Fox #: Company: COG Operating LLC Company: COG Operating LLC 1 Vorsit Main State: NM Zip 88210 Attn:: Robet Minkelii 1 Corport Fox #: Company: COG Operating LLC Company: COG Operating LLC 1 Project Owner: State: IX Zip: 79701 Nillions 1 Project Owner: City: Midand State: IX Zip: 79701 1 Project Owner: State: IX Zip: 79701 Phone #: (sz) Zi-1038 1 Lupe Carrasco Fox #: Project Vortice R Nillions 1 Lupe Carrasco Fox #: Solid Solid Solid 1 Lupe Carrasco Fox #: Solid Solid Solid 1 Lupe Carrasco MATRIX Fox #: Solid Solid 1 Lupe Carrasco Solid Solid Solid Solid Solid 2 Solid Solid Solid Solid Solid Solid Solid 2 Solid Solid Solid Solid Solid Solid Solid 2 Solid Solid Solid Solid	Project Owner: Zip 88210 Address: 600 Willinois Frax #: City: Nobert McNelli State: TX Zip: 79701 Project Owner: State: TX Zip: 79701 Phone #: (432) 221-0388 Fax #: Project Owner: State: TX Zip: 79701 Project Owner: Project Owner: Doate: Eax #: Project Owner: Oill Doate: BTEX BTEX BTEX BTEX BTEX BTEX State: TV: Nin Contract VII: Nin Contreact VII: Nin Contract VII: Nin Contract VI	0	SIIOCISC SILES
Op/Ens/100 Entl. TO Entl. TO AnALYSIS (575) 393-2326 Fox #: PO.#:	OT East Marland, Hobbs, NM 88240 (675) 332-2326 BILL TO ANALYSIS COCC Operating LLC P.O. #: Company: COC Operating LLC Company: COC Operating LLC IUpe Carrasco Fax #: Address: 600 Willinois Address: 600 Willinois Address: 600 Willinois (675) 748-6940 Fax #: Address: 600 Willinois City: Nidland Nidland Project Owner: State: NM Zip 88210 Attr:: Robert MoNeil Project Owner: State: NM Zip State: NI Zip Project Owner: State: NI Zip Robert MoNeil Robert MoNeil Project Owner: State: NI Zip Robert MoNeil Robert MoNeil Project Owner: State: NI Zip Robert MoNeil Robert MoNeil Sample I.D. GipAaB OR (C)OMP Fax #: State: NI State: NI Sample I.D. GipAaB OR (C)OMP Fax #: State: NI State: NI X 1 Group Containers State: NI State: NI State: NI X 2 GipAaB OR (C)OMP Fax #: State: NI State: NI X 3 GipAaB OR (C)OMP Fax #: State: NI State: NI X 4 Y 4 Group Color Accord Color Accord Color Accord Color Accord Color Accord Accord Acco	Project Owner: Zip 88210 Attn: Robert McNeill Fax #: City: Nidland Project Owner: G()RAB OR (C)OMP. Midland Project Owner: State: TX Zip: 79701 Project Owner: G()RAB OR (C)OMP. Midland Project Owner: State: TX Zip: 79701 Project Owner: G()RAB OR (C)OMP. Midland Project Owner: State: TX Zip: 79701 Project Owner: SoliL Prescrev SampLing Project Owner: G()RAB OR (C)OMP. Midland Prescrev Project Owner: SoliL Prescrev SampLing Project Owner: GROUNDWATER Prescrev SampLing Project Owner: Fax: X X X X Project Owner: Fax: X X <td< td=""><td>ult: Ves No</td><td>PLEASE NOTE: Learning and common including the set of t</td></td<>	ult: Ves No	PLEASE NOTE: Learning and common including the set of t
