

August 20, 2014

Oil Conservation Division District 2 – Artesia 811 S. First St. Artesia, NM 88210

Re: SRO State Com #5

30-015-37425 Sec. 8, T26S-R28E Eddy County, NM

Mr. Mike Bratcher,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated July 10, 2014.

Background

The release was due to a well control issue that occurred during a routine pump change. Fluid released was a light spray and was mitigated through the construction of berms to control any standing fluid. All Standing fluid was picked up and disposed of at an NMOCD approved facility. An area approximately 5200 square feet was impacted off location to the north. The rest of the impact was confined to the pad area. This area was addressed with an initial scrape and all impacted material hauled to an NMOCD approved facility.

Groundwater

This area has limited ground water data (per NMOSE), therefore geotechnical data from a nearby construction project and information ascertained from Chevron Trend Maps, was used to determine a site ranking of Zero (o). Depth to groundwater is approximately 100'.

Soil Assessment and Analytical Results

Initial soil samples were taken on 7-14-2014. Samples indicated TPH and BTEX were within RRALs for a site ranking zero. Chloride concentrations in sampling areas S1, S2, S3, S4, S6, and S7 were elevated at 1' depth for surface reclamation, therefore further delineation was conducted for off pad sampling points S7, S9, and S10 (see attached site diagram labeled *Initial Sampling* and *Delineation*).

Work Plan

COG proposes the following work:

- Excavation by scraping of 6" 12' of material from the pad in the heavy and light impact areas. Followed by resurfacing of the pad. (See areas on diagram labeled *Overview Maps*.
- Excavation by scraping of 6" 12' of material from the offsite area (S6) labeled in blue on the site diagram labeled *Delineation*. Impact in this area was suitable for surface reclamation after 1'.
- Excavation by scraping of 3' of material from the offsite area (S7, S9, S10) labeled in red on the site diagram labeled *Delineation*. Removal of 3' will accomplish vegetation of native plant communities.

If there are no objections or further stipulations, COG Operating LLC would like to begin the remediation process based on approval of this work plan. Please feel free to contact my with any questions or concerns at (505) 350-1336

Sincerely,

Amanda Trujillo

Senior Environmental Scientist

1- Zinlle

Enclosed

- (1) C-141 Initial
- (2) Site Diagram Overview Maps
- (3) Site Diagram Initial Sampling
- (4) Site Diagram Delineation
- (5) Laboratory Analysis

District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

* Attach Additional Sheets If Necessary

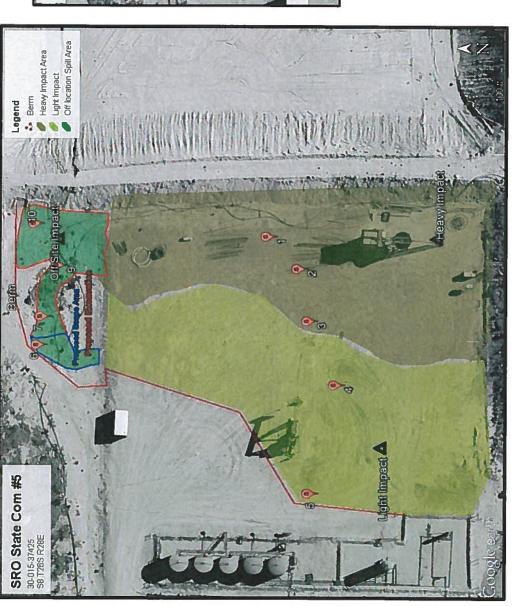
State of New Mexico Energy Minerals and Natural Resources

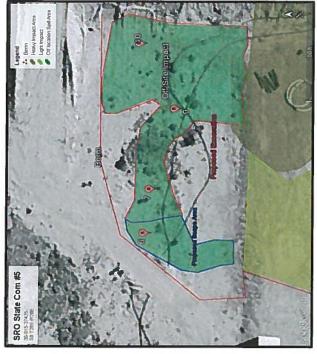
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