Op: East Mariand, Hobbs, NM: occurso BILL TO Polyneting LLC Polynet LLC Polynet LLC Poly	Of East Marland, Hobbs, NM 88240 (675) 393-2326 FAX (575) 393-2476 BILL TO Ant VSIS COGO Operating LLC P.O. #: Company: COG Operating LLC P.O. #: West Main State: NM Zip 88210 Attr:: Robert McNeill (575) 748-6940 Fax #: Company: COG Operating LLC Address: 600 Willinois (575) 748-6940 Fax #: Company: COG Operating LLC Address: 600 Willinois (575) 748-6940 Fax #: Company: COG Operating LLC Address: 600 Willinois (575) 748-6940 Fax #: Robert McNeill Address: 600 Willinois (575) 748-6940 Fax #: Company: COG Operating LLC Address: 600 Willinois (575) 748-6940 Fax #: Robert McNeill Address: 600 Willinois (575) 748-6940 Fax #: Nate: TX Zip: 79701 State: TX Zip: 79701 State: TX Zip: 79701 Project Owner: Vac Astreva Ter Nate: TX Zip: 79701 State: TX Zip: 79701 State: TX Zip: 79701 Particle Carrisco Fate: TX Solution Fate: TX Zip: 79701 State: TX Zip: 79701 State: TX Zip: 79701 Particle Carrisco Fate: TX Zip: 79701 Fate: TX Zip: 79701 State: TX Zip: 79701 State: TX Zip: 79701 Particle Carrisco Fat	State: NM Zip 88210 Attn: Company: COG Operating LLC Project Owner: Robert McNeill Address: 600 W Illinois Fax #: V(G)RAB OR (C)OMP. Honne #: (432) 221-0388 Fax #: Fax #: Phone #: (432) 221-0388 Fax #: Fax #: Fax #: Fax #: OIL OIL OIL SLUDGE OTHER: Fax #: Fax #: ICE / COOL OTHER: NATE Midland Fax #: Fax #: Fax #: ICE / COOL OTHER: NATE BTEX BTEX BTEX BTEX TPH THH THH THH THH	contract or tort, shall be limited to the amount paid by the client for the nting and received by Cardinal within 30 days after completion of the applicable the subsidiaries.	the security and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether tases
(G7E Jase: Mariand, Hobbs, NM obcy, NM obcy, Mariand, Hobbs, NM obcy, Mariand, Marian, State: NM Zip 88210 BLL TO POLETING	OT East Mariand, Hobbs, NM 88240 (675) 393-2326 PALL TO FAX (575) 393-2476 PO #: Company: State: NM PO #: ZIP Company: State: NM Company: ZIP Code Note: Company: State: NM PO #: ZIP Company: Code Note: State: NM Code Note: ZIP PO #: Company: State: NM Code Note: ZIP PO #: Company: State: NM Code Note: ZIP PO #: Code Note: State: NM Code Note: ZIP PO #: Code Note: State: NM PO Note: NM PO Note:	State: NM Zip 88210 Attn: Company: COG Operating LLC Project Owner: Zip 88210 Attn: Robert McNeill Address: 600 W Illinois Project Owner: V GROUNDWATER MATRIX State: TX Zip: 79701 Project Owner: GROUNDWATER MATRIX PRESERV State: TX Zip: 79701 PRESERV SOIL OIL Fax #: (432) 221-0388 Fax #: (432) 221-0388 OIL SLUDGE OTHER : PRESERV SAMPLING Fax #: (432) 221-0388 OTHER : OIL OIHER : DATE TIME TIME ACID/BASE: ICE / COOL OTHER : DATE TIME ACID/BASE ICE / COOL OTHER : DATE TIME ACID/BASE ICE / COOL OTHER : DATE TIME ACID/BASE TIME TIME TOATE TIME ACID/BASE TPH ACID/BASE ACID/BASE ACID/BASE		
OF East Mariand, Hobbs, NM Pocked (575) 333-2276 BILL TO BILL TO AnALYSIS : Lupe Carrasco Zip Polect Nmer: Company: COG Operating LLC West Main State: NM Zip 88210 Attm: Robert McNeill (575) 748-6940 Fax #: Project Owner: City: Midland Project Owner: Project Owner: City: Midland Project Owner: Fax #: Phone #: (432) 221-0388 n: Lupe Carrasco MATRX PRESERV SAMPLING Sample I.D. GROUNDWATER Fax #: Fax #: Fax #: Lupe Carrasco MATRX PRESERV Soll Soll SUDGE OIL SUDGE Fax #: Fax #: Lupe Carrasco MATRX PRESERV SAMPLING SUDGE THER: Soll Soll Soll SUDGE THER: Soll Soll Soll SUDGE NATE TIME BTEX Soll Soll SUDGE Chloride Soll Soll Soll Soll SUDGE Soll Soll Soll Soll