RECEIVED	
	Form C-141 vised October 10, 2003
JUL 14 2014 Re	vised October 10, 2003
Submit 2	opies to appropriate
IMOCD ARTEGIA	Office in accordance ith Rule 116 on back
W	side of form

Release Notification and Corrective Action

						OPERA'	TOR		⊠ Init	ial Report		Final Repor
Name of Con		COG OP				Contact		obert N	AcNeill			<u> </u>
Address	600 We			idland, TX 797		Telephone 1		132-230	0-0077			
Facility Name	e .	SRO St	ate Com	#5H		Facility Typ	oe	Well				
Surface Owne	er State			Mineral C)wner	8			Lease 1	No. (API#)	30-015	5-37425
				LOCA	ATIO]	N OF REI	LEASE					
Unit Letter M	Section 8	Township 26S	Range 28E	Feet from the 660		South Line	Feet from the 330	1	Vest Line Vest		Count Eddy	
				Lati	tude	Long	itude					
				NAT	URE	OF RELI	EASE					
Type of Release				-		Volume of			Volume I	Recovered		
Produced water		lensate				Unknown (Unknown			
Source of Relea							our of Occurrenc	e		Hour of Disc	overy	
Well Control Is Was Immediate		0				07-01-2014			07-01-20	14 2:30 pm		
was immediate	Notice G		Yes 🗌	No 🗌 Not Re	quired	If YES, To		Randy D	ade - NM(OCD		
By Whom? Am	nanda Trui	illo				Date and H	our 07-02-2014	09:30	am			
Was a Watercou							lume Impacting th					
			Yes 🛛	No		· ·	, , , , , , , , , , , , , , , , , , ,					
If a Watercourse	a was Imp	ooted Describ	Eullu *									
Describe Cause During a routine company addres approved facility	e pump chased the iss	ange, while p	ılling tubi	Taken.* ng, the well kicke	ed, and t was a l	he BOP rams ight mist. All	were unable to c	lose aro	und the tubed up and d	ing. A third lisposed of at	party v	vell service 10CD
Describe Area A	ffected an	d Cleanup Ad	tion Take	n.*								
site sampled to d	lelineate ar emediation	ny possible co 1 work.	ontaminati	s were constructed on from the relea	se and v	ve will presen	t a remediation w	ork pla	n to the NN	AOCD for ap	proval	prior to
regulations all op public health or t should their oper	perators are the enviror ations havent. In add	e required to a ment. The act of the failed to addition, NMOC	report and cceptance equately in D accepta	s true and comple /or file certain rel of a C-141 report nvestigate and rer nce of a C-141 re	ease not by the nediate	tifications and NMOCD mar contamination	l perform correcti ked as "Final Rep n that pose a threa	ve actio port" do at to gro	ns for releases not relie	ases which make the operate surface water	nay enda tor of li	anger ability
Signature:	Tin	16					OIL CONS	ERVA	TION I	DIVISION	1	
rinted Name:		Amanda	Trujillo		A	pproved by D	istrict Supervisor	:				
Title:	Sen	nior Environm	ental Coo	rdinator	A	pproval Date:		Ex	piration D	ate:		
E-mail Address:		atrujillo@c	oncho.con	1		onditions of A				Attached [
Nate: 07-10-20	014	D	h	575 749 (040								

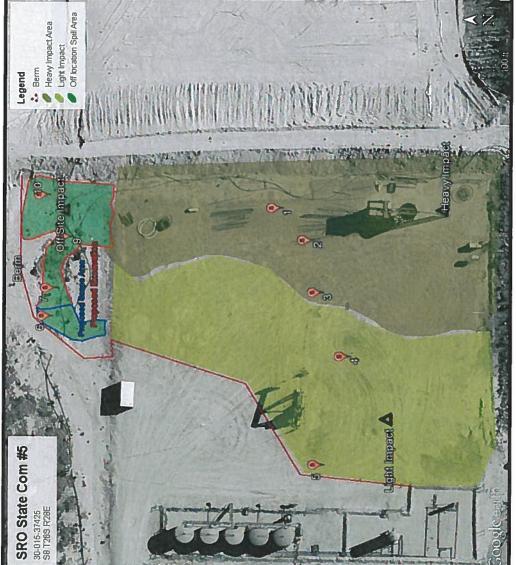






SRO State Com #5 - Initial Sampling

	Site Ra	Site Ranking: 0				
	Depth	Depth to GW per SEO: 100'	SEO: 100'			
	Heavy	Heavy Impact Area	ea.			
	51	DRO	GRO	ТРН	BTEX	-IO
	1,	< 10.0	< 10.0	< 10.0	<0.300	4880
rea	2'	< 50.0	< 50.0	< 50.0	<0.300	160
Il Area	3,	< 10.0	< 10.0	< 10.0	<0.300	80
	S2	DRO	GRO	ТРН	BTEX	Ö
1	1,	< 10.0	141	141	<0.300	5760
K-1	2'	< 10.0	< 10.0	< 10.0	<0.300	272
	3-	< 10.0	< 10.0	< 10.0	<0.300	128
	S3	DRO	GRO	TPH	BTEX	- - -
	1,	< 10.0	< 10.0	< 10.0	<0.300	3760
1	2'	< 10.0	< 10.0	< 10.0	<0.300	1060
-4	3,	< 10.0	< 10.0	< 10.0	<0.300	192
	Light Ir	ight Impact Area				
1/	S4	DRO	GRO	TPH	BTEX	CI-
	1,	< 10.0	115	115	<0.300	2920
	2,	< 50.0	< 50.0	< 50.0	<0.300	784
9	3,	< 10.0	< 10.0	< 10.0	<0.300	176
	S 2	DRO	GRO	TPH	ВТЕХ	'
- 1	1.	< 10.0	< 10.0	< 10.0	<0.300	256
	2'	< 10.0	< 10.0	< 10.0	<0.300	64
N. N.	3,	< 10.0	< 10.0	< 10.0	<0.300	80
	Off Site	Impact	Area			
	98	DRO	GRO	ТРН	BTEX	Cl-
< '/	1-	< 10.0	45	45	<0.300	1680
	2,	< 50.0	< 50.0	< 50.0	<0.300	352
	3.	< 10.0	< 10.0	< 10.0	<0.300	400
	57	DRO	GRO	ТРН	BTEX	-i
	1	< 10.0	141	141	<0.300	12300
	2'	< 10.0	< 10.0	< 10.0	<0.300	6320
	i					





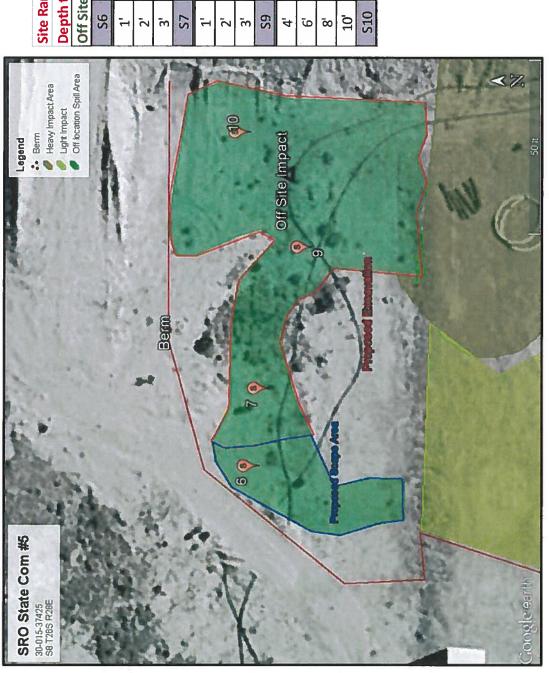
11200

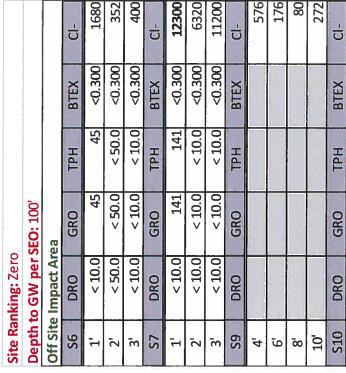
<0.300

< 10.0

< 10.0

< 10.0









July 15, 2014

AMANDA TRUJILLO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: SRO #5

Enclosed are the results of analyses for samples received by the laboratory on 07/14/14 15:30.