Soll Soll Soll Soll Soll Soll	Of East Mariand, Hobbs, NM 88240 (675) 393-2326 FAX (675) 393-2476 COG Operating LLC PLL TO ANALYSIS IUpe Carrasco FO. # FO. # Company: COG Operating LLC PO. # Company: COG Operating LLC PO. # Company: COG Operating LLC Po. # Company: COG Operating LLC Company: COG Operating LLC Address: 600 W llinois Company: COG Operating LLC Company: COG Operating LLC Address: 600 W llinois Company: COG Operating LLC Address: 600 W llinois Company: COG Operating LLC Company: COG	.D. Zip 88210 Attm: Robert McNeill Project Owner: Zip 88210 Attm: Robert McNeill Project Owner: GROUNDWATER State: TX Zip: 79701 SoliL Oil SLUDGE PRESERV SAMPLING OIL SLUDGE OTHER: PRESERV SAMPLING ACID/BASE: ICE / COOL OTHER: DATE TIME BTEX BTEX TPH TPH TPH		
BILL TO AMALYSIS COG Operating LLC P.O. #: BILL TO P.O. #: Company: COG Operating LLC 1 Lupe Carrasco State: NM Zip 882.10 Attn: Robert McNeill 3 State: NM Zip 882.10 Attn: Robert McNeill Address: 600 W Illinois (575) 748-6940 Fax #: City: Mdland Project Owner: State: TX Zip: 79701 Project Owner: Upe Carrasco GROUNDWATER PRESERV SAMPLING Sample I.D. PRESERV SoliL SoliL SoliL Sample I.D. PRESERV SoliL Sample I.D. PRESERV SoliL Sample I.D. PRESERV Samplu Grave Fax #: Fax #: Fax Fine	OT East Marland, Hobbs, NM 88240 BLL TO BLL TO ANALYSIS COC Operating LLC Company: COC Operating LLC P.O.#: Company: COC Operating LLC 1 Lupe Carrasco Fax #: N Zip 88210 Attn: Robert Minios (575) 748-6940 Fax #: Project Owner: City: Midland Midland Project Owner: State: TX Zip: 79701 State: TX Zip: 79701 Sample LD. GROUNDWATER Preserv sampLING Fax #: Lupe Carrasco Mitrix: Preserv sampLing Fax #: Sample LD. GROUNDWATER Preserv sampLing SampLing Vaste: Vaste: TX Zip: 79701 SampLing Sample LD. GROUNDWATER Preserv sampLing SampLing Vaste: Vaste: Vaste: Time BTEX Sample LD. GROUNDWATER Mitrix: SampLing SampLing Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: Vaste: <t< td=""><td>D. Zip 88210 Attn: Robert McNeill Project Owner: Zip 88210 Attn: Robert McNeill Project Owner: K GROUNDWATER Midland WASTEWATER MATRIX Phone #: (432) 221-0388 Fax #: PRESERV SOIL OIL SLUDGE OIL SLUDGE OTHER: Actio/BASE: Fix OTHER: Actio/BASE: Fax #: SMPLING WASTEWATER MITINS SAMPLING BTEX BTEX BTEX X X TPH</td><td></td><td></td></t<>	D. Zip 88210 Attn: Robert McNeill Project Owner: Zip 88210 Attn: Robert McNeill Project Owner: K GROUNDWATER Midland WASTEWATER MATRIX Phone #: (432) 221-0388 Fax #: PRESERV SOIL OIL SLUDGE OIL SLUDGE OTHER: Actio/BASE: Fix OTHER: Actio/BASE: Fax #: SMPLING WASTEWATER MITINS SAMPLING BTEX BTEX BTEX X X TPH		
OF East Marland, Hobbs, NW bock-vi (575) 393-2326 FAX (575) 393-2476 BILL TO AMALYSIS CGO Operating LLC Company: COG Operating LLC Company: COG Operating LLC West Main State: NM Zip 88210 Attn: Robert McNell West Main State: NM Zip 88210 Attn: Robert McNell West Main State: NM Zip 88210 Attn: Robert McNell Project Owner: Project Owner: City: Midland Hone #: (432) 221-0386 Hone #: (432) 221-0386 n: Lupe Carrasco MATRIX PRESERV SAMPLING Hone #: (432) 221-0386 Hone #: (432) 221-0386 n: Lupe Carrasco MATRIX PRESERV SAMPLING Hone #: (432) 221-0386 Hone #: (432) 221-0386 n: Lupe Carrasco MATRIX PRESERV SAMPLING Hone #: (432) 221-0386 Hone #: (432) 221-0386 n: GRAD UNDVATER MATRIX PRESERV SAMPLING Hone #: (432) 221-0386 Hone #: (432) 221-0386 n: GRAD UNDVATER MATRIX PRESERV SAMPLING Hone #: (432) 221-0386 Hone #: (432) 21-0386 n: GRAD UNDVATER MATRIX PRESERV SAMPLING Hone #: (432) 21-03	Of East Marland, Hobbs, NM 88240 BILL TO PILL TO ANALYSIS (575) 332-2476 P.O. # Company: COG Operating LLC P.O. #: Company: COG Operating LLC Address: 600 Willinois F.S. #: State: NM	.D. Zip 88210 Attra: Robert McNeill Project Owner: Zip 88210 Attra: Robert McNeill Project Owner: Zip 88210 Attra: Robert McNeill Value GROUNDWATER Matrix Zip: 79701 Value GROUNDWATER Matrix Zip: 79701 Value SoliL Oil State: TX Zip: 79701 Studge OTHER: PRESERVV SAMPLING Fax #: Fax Fax Value OIL SLUDGE OTHER: DATE TIME TIME BTEX BTEX X TPH X TPH		X
OF East Marland, Hobbs, NM 60444 COG Operating LLC P.O. #: COG Operating LLC Company: COG Operating LLC State: NM State: NM Zip 88210 Attn: Robert McNeill State: NM State: NM Zip 88210 Attn: Robert McNeill Project Owner: Project Owner: City: Midland Address: 600 W Illinois n: Lupe Carrasco Fax #: State: TX Zip: 79701 Phone #: (432) 221-0388 n: Lupe Carrasco MATRIX PRESERV. SAMPLING Lupe Carrasco MATRIX PRESERV. SAMPLING solu SLUDGE OTHER: Image: Solu Image: Solu oil SLUDGE OTHER: Image: Solu Image: Solu oil SLUDGE OTHER: Image: Solu Image: Solu oil SLUDGE OTHER: Image: Solu Image: Solu Image: Solu OIL SLUDGE OTHER: Image: Solu Image: Solu Image: Solu Chloride TPH Chloride Image: Solu Image: Solu Image: Solu	Of East Marland, Hobbs, NM 88240 (575) 393-2326 BILL TO ANALYSIS COG Operating LLC Company: COG Operating LLC P.O. #: Company: COG Operating LLC Company: COG Operating LLC West Main State: NM Zip 88210 Attn: Robert McNeill State: NM State: NM Zip 88210 Attn: Robert McNeill State: NM State: NM Zip 88210 Attn: Robert McNeill Project Owner: Project Owner: City: Midland Hone #: (432) 221-0388 Prove MATRIX PRESERV. Samplus Samplus Image: Solut Git Company: COG Operating LLC Image: Solut Git Company: So	.D. Zip 88210 Attn: Company: COG Operating LLC Fax #: Zip 88210 Attn: Robert McNeill Project Owner: Zip 88210 Attn: Robert McNeill Project Owner: Kate: City: Midland SOIL OIL State: Tip: 79701 SOIL Fax #: Fax #: Fax #: Midland OIL SLUDGE PRESERV SAMPLING OTHER : ACID/BASE: ICE / COOL DATE ICE / COOL DATE TIME TIME BTEX TPH TPH TPH		×>
GYL East Marland, Hobbs, NM: 002+44 COG Operating LLC PO.#: COG Operating LLC PO.#: West Main State: NM State: NM Zip 88210 Attn: Robert Main State: NM State: NM Zip B8210 Attn: Robert McNeill Company: CGO Operating LLC Address: (575) 748-6940 Fax #: Project Owner: Robert McNeill Project Owner: State: TX Project Owner: State: TX CONTAINERS Phone #: (432) 221-0388 n: Fax #: Lupe Carrasco Matrix Sample I.D. RAB OR (C)OMP. CONTAINERS Fax #: SolL Fax #: Lupe Carrasco Matrix PRESERV Samplus Sample I.D. Preserv Sample I.D. Fax #: Contraine Hat # BTEX Hat # TPH Chloride	Of East Marland, Hobbs, NM 88240 BILL TO ANALYSIS COG Operating LLC COG Operating LLC P.O. #: Company: Cod Operating LLC Image: State: NM Zip 88210 Attn: Robert MicNeill Project Owner: City: Midland Hone #: (432) 221-0386 Hone #: (432) 221-0386 N: Fax #: Fax #: Fax #: Hone #: (432) 221-0386 Hone #: (432) 221-0386 Subudge Fax #: Fax #: Fax #: Hone #: (432) 221-0386 Hone #: (432) 221-0386 Subudge Fax #: Fax #: Hone #: (432) 221-0386 Hone #: (432) 221-0386 Hone #: (432) 221-0386 Subudge Fax #: Fax #: Hone #: (432) 221-0386 Hone #: (432) 221-0386 Hone #: (432) 221-0386 Fax #: Fax #: Fax #: Hone #: (432) 221-0386 Hone #: (432) 421-0366 Hone #: (432) 421-0366 Hone #: (432)	D. Zip 88210 Attn: Company: COG Operating LLC Fax #: Zip 88210 Address: 600 W Illinois Fax #: Zip 88210 Attn: Robert McNeill For Astronomer: Kate: TX Zip: 79701 Subdec Fax #: Project Owner: Midland Subdec Fax #: Project Owner: Vaste: Subdec Fax #: Project Owner: Midland Subdec Fax #: Project Owner: Project Owner: Subdec Fax #: Project Owner: Midland Subdec Fax #: Project Owner: Midland Subdec Fax #: Project Owner: Project Owner: Subdec Fax #: Project Owner: Project Owner: Subdec Fax #: SampLing BTEX BTEX TPH TPH Fax	× map: 6 516118	
OT East Marland, Hobbs, NM bockey SALL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO P.O. #: D.O. #: D	BILL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 P.O. #: COG Operating LLC P.O. #: Lupe Carrasco Rompany: COG Operating LLC West Main State: NM State: NM Zip 88210 Attn: Robert McNeill FAS.46940 Fax #: Project Owner: State: TX Project Owner: State: TX Project Owner: State: TX State: TX Zip: 79701 Phone #: (432) 221-0388 n: Lupe Carrasco	P.O. #: State: NM Zip 88210 Attn: Fax #: Project Owner: C() OMP. C() OM	DTHER : ACID/BASE ICE / COO OTHER : DATE TIME BTEX TPH	So)RAB OR CONTAINE ROUNDW VASTEWA
Orl East Marland, Hobbs, NM: 602440 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: Company: COG Operating LLC Nuest Main State: NM Zip 88210 Attn: Robert McNeill West Main State: NM Zip 88210 Attn: Robert McNeill State: NM Fax #: State: TX Zip: 79701 Fax #: N: Project Owner: State: TX Zip: 79701 Fax #: N: Iupe Carrasco MATRIX PRESERV. SAMPLING	BILL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: Company: COG Operating LLC Iupe Carrasco P.O. #: Company: COG Operating LLC West Main State: NM Zip 88210 Attn: Robert McNeill Project Owner: Gity: Midland Phone #: (432) 221-0388 n: Eax #: Phone #: (432) 221-0388 n: Eax #: PRESERV SAMPLING	P.O. #: State: NM Zip 88210 Attn: Fax #: Project Owner: Project Owner: Pr	L	(C)OMP. ERS ATER
Of East Marland, Hobbs, NW 602440 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO COG Operating LLC P.O. #: P.O. #: : Lupe Carrasco Company: COG Operating LLC 3 West Main State: NM Zip 88210 Attn: Robert McNeill Muest Main State: NM Zip 88210 Attn: Robert McNeill State: NM Zip 88210 Attn: Robert McNeill Forject Owner: City: Midland Hoone #: (432) 221-0388 n: Fax #: Fax #: Fax #:	Image: State in the integral in	P.O. #: State: NM Zip 88210 Attn: Fax #: Project Owner: Project Owner: City: State: TX Phone #: (43)	PRESERV.	