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.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014

Project Name:

SRO #5 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1-1' (H402134-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS				-721	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	6 89.4-12	6	100					
Chloride, SM4500CI-B	mg/l	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/l	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	129 %	65.2-14	0				100	-	
Surrogate: 1-Chlorooctadecane	136 %	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1-2' (H402134-02)

BTEX 8021B	mg	'kg	Analyze	d By: MS					200
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 89.4-12	б		2000		# 8 · ·		
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	121 9	65.2-14)			2010			1-1
Surrogate: 1-Chlorooctadecane	127	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

BTEX 8021B

07/15/2014

Project Name: Project Number: SRO #5 NONE GIVEN

Project Location:

NOT GIVEN

mg/kg

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S1-3' (H402134-03)

		9	741474	,					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0,300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 89.4-12	6						2 11
Chloride, SM4500Cl-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	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	120 9	65.2-14	0				, , , , , , , , , , , , , , , , , , , ,		
Surrogate: 1-Chlorooctadecane	130 9	63.6-15	4						

Analyzed By: MS

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*=Accredited Analyte

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 07/14/2014 07/15/2014

Project Name: Project Number:

Project Location:

SRO #5 NONE GIVEN

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S2-1' (H402134-04)

BTEX 8021B	mg	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	88	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 89.4-12	6						

mg,	/kg	Analyzed By: AP						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
5760	16.0	07/15/2014	ND	432	108	400	0.00	
mg/kg		Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
141	10.0	07/15/2014	ND	202	101	200	0.615	
	Result 5760 mg , Result <10.0	5760 16.0 mg/kg Result Reporting Limit <10.0 10.0	Result Reporting Limit Analyzed 5760 16.0 07/15/2014 mg/kg Analyze Result Reporting Limit Analyzed <10.0	Result Reporting Limit Analyzed Method Blank 5760 16.0 07/15/2014 ND mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank <10.0	Result Reporting Limit Analyzed Method Blank BS 5760 16.0 07/15/2014 ND 432 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS <10.0	Result Reporting Limit Analyzed Method Blank BS % Recovery 5760 16.0 07/15/2014 ND 432 108 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery <10.0	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC 5760 16.0 07/15/2014 ND 432 108 400 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <10.0	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD 5760 16.0 07/15/2014 ND 432 108 400 0.00 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <10.0

Surrogate: 1-Chlorooctane 120 % 65.2-140 Surrogate: 1-Chlorooctadecane 130 % 63.6-154

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*=Accredited Analyte

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Celey D. Keena



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

07/14/2014

Reported:

07/15/2014 SRO #5

Project Name: Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2-2' (H402134-05)

BTEX 8021B	mg/	kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	6 89.4-12	6	7. 0.0					
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					-
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	120 %	6 65.2-14	0						
Surrogate: 1-Chlorooctadecane	128 9	63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 07/14/2014 07/15/2014

Project Name:

SRO #5 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S2-3' (H402134-06)

mg/kg		Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
<0.300	0.300	07/15/2014	ND					
	Result <0.050 <0.050 <0.050 <0.150	<0.050	Result Reporting Limit Analyzed <0.050	Result Reporting Limit Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank BS <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

102	% 89.4-12	6						
mg/kg		Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
128	16.0	07/15/2014	ND	432	108	400	0.00	
mg/kg		Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
	Result 128 mg Result <10.0	mg/kg Result Reporting Limit 128 16.0 mg/kg Result Reporting Limit <10.0 10.0	mg/kg Analyzed Result Reporting Limit Analyzed 128 16.0 07/15/2014 mg/kg Analyzed Result Reporting Limit Analyzed <10.0	mg/kg Analyzed By: AP Result Reporting Limit Analyzed Method Blank 128 16.0 07/15/2014 ND mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank <10.0	mg/kg Analyzed By: AP Result Reporting Limit Analyzed Method Blank BS 128 16.0 07/15/2014 ND 432 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS <10.0	mg/ky Analyzed By: AP Result Reporting Limit Analyzed Method Blank BS % Recovery 128 16.0 07/15/2014 ND 432 108 mg/ky Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery <10.0	mg/kg Analyzed By: AP Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC 128 16.0 07/15/2014 ND 432 108 400 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <10.0	mg/kg Analyzed By: AP Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD 128 16.0 07/15/2014 ND 432 108 400 0.00 mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <10.0

Surrogate: 1-Chlorooctane

113 %

65.2-140

Surrogate: 1-Chlorooctadecane

123 %

63.6-154

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name:

07/15/2014 SRO #5

Project Number: Project Location: NONE GIVEN **NOT GIVEN**

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S3-1' (H402134-07)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8S	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	6 89.4-12	6						-
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	118 9	6 65.2-14	0			-1/4.00			
Surrogate: 1-Chlorooctadecane	122 9	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

DRO >C10-C28

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number: Project Location: NONE GIVEN NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S3-2' (H402134-08)

BTEX 8021B	mg,	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	

ND

202

101

200

0.615

Surrogate: 1-Chlorooctane 65.2-140 112% Surrogate: 1-Chlorooctadecane 122% 63.6-154

<10.0

10.0

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07/15/2014

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number: Project Location: NONE GIVEN

C----

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S3-3' (H402134-09)

BTEX 8021B	mg/	'kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 89.4-12	6				-		
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	1149	65.2-14	0			•	31		5
Surrogate: 1-Chlorooctadecane	123 9	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number: Project Location:

NONE GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S4-1' (H402134-10)

BTEX 8021B

ma/ka

Analyzed By: MS

B1EX 8021B	mg,	кg	Anaiyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 89.4-12	6			99			
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2920	16.0	07/15/2014	ND	432	108	400	0.00	

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2920	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	115	10.0	07/15/2014	ND	202	101	200	0.615	
(The state of the									

Surrogate: 1-Chlorooctane

119%

65.2-140

Surrogate: 1-Chlorooctadecane

127%

63.6-154

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received: Reported: 07/14/2014 07/15/2014

Project Name:

SRO #5 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S4-2' (H402134-11)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	118 9	65.2-14	0				JU-		
Surrogate: 1-Chlorooctadecane	127	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014

Project Name:

SRO #5

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S4-3' (H402134-12)

BTEX 8021B	mg/	/kg	Analyze	d By: MS				×	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 89.4-12	5						-
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	120 9	65.2-14)						
Surrogate: 1-Chlorooctadecane	127 9	63.6-15	1						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014 SRO #5

Project Name: Project Number:

SRO #5

Project Location:

NONE GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S5-1' (H402134-13)

BTEX 8021B	mg/	/kg	Analyze	d By: MS			100		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2,00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 89.4-12	б				2000		
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	1129	65.2-14	0		13313	===			***
Surrogate: 1-Chlorooctadecane	121 9	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

BTEX 8021B

GRO C6-C10

DRO >C10-C28

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

mg/kg

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S5-2' (H402134-14)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

ND

ND

194

202

96.8

101

200

200

1.03

0.615

07/15/2014

07/15/2014

Analyzed By: MS

Surrogate: 1-Chlorooctane 107 % 65.2-140
Surrogate: 1-Chlorooctadecane 114 % 63.6-154

<10.0

<10.0

10.0

10.0

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014

Project Name:

SRO #5

Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S5-3' (H402134-15)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 89.4-12	6	200					
Chloride, SM4500Cl-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	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	118 9	65.2-14	0						****
Surrogate: 1-Chlorooctadecane	127 9	63.6-15	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name: 07/15/2014 SRO #5

Project Number: Project Location: NONE GIVEN NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S6-1' (H402134-16)

BTEX	8021B	

BTEX 8021B	mg,	kg	Anaiyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	45.3	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	113 9	65.2-14	0				11.15		
Surrogate: 1-Chlorooctadecane	121	63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING **AMANDA TRUJILLO** P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