O1 East Marland, Hobbs, NM: 602440 SULL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 P.O. #: P.O. #: P.O. #: COG Operating LLC P.O. #: P.O.	Image: State in the state i	P.O. #: State: NM Zip 88210 Attn: Fax #: Project Owner: Project Owner: City: State: TX State: TX Phone #: (43)		Project Location:
Of East Marland, Hobbs, NW 60240 BILL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 P.O. #: P.O. #: P.O. #: COG Operating LLC P.O. #: P.O. #: P.O. #: : Lupe Carrasco State: NM Zip 88210 Attn: Robert McNeill West Main State: NM Zip 88210 Attn: Robert McNeill (575) 748-6940 Fax #: City: Midland Project Owner: City: Midland Project Owner: State: TX Zip: 79701	BILL TO ANALYSIS (575) 393-2326 FAX (575) 393-2476 P.O. #: COG Operating LLC P.O. #: COG Operating LLC P.O. #: : Lupe Carrasco P.O. #: West Main State: NM State: NM Zip 88210 Attn: Robert McNeill State: NM Zip 88210 Attn: Robert McNeill Fax #: Got Willinois Project Owner: City: Midland Project Owner: State: TX	P.O. #: State: NM Zip 88210 Attn: Fax #: Project Owner: State: TX	Phone #: (432) 221-0388	roject Name: Statelicom
Of East Marland, Hobbs, NM 602440 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: ANALYSIS COG Operating LLC P.O. #: Company: COG Operating LLC P.O. #: Image: COG Operating LLC	O1 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: Image: Cog Operating LLC Nuest Main State: NM Zip 88210 Attn: Robert McNeill Image: Robert McNeill Image	rrasco P.O. #: State: NM Zip 88210 Attn: 6940 Fax #: Project Owner: City:		
Of East Marland, Hobbs, NW 60240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO COG Operating LLC P.O. #: P.O. #: : Lupe Carrasco P.O. #: Company: COG Operating LLC West Main State: NM Zip 88210 Attn: Robert McNeill Address: 600 W Illinois	O1 East Marland, Hobbs, NM 88240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 FOLL TO COG Operating LLC P.O. #: : Lupe Carrasco P.O. #: 3 West Main State: NM State: NM Zip 88210 Attn: Robert McNeill Address: 600 W Illinois	rrasco P.O. #: State: NM Zip 88210 Attn: Address:		
Of East Marland, Hobbs, NW 60240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: Company: COG Operating LLC : Lupe Carrasco Company: COG Operating LLC Company: COG Operating LLC : Lupe Carrasco Zip 88210 Attn: Robert McNeill	01 East Marland, Hobbs, NM 88240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: : Lupe Carrasco Company: COG Operating LLC Company: COG Operating LLC : West Main Zip 88210 Attn:	rrasco P.O. #: Company: State: NM Zip 88210 Attn:		
O1 East Marland, Hobbs, NW 60240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: Image: Cog Operating LLC Image: Cog Operating LLC<	01 East Marland, Hobbs, NM 88240 ANALYSIS (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #: : Lupe Carrasco Company: COG Operating LLC Company: COG Operating LLC	rrasco P.O. #: Company:		Stato: NM Zip
O1 East Marland, Hobbs, NW 60240 (575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS COG Operating LLC P.O. #: P.O. #:	01 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 COG Operating LLC P.O. #:			Project Manager: Lupe Califasco
BILL TO ANALYSIS	BILL TO ANALYSIS			Company Name: COG Operating LLC
SISA IVNV		BILL TO		(575) 393-2326 FAX (5/5) 393-2410
		SISA IANV	1000	101 East Marland, Hobbs, NM 88240