07/14/2014

Reported:

07/15/2014

Project Name: Project Number:

SRO #5 NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S6-2' (H402134-17)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 89.4-12	б				-	0.000	
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	121 9	6 65.2-14)			37			
Surrogate: 1-Chlorooctadecane	1249	63.6-15-	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014 SRO #5

Project Name: Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S6-3' (H402134-18)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	1049	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	07/15/2014	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	123 %	6 65.2-14	9			US:			
Surrogate: 1-Chlorooctadecane	133 9	63.6-15-	4						

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COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

07/14/2014

Reported:

07/15/2014 SRO #5

Project Number: Project Location:

NONE GIVEN

Project Name:

NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Sampling Condition:

Soil Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S7-1' (H402134-19)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12300	16.0	07/15/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS		S.			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	141	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	1179	65.2-14	9						
Surrogate: 1-Chlorooctadecane	123 9	63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported: Project Name:

RTEY 8021B

07/15/2014 SRO #5

Project Number: Project Location:

NONE GIVEN

ma/ka

129 %

63.6-154

Come

Sampling Date:

07/14/2014

Sampling Type:

Sampling Condition:

Soil Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S7-2' (H402134-20)

BTEX 8021B	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.72	86.2	2.00	5.35	
Toluene*	<0.050	0.050	07/15/2014	ND	1.66	82.8	2.00	5.96	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.56	78.0	2.00	7.61	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	4.79	79.9	6.00	6.70	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 89.4-12	б						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	07/15/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	194	96.8	200	1.03	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	202	101	200	0.615	
Surrogate: 1-Chlorooctane	120 9	% 65.2-14	0						

Applymed By MC

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Surrogate: 1-Chlorooctadecane

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Celey D. Keena

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/14/2014

Reported:

07/15/2014

Project Name:

SRO #5

Project Number: Project Location:

NONE GIVEN NOT GIVEN

Sampling Date:

07/14/2014

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S7-3' (H402134-21)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/15/2014	ND	1.95	97.5	2.00	6.70	
Toluene*	<0.050	0.050	07/15/2014	ND	1.96	98.0	2.00	4.51	
Ethylbenzene*	<0.050	0.050	07/15/2014	ND	1.98	99.0	2.00	4.74	
Total Xylenes*	<0.150	0.150	07/15/2014	ND	6.10	102	6.00	4.88	
Total BTEX	<0.300	0.300	07/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	6 89.4-12	6				7,80		
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	07/15/2014	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS			1201		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	182	90.8	200	1.69	
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	190	94.8	200	6.55	
Surrogate: 1-Chlorooctane	1169	6 65.2-14	0				1		
Surrogate: 1-Chlorooctadecane	1229	6 63.6-15	4						

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Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	1411	BILL 10		
Project Manager:		P.O. #:		
Address:	6	Company: C06		
City: Attain State: Un	State: Um Zip: 88210	Attn:		223
0#: 575-748-6730F		Address:		
Project #: Project Owner:		City:		
Project Name: SRO #5	10	State: Zip:		
Ä	-	Phone #:	5	
Sampler Name:	7	Fax #:		
FOR LABUSE ONLY	MATRIX	PRESERV SAMPLING	1,	
Huou34	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER: DATE	TPH BTE) Chloric	
1 5/- 1		1 7/14/14	8	
2-51-2'			7	
3 51.3'			R.	
4 52-1'			-	
5 52-2:			X.	
6 52 -3 '			K	
7 53-1'			K	
853-6,			4	
9 53-31			2 2 2	energy of the contract of the

Sample Condition
Cool Intact
Pes Pres
No No

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

Refinquished By:

Time:

efficies or successors energious of or related to the performance of services

Relinquished By:

Date:

Phone Result: Fax Result: REMARKS:

☐ Yes ☐ No Add'I Phone #:

atry: 16 @ conche. com

Rush!



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

200	81	ANALYSIS REQUEST
Project Manager:	P.O. #:	
Address:	Company:	
City: State:	Zip: Attn:	
Phone *: Fax *:	Address:	
Project #: Project Owner:	er: City:	
Project Name: 5KO #5	State: Z	Zip:
Project Location:	*	
Sampler Name:	Fax #:	
FOR LAB USE ONLY	MATRIX	SAMPLING
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP. CONTAINERS GROUNDWATER WASTEWATER SOIL DIL SLUDGE DTHER: ACID/BASE: CE / COOL DTHER:	TPH BTEX Chlorid
10 59 - 11		•
11 59-20		~ X X X X
47		
14 55-21		× 7 × × ×
1555-3		X X X X
16 56 - 1		XXXX
2-96-1		XXXX
1086-3		XXXX
PLEASE NOTE: Liability and Garriages. Controll's labidity and clearl's enclasive remark) for any other aroung whether based in contract or text, shall be landed to the amount paid by the clearl for the enables. All clears including those for negligence and any other cause whitever in hall be determed whered unless made in vitring and received by Centrals within 30 days after completion of the applicable service. In no event shall clearly the moderatal or consequential damages, including without introduce business interruptions loss of use or less of profits instinct by clearly designed and all the profits instinct by clearly designed and the control of the above the control of the control of the above to otherwise.	any daam araang whether based in contract or bot, shall be landed to the destinated whether based in contract or bot, stadies whether became withing and received by Cardianal withing without infratation business inferruptions loss of use, or base of profits of without impairs of the san Cardinal regardless of whether such dates is based union aim of the san Cardinal regardless of whether such dates is based union aim of the san Cardinal regardless of whether such dates in based union aim of the san Cardinal regardless of whether such dates in the san cardinal regardless of whether such dates in the san cardinal regardless of the san cardinal r	t shall be landed to the amount paid by the chent for the ved by Cardural within 30 days after completion of the applicable used by the profits including by chent, as uchadonars. In profit after of the afterus status designed on a forthermorans.
Reinquished By: Time:	P I	Phone Result: Fax Result: REMARKS:
Relinquished By: Date:	Rogarved By:	Email: atris, 1/10 @ condio.com
Delivered By: (Circle One)	Sample Condition CHECKED BY:	

Sampler - UPS - Bus - Other:



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	100		BILL TO	9		ANALYSIS ATCOTS
Project Manager:	Brand Christ	16	P.O. #:			
Address:	inaryo July		Company:	60 COC		
City:	State:	Zip:	Attn:			
Phone #:	Fax #:		Address:			
Project #:	Project Owner:	er:	City:		-	
Project Name:	SCO #5		State: Zip:			
Project Location:			Phone #:			
Sampler Name:			Fax #:			
FOR LAB USE ONLY		MATRIX	PRESERV.	SAMPLING	· C	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:	TIME BYEX	Chlorid	
- P	11-23		_	7	84	
20 5	12-4			8	8	
2	57-31			R	X	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 3934326

Sample Condition
Cool Intact
Cool Intact
Yes Yes
No No

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

Relinquished By:

Time:

ceived By

Phone Result: Fax Result: REMARKS:

☐ Yes ☐ No Add'l Phone #:

Email: atrujillol concho.com

lush!

Relinquished By:



July 31, 2014

AMANDA TRUJILLO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: SRO STATE COM #5

Enclosed are the results of analyses for samples received by the laboratory on 07/25/14 15:05.

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.

Lope S. Moreno

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,

Hope S. Moreno For Celey D. Keene

Lab Director/Quality Manager



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/25/2014

Reported:

07/31/2014

Project Name:

SRO STATE COM #5

Project Number: Project Location:

NONE GIVEN **NOT GIVEN**

Sampling Date:

07/24/2014

Soil

Sampling Type:

Sampling Condition:

** (See Notes)

Sample Received By: Jodi Henson

Sample ID: S9 4' (H402290-01)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte

Analyte

Result Reporting Limit

16.0

Reporting Limit

Analyzed

Analyzed

Method Blank

BS

% Recovery

True Value QC

Qualifier

RPD

0.00

Chloride

576

07/28/2014

ND

400

100

400

Sample ID: S9 6' (H402290-02)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