454

Page 7 of 7

PO

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr.

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

Attached

1220 S. St. Fran	cis Dr., Santa F	^r e, NM 87505	i	Sa	inta Fe	e, NM 875	505						
		· · · · ·	Rele	ase Notific	catior	and Co	orrective A	ction					
						OPERA		Б] Initial	Report		Final Report	
Name of Company: COG Operating LLC							OPERATOR Initial Report Final Report Contact: Robert McNeill						
							Telephone No. 432-230-0077						
							Facility Type: Battery						
Surface Owner: State Mineral Owner:							API No. 30-015-27916						
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	1	South	660	East/ we East				-	
	·			Latitude 32 (5744804	Longitude	-104 1410294						
Latitude 32.6744804 Longitude -104.1410294													
NATURE OF RELEASE Type of Release: Volume of Release: Volume Recovered:													
Type of Release: Oil							Volume of Release: 80 bbls oil			80 bbls oil			
Source of Release:							Date and Hour of Occurrence:			Date and Hour of Discovery:			
Hole in tank										/15/2015 11:34 am			
Was Immédiate Notice Given?							If YES, To Whom? Mike Bratcher – NMOCD						
By Whom? Amanda Trujillo						Date and Hour: 7/17/2015 3:57 PM							
Was a Watercourse Reached?							If YES, Volume Impacting the Watercourse.						
🗌 Yes 🖾 No													
If a Watercou	ırse was Impa	cted, Descri	be Fully.*			J							
					÷								
Describe Cau	se of Problem	and Remed	lial Action	Taken.*			•						
This release v	was caused by	a hole in th	e tank.										
Describe Are	a Affected and	d Cleanup A	ction Tak	en.*									
		-											
							led to delineate an		e contamin	ation fron	n the re	lease and we	
will present a	will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.												
							knowledge and u						
	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 o	perations hav	e failed to a	dequately	investigate and re	emediate	contaminatio	on that pose a thre	eat to grou	nd water, a	surface wa	ter, hu	man health	
or the enviror federal, state,	iment. In add	ition, NMO	CD accept	ance of a C-141	report do	es not relieve	e the operator of r	responsibil	ity for con	npliance w	ith any	other	
icuciai, state,	or local laws	and/or regu	lations.				OIL CONS	SERVA	ΤΙΟΝ Γ)N		
- Augille							OIL CONSERVATION DIVISION						
Signature:							1						
Printed Name: Amanda Trujillo Approved by Environmental Specialist:													
Title: Senior Environmental Coordinator						Approval Dat	e:	Ext	Expiration Date:				

Conditions of Approval:

* Attach Additional Sheets If Necessary

Phone: 575-748-6940

Date: 7/29/2015

E-mail Address: atrujillo@concho.com

١