% Recovery

True Value QC

RPD

Chloride

Chloride

Chloride

Result 176

16.0 07/28/2014 Method Blank ND

BS 400

100

400

Qualifier

Sample ID: S9 8' (H402290-03)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte

Result 80.0

Result

272

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 07/28/2014 Method Blank

ND

ND

BS 400 % Recovery 100

100

True Value OC 400

RPD

0.00

0.00

Qualifier

Qualifier

Sample ID: S9 10' (H402290-04)

Analyte

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyzed

07/28/2014

Method Blank

BS

400

% Recovery

True Value QC 400

RPD

0.00

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 walved 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 clamages, 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.

Abpe S. Moreno



COG OPERATING AMANDA TRUJILLO P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

07/25/2014

Reported:

07/31/2014

Project Name:

SRO STATE COM #5

Project Number: Project Location:

Analyte

Analyte

NONE GIVEN

NOT GIVEN

Sampling Date:

07/24/2014

Soil

Sampling Type:

Sampling Condition:

Sample Received By:

** (See Notes) Jodi Henson

Sample ID: S10 4' (H402290-05)

Chioride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

BS % Recovery True Value QC 400

400

400

Qualifier

Chloride

Chloride

Chloride

Chloride

Result 80.0

Result

32.0

32,0

Result

<16.0

Reporting Limit 16.0

Reporting Limit

16.0

16.0

Reporting Limit

16.0

Analyzed 07/28/2014

Analyzed

07/28/2014

ND

400

BS

400

100

RPD 0.00

Sample ID: S10 6' (H402290-06)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

% Recovery

True Value QC

RPD

0.00

Qualifier

Sample ID: S10 8' (H402290-07)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte

Analyte

Result Reporting Limit

Analyzed 07/28/2014

Analyzed

07/28/2014

Method Blank

ND

Method Blank

ND

BS 400 % Recovery 100

100

True Value QC

RPD Qualifier 0.00

Sample ID: S10 10' (H402290-08)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

BS

400

% Recovery 100

True Value QC

400

RPD Qualifier

0.00

Cardinal Laboratories

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Abpe S. Moreno

Hope S. Moreno For 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 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

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Lope S. Moreno



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

	(575) 393-2326 FAX (575) 393-2476	93-2476		
Company Name:	COG Operating LLC		8/12/70	ANALYSIS REQUEST
Project Manager:	mands Im	110	P.O. #:	
Address: 2208 V			Company: COG Operating LLC	
City: Artesia	State: NM	M Zip 88210	Attn: Robert McNeill	
Phone #:	(575) 748-6930 Fax #:		Address: 600 W Illinois	
Project #:	Project Owner:	Wner:	City: Midland	
ame:	SRO State Com #5		State: TX Zip: 79701	
Project Location:			Phone #: (432) 221-0388	
Sampler Name:			1	
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMF # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER: DATE BTEX	TPH
1	39 4	X	-	->
40.	5000	KX.		
5 M E	27.5			X
27	20 0,	X	7124/14 9 am	X
			the state of the s	
PLEASE NOTE: Liability and arrahyses. All claims including	Darmages. Cardinal's liability and client's exclusive r those for negligence and any other cause whatsoer	medy for any claim arterig whether based in contra or shall be deemed waived unless made in writing a	PLEASE NOTE: Lability and Damages. Cardinal's liability and client's exclusive remody for any claim arteing whether based in contract or tort, shall be limbed to the arrount paid by the client for the process. All claims including those for negligence and any other cause whatsomer intell be deemed wished unless made in writing and received by Cardinal within 30 days after completion of the applicable arrayless. All claims including those for negligence and any other cause whatsomer in the second wished unless made in writing and received by Cardinal within 30 days after completion of the applicable arrayless.	pplicable

Relinquished By:

Time:

Phone Result: Fax Result: REMARKS:

☐ Yes

N O

Add'l Phone #: Add'l Fax #:

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

25.80

Sample Condition
Cool Intact

Yes MY Yes

No | No

Relinquished By: