2RP-471 SITE INFORMATION Report Type: Closure Report General Site Information: Site: Schley Federal Tank Battery Company: COG Operating LLC Section, Township and Range Sec 29 Unit K T17S R29E NM-29281 Lease Number: County: **Eddy County** GPS: 32.80277 104.09825 Surface Owner: **Federal** Mineral Owner: From intersection of CR 210 (old Loco Road) and Hwy 82, go south on CR 210 for 0.5 miles, Directions: turn right (west) and go 0.2 miles, turn left and go 0.1 mile to Tank Battery Release Data:: Date Released: 10/23/2010 Type Release: Produced Fluid Source of Contamination: water tank over flow Fluid Released: 40 bbls Fluids Recovered: 35 bbls Official Communication: Name: Pat Ellis Ike Tavarez Company: COG Operating, LLC Tetra Tech Address: 550 W. Texas Ave. Ste. 1300 1910 N. Big Spring P.O. Box City: Midland Texas, 79701 Midland, Texas Phone number: (432) 686-3023 (432) 682-4559 Fax: (432) 684-7137 Email: pellis@conchoresources.com ike.tavarez@tetratech.com Ranking Criteria Depth to Groundwater: Ranking Score Site Data <50 ft 20 50-99 ft 10 >100 ft. 0 0 WellHead Protection: Ranking Score Site Data Water Source <1,000 ft., Private <200 ft. Water Source >1,000 ft., Private >200 ft. 0 Surface Body of Water: Ranking Score Site Data <200 ft. 20 200 ft - 1,000 ft. 10 >1,000 ft. 0

Accepta	ble Soil RRAL (n	ng/kg) 🕵
Benzene	Total BTEX	TPH
10	50	5,000

Total Ranking Score



RECEIVED
FEB 0.6 2012
NMOCD ARTESIA

January 25, 2012

Mr. Mike Bratcher Environmental Engineer Specialist Oil Conservation Division, District 2 1301 West Grand Avenue Artesia, New Mexico 88210

Re: Closure Report for the COG Operating LLC., Schley Federal Tank Battery, Unit K, Section 29, Township 17 South, Range 29 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill at the Schley Federal Tank Battery, Unit K, Section 29, Township 17 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.80305°, W 104.09841°. The site location is shown on Figures 1 and 2.

Background

On October 23, 2010, the spill occurred due to an electrical problem with the water transfer pump, which overflowed the water tank releasing approximately forty (40) barrels of produced water. Thirty-five (35) barrels of product were recovered by means of a vacuum truck. The spill originated at the transfer pump, migrating 165' south of the tank battery pad and off the tank battery pad measuring 45' x 100'. The initial C-141 form is enclosed in Appendix A.

Groundwater

According to the *Geology and Groundwater Resources of Eddy County, New Mexico* (Report 3), one well is located in Section 20, with a reported depth to water of 210' below surface. According to the NMOCD groundwater map, the average depth to groundwater in this area is greater than 150' below surface. The Geology and Groundwater Resources of Eddy County, New Mexico (Report 3) well report data is shown in Appendix B.



Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On October 26, 2010, Tetra Tech personnel inspected and sampled the spill area. A total of five (5) auger holes (AH-1 through AH-5) were installed using a stainless steel hand auger to assess the impacted soils. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The spill area and auger hole locations are shown on Figure 3.

Referring to Table 1, all of the submitted samples were below the RRAL for TPH and BTEX. A shallow chloride impact was detected at the site. Auger holes (AH-1 and AH-2) showed a shallow impact the soils on the tank battery pad, with chloride concentrations decreasing with depth to 392 mg/kg at 1-1.5' and 354 mg/kg at 3-3.5' below surface, respectively. Auger holes (AH-3, AH-4 and AH-5) were not vertically defined. After review of the aerial photograph, the chloride concentrations found in AH-4 and AH-5 appear to be from a closed reserve pit.

On February 8, 2011, Tetra Tech supervised installation of one (1) soil boring in the area of AH-3 to define the vertical extents. The soil boring results are shown in Table 1. Referring to Table 1, the soil boring samples did not show a significant impact to the soils. The chloride concentrations declined to 201 mg/kg at 7.0' below surface.



Corrective Action

On July 14, 2011, Tetra Tech personnel supervised the removal of the impacted soil as stated in the approved work. The excavated areas and depths are highlighted (green) in Table 1 and shown in Figure 4.

As requested by the BLM, the areas of AH-4 and AH-5 were excavated to a depth of 2.0' to 5.0' below surface to remove the elevated chloride concentrations. As discussed in the work plan, these areas were off the pad in a closed reserve pit. According to the BLM, the reserve pit area was closed by deep burial.

A total of 1,480 yards³ of impacted material was hauled to CRI for proper disposal. Once the excavation, confirmation samples (CS-1, CS-2 and CS-3) were collected from excavated areas. The sample results are shown in Table 2 and shown on Figure 4. Referring to Table 2, all samples showed chloride concentrations of <200 mg/kg, with the exception of CS-2. CS-2 west wall confirmation sample showed a chloride of 911 mg/kg. Based on the results, the excavations were backfilled with clean material.

Based upon the results of the investigation and remediation performed at this site, COG Operating LLC requests closure of this site. The C-141 (Final) is included in Appendix A. If you have any question or comments concerning the remedial activities performed at the Site, please call me at (432) 682-4559.

Respectfully submitted,

TETRA TECH

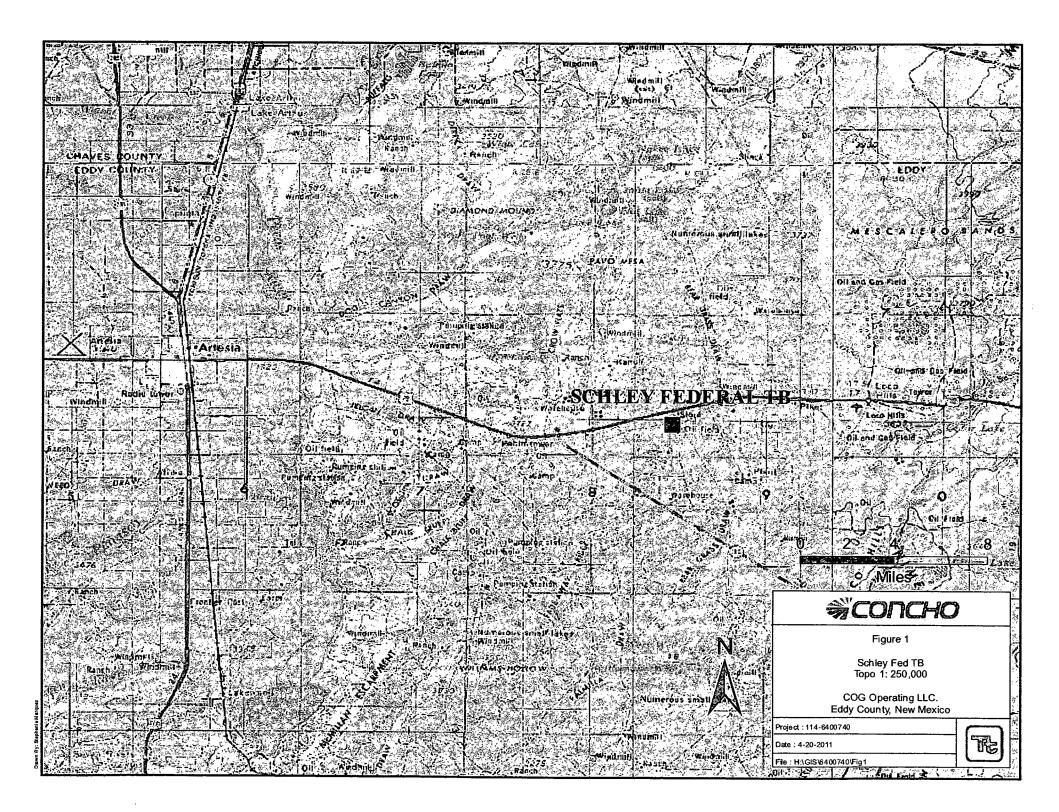
Ike Taxarez

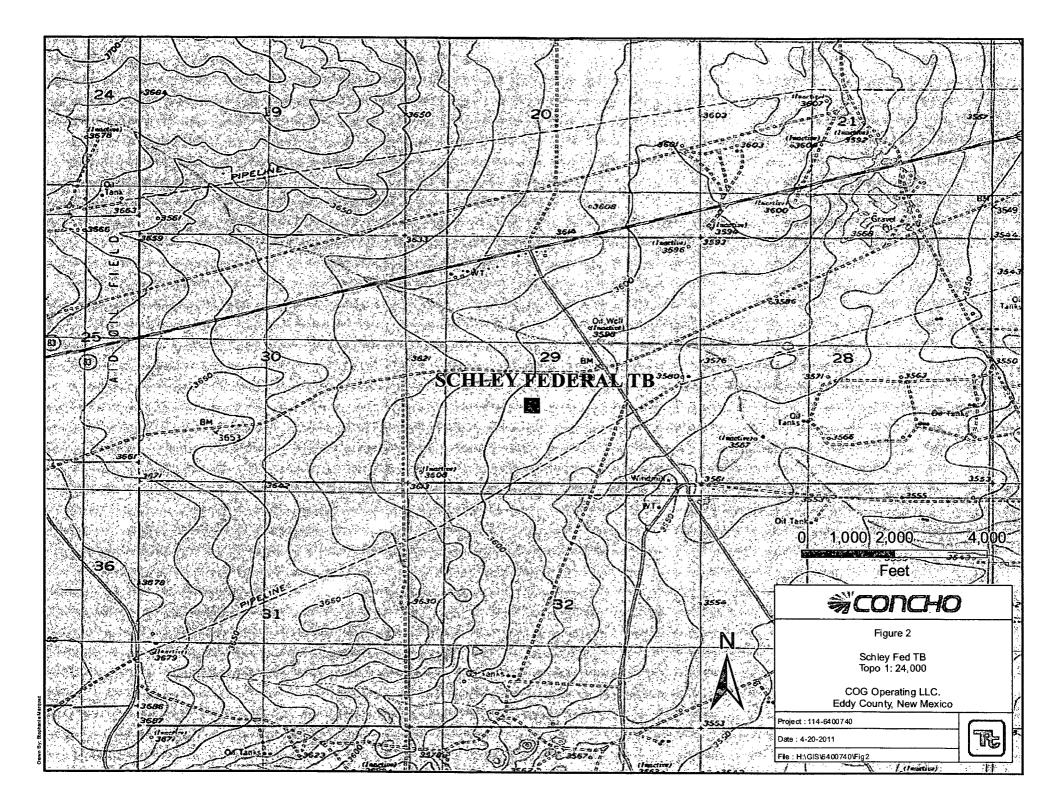
Senior Project Manager

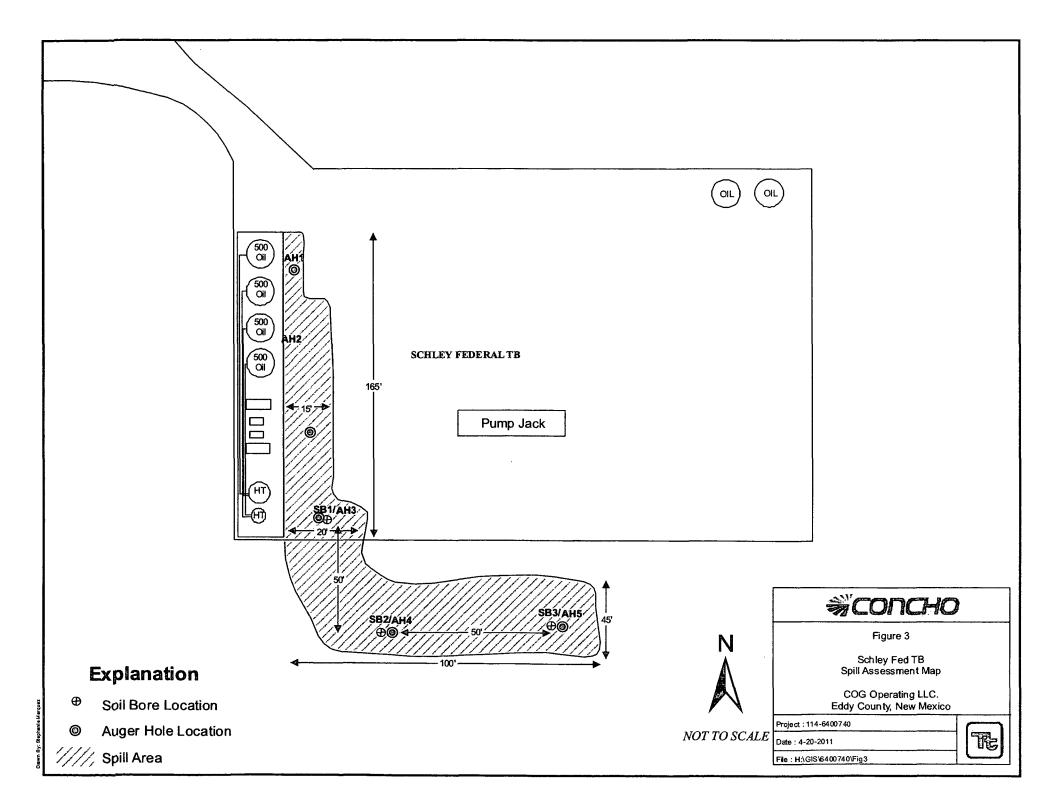
Pat Ellis – COG Terry Gregston - BLM

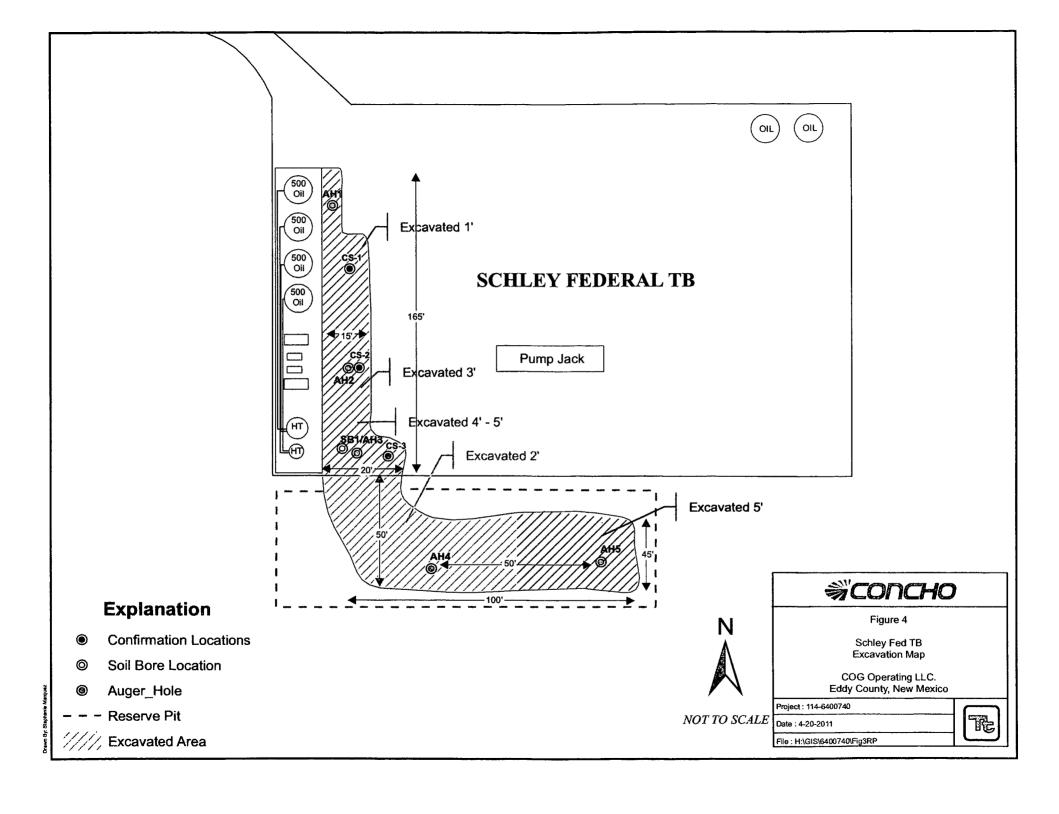
cc:

Figures









Tables

Table 1
COG Operating LLC.
Schley Federal TB
EDDY COUNTY, NEW MEXICO

Sample	Sample	Sample	Depth	Soi	l Status	TF	H (mg/k	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Date	Depth (ft)		In-Situ	Removed	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-1	12/6/2010	0-1	1'*		Χ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	ั<0.0200ื _ย	6,580
		1-1.5'	1'	Х		_	-	-	-	-	-	-	393
		2-2.5'	1'	Х		-	-	-	-	-	-	-	<200
		3-3.5'	1'	Х		-	-	-	-	-	-	~	216
		4-4.5'	1'	X		_	-	-	-	-	-	-	265
		5-5.5'	1'	Х		-	-	-	-	-	-	-	550
AH-2	12/6/2010	0-1'	3. 41°	- Pa	Χ	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	∂7,340 °
		1-1:5"	- '4' .	4.1	Χ		-3.13		5.00				5,660
		2-2.5'	. % j	46	X		e 5_ 2	4 - 41					:'5,930 ∗ :
		3-3.5'	1'	Х		-	-	-	-	-	-	-	354
AH-3	12/6/2010	0-1	1'*	F 13 5 5 5.	X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	7,950
		∂ 1-1.5°	. * 1"	1, 11,	X	V. 22		-				學性學	2,650
		2-2.5'	19 JUE	وداه	Χ							* **	500
		3-3:5"	1145		X		100				3991 98	14.0	2,230
		4-4.5	\$15°		. X	J.	3,523	4. 4. 16.					2,270
SB-1	2/18/2011	0-1'	1'	Х		-	-	-	_	-	-	-	1,490
	11	3'	1'	Х		-	-	-	-	-	-	-	638
	u	5'	1'	Х		-	-	-	-	-	-	-	1,190
	16	7'	1'	Х		-		-	-	-	-	-	201
	15	10'	1'	Х		-	-	-	-	-	-	-	<200
	11	15'	1'	Х		-	-	-	-	-	-	-	<200
	n	20'	1'	Х		-	-	_	-	-	-	-	242

Table 1 COG Operating LLC. Schley Federal TB EDDY COUNTY, NEW MEXICO

Sample	Sample	Sample	Depth	Soi	l Status	TF	PH (mg/k	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
iD	Date	Depth (ft)	(BEB)	In-Situ	Removed	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Closed Re	eserve Pit A	rea					h	<u> </u>		· · · · · · · · · · · · · · · · · · ·		L .,	
AH-4	12/6/2010	0-1		,	X	<2.00	137 .	137	<0.0200	<0.0200	<0.0200	<0.0200	5,080
		1-1.5'	. 4 4 5 1 0 1		X	-						= 3, 3, 6	2,310
		2-2.5'			X	<u>.</u>					<u>-</u>		846
		3-3.5'		Х		-	-	-	_	-	-	-	827
		4-4.5'		Х		-	-	-	-	-	_	-	884
· · · · · · · · · · · · · · · · · · ·		5-5.5'		Х		-	-	-	-	-	-	-	1,040
		6-6.5'		Х		-	-	-	_	-	-	-	920
		7-7.5'		Х		-	-	-	-	-	_	-	1,670
		8-8.5'		Х		-	-	-	-	-	-	-	1,350
		9-9.5'		Х		-	-	-		-	-	-	1,430
AH-5	12/6/2010	0-1'	3		Χ	<2.00	<50.0	<50.0	<0.0200-	<0.0200	<0.0200	<0.0200	5,460
		1-1.5'			X	•	-				-	- 1	5,320
		2-2.5'			Χ							1 1 1 1 1	5,600
		3-3.5'		45	X	· -			-	Δ		- 1	7,240
		4-4.5			X	· - `							7,480
		5-5.5			X	-						4 170g	4,140
		6-6.5'		Х		-	-	-	-	-	_	-	1,130

BEB Below Excavation Bottom

(--) Not Analyzed

Excavation Depths

Table 1 COG Operating LLC. Schley Federal TB EDDY COUNTY, NEW MEXICO

Sample	Sample	Sample	Depth		l Status	TF	H (mg/k	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
Ö.	Date	Depth (ft)	(BEB)	In-Situ	Removed	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Closed R	eserve Pit A	rea											
AH-4	12/6/2010	0-1'			Х	<2.00	137	137	<0.0200	<0.0200	<0.0200	<0.0200	5,080
		1-1.5'			Х	-	-	-	-	- "	-	1	2,310
		2-2.5'			Х	-	,-	-	-	-	-	-	846
		3-3.5'		Х		-	-	-	-	_	-	-	827
		4-4.5'		Х		-	-	-	-	-	-	-	884
		5-5.5'		Х		-	-	-	-	-	-	-	1,040
		6-6.5'		Х		-	-	-	-	-	-	-	920
		7-7.5'		Х		-	-	-	-	-	-	-	1,670
		8-8.5'		Х		-	-	-	_	-	-	-	1,350
		9-9.5'		Х		-	-	-	-	-	-	-	1,430
AH-5	12/6/2010	0-1'			Х	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	5,460
		1-1.5'			Х	-	-	-	-	-	-		5,320
		2-2.5'			Х	-	-	-	- .	-		- "	5,600
		3-3.5'			Х	-	-	-	-			-	7,240
		4-4.5			Х	-	-	_	-	•		-	7,480
		5-5.5'			X	-	-		•	-		-	4,140
		6-6.5'		Х		-	-	-	-	-	-	-	1,130

BEB Below Excavation Bottom

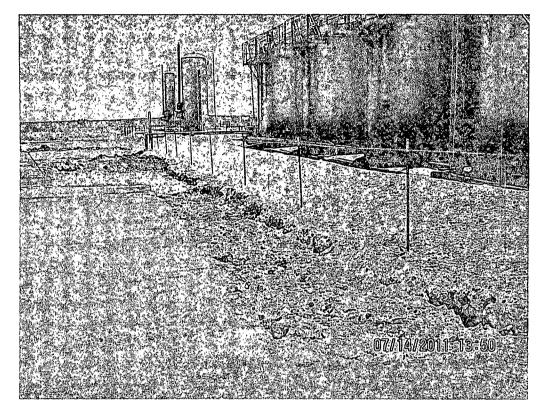
(--) Not Analyzed

Excavation Depths

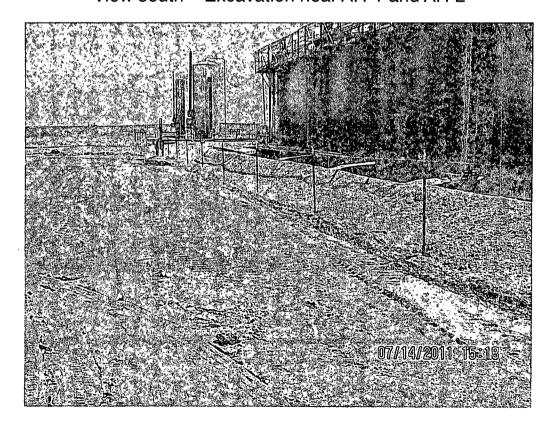
Photos

COG Operating LLC Schley Federal Tank Battery Eddy County, New Mexico





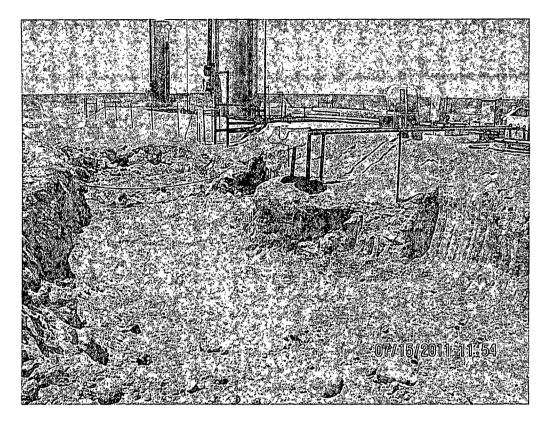
View south - Excavation near AH-1 and AH-2



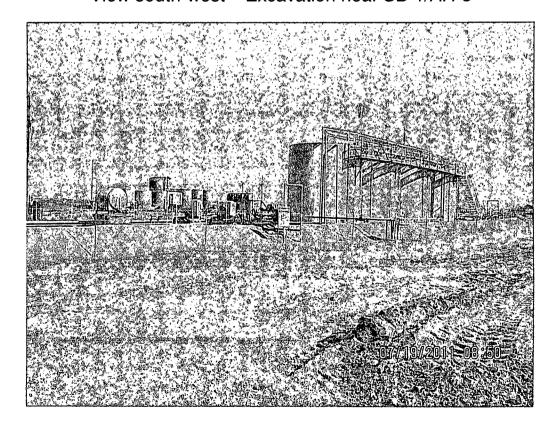
View south - Area backfilled with clean material

COG Operating LLC Schley Federal Tank Battery Eddy County, New Mexico





View south-west - Excavation near SB-1/AH-3



View North-west – Spill area remediated and backfilled with clean material.

Appendix A

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
<u>District II</u>
1301 W. Grand Avenue, Artesia, NM 88210
<u>District III</u>

1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

* Attach Additional Sheets If Necessary

District IV

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

2RP-471

Release Notification and Corrective Action

						OPERAT	OR	Initia	l Report	Final Repor	
Name of Co	mpany C	OG Operat	ing LLC		(Contact Pat	Ellis				
Address 550	0 W. Texa	s, Suite 130	0 Midlai	ıd, Texas 79701	7	Telephone N	lo. (432) 230-0	077			
Facility Nan	ne Schley	Federal Tan	k Battery	1	I	Facility Type	e Tank Batter	у	·		
Surface Own	ner Feder	a1		Mineral O	wner			I ease N	lo. NM-29	281	
Surface Own	ner reder	<u>uı</u>							Dease Ivo. Iviii 20201		
						OF REI					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line		County	
K	29	17-S	29-E	1650	S	South	2310	West		Eddy	
]	Latitude N 32.8	0277°	Longitude	w 104.09825	;0			
				NATI	URE	OF RELI	EASE				
Type of Relea		ed Water					Release 40 bbls		ecovered 3		
Source of Rel	lease					1	our of Occurrence		Hour of Disc	covery	
Water Tank Was Immedia	ta Nation C	Nivon O				10/23/2010 If YES, To		10/23/10	8:00 a.m.		
was mimeon	ne nonce C		Yes [No 🗌 Not Rec	quired		cher - OCD	\$	/	•	
By Whom?	Josh Russo				-	Date and H	our 10/25/10				
Was a Watero						If YES, Vo	lume Impacting th	ne Watercourse.			
			Yes 🏻	No		N/A					
If a Watercou	rse was Im	pacted, Descr	be Fully.*								
N/A								-			
IVA											
							· · · · · · · · · · · · · · · · · · ·				
Describe Cau	se of Proble	em and Remed	lial Actioi	1 Taken.*							
Water Tank o back in service		due to electric	al problen	n with the water tra	ınsfer p	ump. The ele	ectrical problem h	as been corrected a	and the water	transfer pump is	
Describe Area	a Affected :	and Cleanup A	ction Tak	en *	·						
		_									
	ecovery, Inc	e., Hobbs, NM		to define spills extended then brought up to							
regulations al public health should their o	l operators or the envir perations hament. In a	are required to onment. The ave failed to a ddition, NMC	report an acceptanc dequately CD accep	is true and completed of a C-141 report investigate and retained for a C-141 report tance of a C-141 reference of	lease no t by the mediate	otifications and NMOCD made contamination	d perform correct trked as "Final Re on that pose a thre	ive actions for rele port" does not reli at to ground water	ases which i eve the opera , surface wat	nay endanger ator of liability er, human health	
Signature:	///	17	7				OIL CONS	SERVATION	<u>DIVISIO</u>	<u>N</u>	
Printed Name	: Ike Tavar	ez (A	gent	In Col)	Approved by	District Superviso	r:			
Title: Project Manager						Approval Date: Expiration Da			Date:		
E-mail Addre	ss: ike.tava	rez@tetratech	.com		(Conditions of	Approval:		Attached	П	
Date: /-	1112		Phone:	(432) 682-4559						_	

District I
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

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action **OPERATOR** Final Report Name of Company COG OPERATING LLC Pat Ellis Contact 550 W. Texas, Suite 100, Midland, TX 79701 432-230-0077 Address Telephone No. **Facility Name** Schley Federal Facility Type Tank Battery Federal Mineral Owner Surface Owner Lease No. NM-29281 LOCATION OF RELEASE North/South Line County Unit Letter Section Township Feet from the Feet from the Fast/West Line Range K 29 178 29E 1650 South 2310 West Eddy Latitude 32 48.162 Longitude 104 05.895 NATURE OF RELEASE Type of Release Produced water Volume of Release 40bbls Volume Recovered 35bbis Source of Release Water tank Date and Hour of Occurrence Date and Hour of Discovery 10/23/2010 10/23/2010 8:00 a.m. Was Immediate Notice Given? If YES, To Whom? ☑ Yes ☐ No ☐ Not Required Mike Bratcher-OCD By Whom? Josh Russo Date and Hour 10/25/2010 2:12 p.m. Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Water tank overflowed due to an electrical problem with the water transfer pump. The electrical problem has been corrected and the water transfer pump is back in service. Describe Area Affected and Cleanup Action Taken.* Initially 40bbls was released from the water tank at the facility and we were able to recover 35bbls with a vacuum truck. The fluid traveled from around the transfer pump, to the well pad location where it then ran west across the location down the dike wall, and onto the old reserve pit west of the pad. The dimensions of the spill area were 15' x 300'. (The closest well to the release is the Schley Federal #1, API#30-015-30031, located on the same pad location as the Tank Battery). Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the BLM/OCD for approval prior to any significant remediation work, I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by District Supervisor: Printed Name: Josh Russo Title: **HSE** Coordinator Approval Date: **Expiration Date:** E-mail Address: jrusso@conchoresources.com Conditions of Approval: Attached

Phone:

432-212-2399

Date: 11/01/2010

Attach Additional Sheets If Necessary

Appendix B

Water Well Data Average Depth to Groundwater (ft) Schley Federal Tank Battery Eddy County, New Mexico

	16 9	South	:	28 East			16 S	outh		29 Eas	t		16	South		30 Eas	t
6	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
						<u> </u>		Maljar				L					
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	50	21	22	23	24	19	20	21	22	23	24
		61			4	110		↓				L					
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36
	17 9	South		28 East	!		17 S	outh		29 Eas	<u> </u>		17	South		30 East	}
6	5	4	3	2	1	6	5	4	3	2	1	8	5	4	3	2	7
7	8	9	10	11	12	7	B	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	50	21	22	23	24	19	20	21	22	80 23	24	19	20	21	22	23	24
			79			<u> </u>		<u> </u>				L					
30	29	58	27	26	25	30	29 210 208	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36
			53			L	L			1.							
	10 (South		28 East			18 Sc			29 East			40	South		0 East	
6	15	4	13	20 E881	1	6	15	4	3	29 E461	11	6	5	30um	3	2	11
	- [l .			1 1	1	ļ	l		1	1 1		Į.	[1		
7	8	9	10	11	12	7	8	9	10	11	12	7	В	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36
	.]		ᆚ	65		L	_1	l	. 1	1	1 . 1	1	1)	1	1	1

- 88 New Mexico State Engineers Well Reports
- 105 USGS Well Reports
- 90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6) Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34 NMOCD Groundwater Data
- 123 Tetra Tech installed temporary wells and field water level
- 143 NMOCD Groundwater map well location

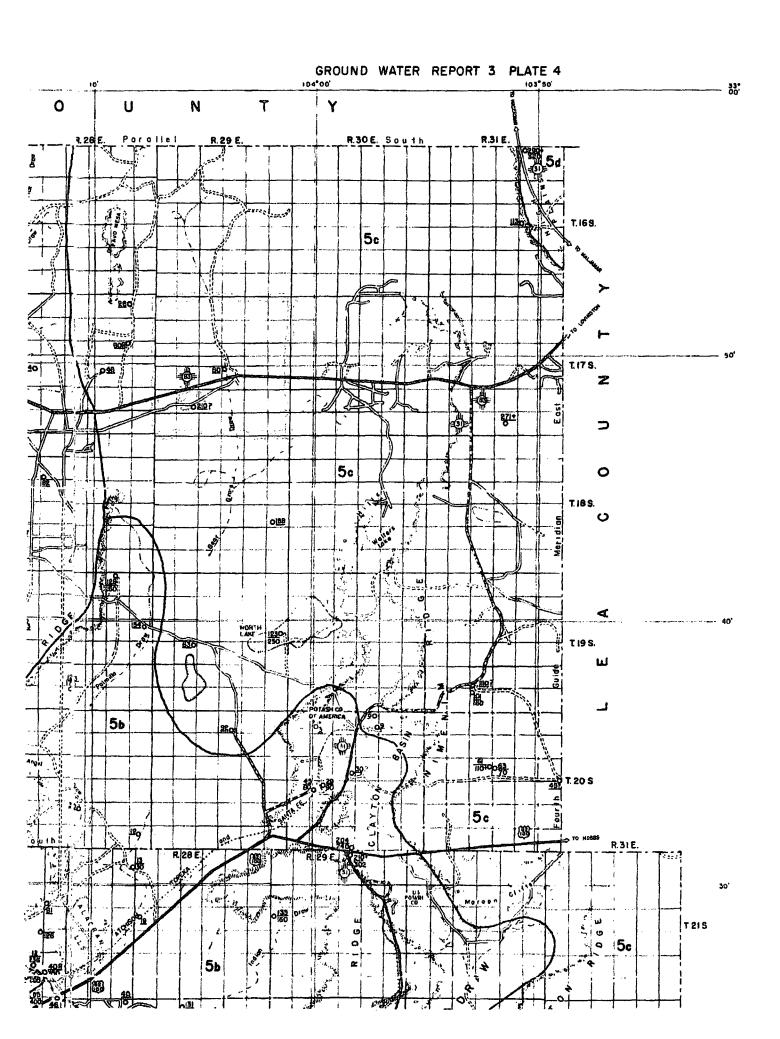


TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

	OWNER	DATE	######################################	ALTITUDE	DEPTH OF	DIAMETER	PRINCIPAL WATER	R-BEARING BED
LOCATION NUMBER	OR Name	COM- PLETED	TOPOGRAPHIC SITUATION	ABOVE SEA LEVEL (feet)	WELL (feet)	(inches)	CHARACTER OF MATERIAL	GEOLOGIC UNIT
17.28.2.240	Hal Bogle	-	Flat between mesas	-	_	6 (?)	Redbeds (?)	Dockum (?)
14.220	do.	_	Rolling	_	_	7	do.	do.
19.200	do.	-	do.	-	-	8	Redbeds, gypsum (?)	Chalk Bluff or Rustler
22.230	-		Flat between mesas	-	-	6	Redbeds (?)	Rustler or Dockum (?)
17.29.22.110	-	_	Bear Grass draw	3,550	-	6	do.	Dockum (?)
29.400	Bishop (?)	***	Flat		-	7	do.	do.
17.31.34.000		-	Rolling	_	_	6 (7)	Redbeds	Dockum
18.21.13.310	Andy Teel	1915		4,100	520	8``	Limestone	San Andres
27.440	do.	1947	Broad valley	4,200	667	10	do.	do.
82.480	George Teel	1946	Rolling	4,300	815	6	do.	do.
18.23.6.140	Couhape Bros.	1941	S. of Rio Penasco	4,060	500	10	do.	do.
18.25.23.111	G. M. Phelps	_	Blackdom Terrace	_	-	-	Alluvium (?)	Quaternary (?

See explanation at beginning of table.

BELOW LAND SURPACE	DATE OF				
(feet)	Measurement	(g.p.m.)	METHOD OF Lipt	USE OF Water	REMARKS
27.6	Dec. 1 1049			WATER	
00	-10.1, 1546	3	w	S	Depth as
80	-	61	TAT	_	Depth to water measured while pum
224.9	Dec 0 1040	•	w	S & D	Driller: Cy Hinshaw. See analysis, Tal
	Dec. 2, 1948	1.2	w	e	
	Dec. 1, 1948			3	Depth to water measured while pum ing.
79.7	Nov. 29, 1948	9 2	N	N	
910	_	3 E.	W	S	Abandoned stock well.
		1.1	TAT	_	Depth to water measured while pum
	Dec. 6, 1948	3.5		S	do,
530	_	10 R.			do. See analysis, Table 3.
800 (?)	_		W		
	_	12 R.	w		
	Jan. 12, 1950	_	T 4.	_	Lowered cylinder 5 ft. in 1948 because
	Jan. 1950	_		S & D	water level declined. Cased to 380 f
	80 224.5 45.5 79.7 210 271+ 505	80 - 224.5 Dec. 2, 1948 45.5 Dec. 1, 1948 Nov. 29, 1948 210 Dec. 3, 1948 Dec. 6, 19	80 - 61 224.5 Dec. 2, 1948 1.2 45.5 Dec. 1, 1948 - 1.2 45.5 Dec. 1, 1948 - 1.2 210 Dec. 3, 1948 1.1 271+ Dec. 6, 1948 3.5 530 - 10 R. 800 (7) - 12 R. 440 Jan. 12, 1950 - 14 Jan. 1950	80 — 61 W 224.5 Dec. 2, 1948 1.2 W 45.5 Dec. 1, 1948 79.7 Nov. 29, 1948 3 E. N 210 Dec. 3, 1948 1.1 W 271+ Dec. 6, 1948 3.5 W 530 — 10 R. W 800 (?) — 12 R. W 440 Jan. 12, 1950 — W	80 — 61 W S&D 224.5 Dec. 2, 1948 1.2 W S 45.5 Dec. 1, 1948

1 Measured Dec. 3, 1948.

Appendix C

Work Order: 11072933

Page Number: 1 of 2

Summary Report

Ike Tavarez Tetra Tech

1910 N. Big Spring Street Midland, TX 79705

Report Date: August 8, 2011

Work Order: 11072933

Project Location: Eddy Co., NM

Project Name:

COG/Schley Fed. TB

Project Number: 114-6400740

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
273111	CS-1 1' bottom	soil	2011-07-14	00:00	2011-07-29
273112	CS-2 3' bottom	soil	2011-07-15	00:00	2011-07-29
273113	CS-2 North Wall	soil	2011-07-15	00:00	2011-07-29
273114	CS-2 East Wall	soil	2011-07-15	00:00	2011-07-29
273115	CS-2 West Wall	soil	2011-07-15	00:00	2011-07-29
273116	CS-3 East WAll	soil	2011-07-18	00:00	2011-07-29
273117	CS-3 West wall	soil	2011-07-18	00:00	2011-07-29
273118	CS-3 South Wall	soil	2011-07-18	00:00	2011-07-29
273119	CS-3 5' Bottom	soil	2011-07-18	00:00	2011-07-29

Sample: 273111 - CS-1 1' bottom

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 273112 - CS-2 3' bottom

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4

Sample: 273113 - CS-2 North Wall

continued ...

Report Date: August 8, 20	11	Work Order: 11072933	Page	Number: 2 of 2
sample 273113 continued .				
Param	Flag	Result	Units	RL
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4
Sample: 273114 - CS-2	East Wall			
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4
Sample: 273115 - CS-2	West Wall			
Param	Flag	Result	Units	RL
Chloride		911	mg/Kg	4
Sample: 273116 - CS-3	East WAll Flag	Result	Units	m RL
Chloride		<200	mg/Kg	4
Sample: 273117 - CS-3	West wall			
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4
Sample: 273118 - CS-3	South Wall			
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4
Sample: 273119 - CS-3	5' Bottom			
Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4



6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, Suite E.

5002 Basin Street, Suite A1 6015 Harris Parkway, Suite 110 - Ft. Worth, Texas 76132

El Paso, Texas 78922 Midland, Texas 79703

800 • 378 • 1296 888 • 588 • 3443

806 • 794 • 1296 FAX 806 • 794 • 1298 915 • 585 • 3443 FAX 915 • 585 • 4944 432 • 689 • 6301 FAX 432 • 689 • 6313

817 - 201 - 5260

E-Mail; lab@traceanalysis.com

Certifications

NCTRCA DBE**NELAP** DoD LELAP Oklahoma ISO 17025 Kansas

Analytical and Quality Control Report

Ike Tavarez Tetra Tech 1910 N. Big Spring Street Midland, TX, 79705

Report Date: August 8, 2011

Work Order: 11072933

Project Location: Eddy Co., NM

Project Name:

COG/Schley Fed. TB

Project Number:

114-6400740

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
273111	CS-1 1' bottom	soil	2011-07-14	00:00	2011-07-29
273112	CS-2 3' bottom	soil	2011-07-15	00:00	2011-07-29
273113	CS-2 North Wall	soil	2011-07-15	00:00	2011-07-29
273114	CS-2 East Wall	soil	2011-07-15	00:00	2011-07-29
273115	CS-2 West Wall	soil	2011-07-15	00:00	2011-07-29
273116	CS-3 East WAll	soil	2011-07-18	00:00	2011-07-29
273117	CS-3 West wall	soil	2011-07-18	00:00	2011-07-29
273118	CS-3 South Wall	soil	2011-07-18	00:00	2011-07-29
273119	CS-3 5' Bottom	soil	2011-07-18	00:00	2011-07-29

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael april

Dr. Blair Leftwich, Director Dr. Michael Abel, Project Manager

Report Contents

Case Narrative
Analytical Report
Sample 273111 (CS-1 1' bottom)
Sample 273112 (CS-2 3' bottom)
Sample 273113 (CS-2 North Wall)
Sample 273114 (CS-2 East Wall)
Sample 273115 (CS-2 West Wall)
Sample 273116 (CS-3 East WAll)
Sample 273117 (CS-3 West wall)
Sample 273118 (CS-3 South Wall)
Sample 273119 (CS-3 5' Bottom)
Method Blanks
QC Batch 83609 - Method Blank (1)
$\stackrel{ ext{QC}}{ ext{QC}}$ Batch 83610 - Method Blank $\stackrel{ ext{(1)}}{ ext{(1)}}$
Laboratory Control Spikes
QC Batch 83609 - LCS (1)
QC Batch 83610 - LCS (1)
QC Batch 83609 - MS (1)
QC Batch 83610 - MS (1)
Calibration Standards
QC Batch 83609 - ICV (1)
QC Batch 83609 - CCV (1)
QC Batch 83610 - ICV (1)
QC Batch 83610 - CCV (1)
Appendix 1
Laboratory Certifications
Standard Flags
Attachments

Case Narrative

Samples for project COG/Schley Fed. TB were received by TraceAnalysis, Inc. on 2011-07-29 and assigned to work order 11072933. Samples for work order 11072933 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

		Prep	Prep	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (Titration)	SM 4500-Cl B	70924	2011-08-02 at 12:49	83609	2011-08-05 at 10:41
Chloride (Titration)	SM 4500-Cl B	70924	2011-08-02 at 12:49	83610	2011-08-05 at 10:43

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11072933 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

114-6400740

Work Order: 11072933 COG/Schley Fed. TB

Page Number: 5 of 12 Eddy Co., NM

Analytical Report

Sample: 273111 - CS-1 1' bottom

Laboratory:

Midland

Chloride (Titration) Analysis:

83609 70924 Prep Batch:

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

QC Batch:

Date Analyzed: Sample Preparation:

2011-08-05 2011-08-02 Analyzed By: ARPrepared By:

RL

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	.J		< 200	mg/Kg	50	4.00

Sample: 273112 - CS-2 3' bottom

Laboratory:

Midland

Chloride (Titration) Analysis: QC Batch: 83609

Analytical Method:

SM 4500-Cl B 2011-08-05

Prep Method: N/A Analyzed By: AR

Prep Batch: 70924 Date Analyzed: Sample Preparation:

Prepared By: AR

2011-08-02

			KL			
Parameter	Flag	Cert	\mathbf{Result}	Units	Dilution	RL
Chloride	U		<200	mg/Kg	50	4.00

Sample: 273113 - CS-2 North Wall

Laboratory:

Midland

Analysis:

Chloride

Chloride (Titration)

Analytical Method:

SM 4500-Cl B 2011-08-05

Prep Method: N/A Analyzed By: AR

QC Batch: 83609 70924 Prep Batch:

Date Analyzed: Sample Preparation:

2011-08-02

Prepared By: AR

Parameter Flag Cert U

RLResult <200

Units mg/Kg

Dilution RL4.00 50

Report Date: August 8, 2011 Work Order: 11072933 Page Number: 6 of 12 114-6400740 COG/Schley Fed. TB Eddy Co., NM Sample: 273114 - CS-2 East Wall Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 83609 Date Analyzed: 2011-08-05 Analyzed By: AR Prep Batch: 70924 Sample Preparation: 2011-08-02 Prepared By: AR RLParameter Flag Cert Result Units Dilution RLChloride <200 mg/Kg 50 4.00 U

Sample: 273115 - CS-2 West Wall Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 83609 Date Analyzed: 2011-08-05 Analyzed By: AR Prep Batch: 70924 Sample Preparation: 2011-08-02 Prepared By: AR RLFlag Parameter Cert Result Units Dilution RLChloride 911 mg/Kg 50 4.00

Sample: 273116 - CS-3 East WAll Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 83610 Date Analyzed: 2011-08-05 Analyzed By: AR Sample Preparation: Prep Batch: 70924 2011-08-02 Prepared By: AR

Sample: 273117 - CS-3 West wall

Laboratory: Midland

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 83610 Date Analyzed: 2011-08-05 Analyzed By: AR Prep Batch: 70924 Sample Preparation: 2011-08-02 Prepared By: AR

114-6400740

Work Order: 11072933 COG/Schley Fed. TB

Page Number: 7 of 12

Eddy Co., NM

			m RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	υ		< 200	mg/Kg	50	4.00

Sample: 273118 - CS-3 South Wall

Laboratory:

Midland

Analysis: QC Batch:

Chloride (Titration)

83610

Prep Batch: 70924

Analytical Method: Date Analyzed:

SM 4500-Cl B 2011-08-05

Prep Method: N/A Analyzed By: AR

AR

Prepared By:

2011-08-02

RL

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	U		<200	mg/Kg	50	4.00

Sample Preparation:

Sample: 273119 - CS-3 5' Bottom

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 83610 Prep Batch: 70924 Analytical Method:

SM 4500-Cl B 2011-08-05

Prep Method: N/A Analyzed By: AR

Date Analyzed: Sample Preparation: 2011-08-02

Prepared By: AR

RL

Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	U		<200	mg/Kg	50	4.00

114-6400740

Work Order: 11072933 COG/Schley Fed. TB

Page Number: 8 of 12 Eddy Co., NM

Method Blanks

70924

Method Blank (1)

QC Batch: 83609

QC Batch: 83609

Prep Batch:

Date Analyzed:

2011-08-05

Analyzed By: AR

QC Preparation: 2011-08-02 Prepared By:

MDL

RLParameter Flag Cert Result Units Chloride < 3.85 mg/Kg

Method Blank (1)

QC Batch: 83610

QC Batch:

83610

Date Analyzed:

2011-08-05

Analyzed By: AR

Prep Batch: 70924

QC Preparation: 2011-08-02 Prepared By: AR

MDL

Parameter Flag Cert Result Units RLChloride <3.85 mg/Kg 4

114-6400740

Work Order: 11072933

COG/Schley Fed. TB

Page Number: 9 of 12

Eddy Co., NM

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch:

Prep Batch: 70924

83609

Date Analyzed:

2011-08-05

Analyzed By: AR

QC Preparation: 2011-08-02 Prepared By: AR

			LCS			Spike	Matrix		Rec.
Param	\mathbf{F}	\mathbf{C}	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride			97.2	mg/Kg	1	100	< 3.85	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

			LCSD			Spike	Matrix		Rec.		RPD
Param	\mathbf{F}	\mathbf{C}	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride			105	mg/Kg	1	100	< 3.85	105	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

83610

Date Analyzed: Prep Batch: 70924 QC Preparation:

2011-08-05 2011-08-02 Analyzed By: AR Prepared By: AR

LCS Spike Matrix Rec. C Result Param Units Dil. Amount Result Rec. Limit Chloride 96.1 mg/Kg 100 < 3.85 96 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

			LCSD			Spike	Matrix		Rec.		RPD
Param	F	C	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride			105	mg/Kg	1	100	< 3.85	105	85 - 115	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

QC Batch: Prep Batch: 70924 Spiked Sample: 273115

Date Analyzed: 2011-08-05 QC Preparation: 2011-08-02 Analyzed By: AR Prepared By: AR

114-6400740

Work Order: 11072933

COG/Schley Fed. TB

Page Number: 10 of 12

Eddy Co., NM

			MS			Spike	Matrix		Rec.
Param	\mathbf{F}	\mathbf{C}	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride			10900	mg/Kg	100	10000	911	100	79.4 - 120.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

			MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	\mathbf{F}	\mathbf{C}	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride			11300	mg/Kg	100	10000	911	104	79.4 - 120.6	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 273119

QC Batch:

83610

2011-08-05

Analyzed By: AR

Prep Batch: 70924

Date Analyzed: QC Preparation: 2011-08-02

Prepared By: AR

•			MS			Spike	Matrix		Rec.		
Param	\mathbf{F}	\mathbf{C}	Result	Units	Dil.	Amount	Result	Rec.	Limit		
Chloride			10000	mg/Kg	100	10000	<385	100	79.4 - 120.6		

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

			MSD			Spike	Matrix		Rec.		RPD
Param	\mathbf{F}	C	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride			10800	mg/Kg	100	10000	<385	108	79.4 - 120.6	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: August 8, 2011

114-6400740

Work Order: 11072933

COG/Schley Fed. TB

Page Number: 11 of 12 Eddy Co., NM

Calibration Standards

Standard (ICV-1)

QC Batch: 83609

Date Analyzed: 2011-08-05

Analyzed By: AR

				ICVs	ICVs	ICVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride			mg/Kg	100	98.4	98	85 - 115	2011-08-05

Standard (CCV-1)

QC Batch: 83609

Date Analyzed: 2011-08-05

Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1 al alli	riag	Cert	Omes	Conc.	Conc.	necovery	Lilling	Analyzed
Chloride			mg/Kg	100	102	102	85 - 115	2011-08-05

Standard (ICV-1)

QC Batch: 83610

Date Analyzed: 2011-08-05

Analyzed By: AR

				ICVs	ICVs	ICVs	Percent	
				True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2011-08-05

Standard (CCV-1)

QC Batch: 83610

Date Analyzed: 2011-08-05

Analyzed By: AR

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2011-08-05

Report Date: August 8, 2011

114-6400740

Work Order: 11072933 COG/Schley Fed. TB Page Number: 12 of 12 Eddy Co., NM

Appendix

Laboratory Certifications

	Certifying	Certification	Laboratory
C	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis

Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
 - U The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

xwo #:11072933 PAGE: **Analysis Request of Chain of Custody Record** OF: ANALYSIS REQUEST (Circle or Specify Method No.) TETRA TECH တ္တ တြ (Ext. to C35) 1910 N. Big Spring St. Ę 문 Midland, Texas 79705 Cr Pb Pd (432) 682-4559 • Fax (432) 682-3946 ₹ ၓ RCRA Metals Ag As Ba Cd CLIENT NAME: **PRESERVATIVE** GC.MS Vol. 8240/8260/624 NUMBER OF CONTAINERS Ba **METHOD** PROJECT NAME PROJECT NO.: GC.MS Semi. Vol. FILTERED (Y/N) LAB I.D. COMP. SAMPLE IDENTIFICATION DATE HNO3 ICE NONE TIME **NUMBER** 건 27311

17 27811 P	1 (5-3	5' 56/thm.			19/111111
ELINOUISMED BY: (Signature)	Date: 7/29/11 Time: 1500	RECEIVED BY (Signature)	Date: 1/1/// Time: 15:00	SAMPLED BY: (Print & Initial)	Date: ' Timé;
ELINQUISHED BY: (Signature)	Date:	AECHO BY: (Signature)	Date:	SAMPLE SHIPPED BY: (Circle)	AIRBILL #:
	Time:		Time:	FEDEX BUS HAND DELIVERED UPS	OTHER:
ELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date:	TETRA TECH CONTACT PERSON:	Results by:
ECEIVING LABORATORY:	rae.	RECEIVED BY: (Signature)		11/1/1000	RUSH Charges
CONTACT: STATE:	ZIP:	DATE:	TIME:	K lauera	Authorized: Yes No
AMPLE CONDITION WHEN RECEIVED:	REMARKS:	HI tosz-Midl	land		

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Page Number: 1 of 2

Summary Report

Work Order: 11022217

Megan Beard Tetra Tech

1910 N. Big Spring Street Midland, TX 79705

Report Date: February 28, 2011

Work Order: 11022217

Project Location: Eddy Co., NM

Project Name:

COG/Schley Federal TB

Project Number: 114-6400740

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
258342	SB-1 (0-1') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258343	SB-1 (3') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258344	SB-1 (5') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258345	SB-1 (7') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258346	SB-1 (10') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258347	SB-1 (15') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258348	SB-1 (20') 1' BEB	soil	2011-02-18	00:00	2011-02-22

Sample: 258342 - SB-1 (0-1') 1' BEB

Param	Flag	Result	Units	RL
Chloride		1490	mg/Kg	4.00

Sample: 258343 - SB-1 (3') 1' BEB

Param	Flag	Result	Units	RL
Chloride		638	mg/Kg	4.00

Sample: 258344 - SB-1 (5') 1' BEB

Param	Flag	Result	Units	RL
Chloride		1190	mg/Kg	4.00

Report Date: February 28, 2011		Work Order: 11022217		Page Number: 2 of 2				
Sample: 258345 - SB-1 (7') 1' BEB								
Param	Flag	Result	Units	RL				
Chloride		201	mg/Kg	4.00				
Sample: 258346	- SB-1 (10') 1' BEB							
Param	Flag	Result	Units	RL				
Chloride		<200	mg/Kg	4.00				
Sample: 258347	- SB-1 (15') 1' BEB							
Param	Flag	Result	Units	RL				
Chloride		<200	mg/Kg	4.00				
Sample: 258348	- SB-1 (20') 1' BEB							
Param	Flag	Result	Units	RL				
Chloride		242	mg/Kg	4.00				



6701 Aherdeen Avenue, Suite 9 200 East Sunset Boad, Suite E 5002 Basin Street, Suite A1 6015 Harris Parkway, Suite 110

Lubbock, Texas 79424 El Paso, Texas 79922 Midland, Texas 79703

Ft. Worth, Texas 76132

800 • 378 • 1296 888 • 588 • 3443

806 • 794 • 1296 915 • 585 • 3443 432 • 689 • 6301

FAX 806 • 794 • 1298 FAX 915 • 585 • 4944

817 • 201 • 5260

FAX 432 • 689 • 6313

E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

LELAP-02003

Kansas E-10317

El Paso: T104704221-08-TX

LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez Tetra Tech 1910 N. Big Spring Street Midland, TX, 79705

Report Date: February 28, 2011

Work Order: 11022217

Project Location: Eddy Co., NM

Project Name: COG/Schley Federal TB

Project Number: 114-6400740

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	rime	Date
Sample	Description	Matrix	Taken	Taken	Received
258342	SB-1 (0-1') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258343	SB-1 (3') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258344	SB-1 (5') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258345	SB-1 (7') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258346	SB-1 (10') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258347	SB-1 (15') 1' BEB	soil	2011-02-18	00:00	2011-02-22
258348	SB-1 (20') 1' BEB	soil	2011-02-18	00:00	2011-02-22

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director Dr. Michael Abel, Project Manager

Standard Flags

 ${f B}$ - The sample contains less than ten times the concentration found in the method blank.

Samples for project COG/Schley Federal TB were received by TraceAnalysis, Inc. on 2011-02-22 and assigned to work order 11022217. Samples for work order 11022217 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

		Prep	Prep	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (Titration)	SM 4500-Cl B	66849	2011-02-28 at 08:41	77937	2011-02-28 at 11:43

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11022217 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: February 28, 2011

114-6400740

Work Order: 11022217 COG/Schley Federal TB Page Number: 4 of 7 Eddy Co., NM

Analytical Report

Sample: 258342 - SB-1 (0-1') 1' BEB

Laboratory:

Midland

Analysis:

Chloride (Titration)

QC Batch: Prep Batch:

77937 66849 Analytical Method:

SM 4500-Cl B

Date Analyzed:

2011-02-28

Prep Method: N/A Analyzed By: AR.

Sample Preparation:

2011-02-28

Prepared By: AR

RL

Parameter Chloride

Flag

Result 1490

Units mg/Kg Dilution 100

RL4.00

Sample: 258343 - SB-1 (3') 1' BEB

Laboratory:

Midland

Analysis: QC Batch: Prep Batch: Chloride (Titration)

77937 66849 Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2011-02-28 2011-02-28

Prep Method: N/A Analyzed By:

AR. Prepared By: AR

RL

Parameter Chloride

Flag

Result 638

Units mg/Kg Dilution

RL

4.00

Sample: 258344 - SB-1 (5') 1' BEB

Laboratory:

Midland

Analysis: QC Batch: Chloride (Titration)

77937

Analytical Method:

SM 4500-Cl B

Prep Method: N/A Analyzed By: AR

Prep Batch:

66849

Date Analyzed: Sample Preparation:

2011-02-28 2011-02-28

Prepared By: AR

RL

Parameter Chloride

Flag

Result 1190

Units mg/Kg Dilution 100

RL4.00

Sample: 258345 - SB-1 (7') 1' BEB

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method: Date Analyzed:

SM 4500-Cl B 2011-02-28

N/A Prep Method: Analyzed By: AR AR

QC Batch: Prep Batch:

77937

66849

Sample Preparation:

2011-02-28

Prepared By:

Report Date: February 28, 2011

114-6400740

Work Order: 11022217 COG/Schley Federal TB Page Number: 5 of 7 Eddy Co., NM

		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		201	${ m mg/Kg}$	50	4.00

Sample: 258346 - SB-1 (10') 1' BEB

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 77937 Prep Batch: 66849

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B

2011-02-28 2011-02-28 Prep Method: N/A Analyzed By: AR

Prepared By: AR

RLParameter Flag Result Units Dilution RL< 200 Chloride mg/Kg 50 4.00

Sample: 258347 - SB-1 (15') 1' BEB

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 77937 Prep Batch: 66849 Analytical Method: Date Analyzed:

SM 4500-Cl B 2011-02-28 Sample Preparation: 2011-02-28

Prep Method: N/A Analyzed By:

AR Prepared By: AR

RLParameter Flag Result Units Dilution RLChloride <200 mg/Kg 50 4.00

Sample: 258348 - SB-1 (20') 1' BEB

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 77937 66849 Prep Batch:

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2011-02-28 2011-02-28

Prep Method: N/A Analyzed By: AR Prepared By: AR

RLDilution Parameter Flag Result Units RL242 Chloride mg/Kg 50 4.00

Method Blank (1)

QC Batch: 77937

QC Batch: 77937 Prep Batch: 66849 Date Analyzed: QC Preparation:

2011-02-28 2011-02-28 Analyzed By: AR Prepared By: AR Report Date: February 28, 2011

114-6400740

Work Order: 11022217 COG/Schley Federal TB Page Number: 6 of 7 Eddy Co., NM

		MDL		
Parameter	Flag	Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch:

77937

Date Analyzed:

2011-02-28

Analyzed By: AR

Prep Batch: 66849

QC Preparation: 2011-02-28

Prepared By: AR

	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Chloride	97.9	mg/Kg	1	100	< 2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	103	mg/Kg	1	100	<2.18	103	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 258581

QC Batch:

Prep Batch: 66849

77937

Date Analyzed:

2011-02-28

QC Preparation: 2011-02-28

Analyzed By: AR

Prepared By: AR

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	12800	mg/Kg	100	10000	4160	86	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	13800	mg/Kg	100	10000	4160	96	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 77937

Date Analyzed: 2011-02-28

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	108	108	85 - 115	2011-02-28

Report Date: February 28, 2011 114-6400740

Work Order: 11022217

 ${\it COG/Schley Federal\ TB}$

Page Number: 7 of 7 Eddy Co., NM

Standard (CCV-1)

QC Batch: 77937

Date Analyzed: 2011-02-28

Analyzed By: AR

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	92.1	92	85 - 115	2011-02-28

TETRA TECH 1910 N. Big Spring St. Midland, Texas 79705 (430) 802-4594 Fix (430) 802-3946 CLIENT NAME: OB PROJECT NAME: PROJECT NAME: SCHENGER FEDERAL AMPLE IDENTIFICATION MIDDIA 2 18-10 S	Analysis Request of Chain of Custody Rec					rd		_									OF:						
1910 N. Big Spring St. Midland, Texas 79705				_			 					(No.)				
### Date: ### Da	1910 N. Big Midland, Te	Spring St. xas 79705								Cr Pb Ha	Vr Pd Hg									The	3		
### Date: ### Da	COG The	ER: Tayarez	2 L	PF					1	a a	B		8	260/624	3270/625					H.	ž (č. ž.		
### Date: ### Da	PROJECT NO.: PROJECT NAME:	D I	(A/N)					8	5 MOD.	als Aa A	als Ag A	tiles	i Volatile	. 8240/8	mi. Vol. 8	809/0	800	96C.	(Air)	estos)	Nia/ Can		
2683-12 2-18-4 5 X 5B-1 (0-1)1' BEB 1 X X X X X X X X X		LE IDENTIFICATION	FILTERED	FCL	HNO3	GE T	NOINE	BTEX 8021	TPH 801	RCRA Met	TCLP Met	TCLP Vola	TCLP Sem	GC.MS Vol	GC.MS Se	PCB's 808	Chloride	Gamma St	Alpha Beta	PLM (Asbe	יייר יייור וייור		
343 2-18-11) i' beb				x											\\\\\					\coprod	
346 Z19-11 5 X 58-1 (10') 1' BEB 1 X X X X X X X X X X X X X X X X X X		1 BEB				χ											×				\perp	Ш	
347 218-11 5 X 58-1 (10') 1' BEB 1 X X X X X X X X X X X X X X X X X X	344 Z-10-11 5 X SB-1 (5')	1'BEB			_	x											X		Ц	\perp	\perp		
347 218-11 5 X 58-1 (15') \ BEB \ X X S8-1 (20') \ \ BEB \ X X S8-1 (20	345 Z1011 S X SB-1 (7')	1'BEB				x											X		Ц		\perp	Ц	
RELINQUISHED BY: (Signature) Date: Time: RECEIVED BY: (Signature) Date: Time: SAMPLE BY: (Print & Injitial) Date: Time: SAMPLE BY: (Print & Injitial) Date: Time: SAMPLE BY: (Print & Injitial) Date: Time: SAMPLE SHIPPED BY: (Circle) BUS BUS BUS Date: Time: Date:	346 Z19-11 5 × SB-1 (10')	1' BEB 1		\downarrow		x				1							X		Ц	\perp	\perp		
RELINQUISHED BY: (Signature) Date: 2-22-1; RECEIVED BY: (Signature) Time: 115 RELINQUISHED BY: (Signature) Date: 2-22-1; TRECEIVED BY: (Signature) Time: 115 RECEIVED BY: (Signature) Date: 115 RECEIVED BY: (Signature) Date: 116 Time: 117 RECEIVED BY: (Signature) Date: 117 Date: 1	347 2-18-11 S X SB-1 (15')	I'BEB		_	_	x L											X		Ц	\perp	\perp	\coprod	
RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS Time: BUS RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: OTHER: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: UPS	348 Z-8-11 5 X5B-1 (ZO')	I'BEB I				x						Ш					K		Ц	\perp		Ц	
RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS Time: BUS RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: OTHER: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: UPS			Ш						Ц					\perp			\perp		Ц	\perp	\perp	Ц	
RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS Time: BUS RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: OTHER: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: UPS				\perp	\downarrow	\perp		L		1	L			\perp				Ш	Ц	\perp	$oldsymbol{\perp}$	Ц	
RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS Time: BUS RELINQUISHED BY: (Signature) Date: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: OTHER: SAMPLE SHIPPED BY: (Circle) BUS OTHER: UPS OTHER: UPS	DELINO (CHES DV (Circular) (Trecedition and (Sixtheles)			to			/,,	Ц	SAME	21 50	974 (Print 8	Initial							\perp	Ц	
Time:	Time: 1115	Latikus		Tir	ne:		11:7	5						<u>K</u>	<u> 11</u>	1					<u>'\\</u>	87	<u> </u>
RECLINQUISHED BY: (Signature) Date: RECEIVED BY: (Signature) Date:	Time:			Tir	ne:					FEE	EX-	_=	_	BU	IS								
RECEIVING LABORATORY: Trace RECEIVED BY: (Signature) ADDRESS ZIP: DATE: DATE: DATE: TIME: TGVGTCZ RUSH Charges Authorized: Yes No					<u> </u>	_						:					ts by:						
CONTACT: PROVIDE: DATE: TIME: TOPPER NO	ADDRESS: TOTAL STATE: ZIP:		F18.4F						-	J	K	e	âva.	<i>(67</i>	_					Autho	rized:	:	Ma
SAMPLE CONDITION WHEN RECEIVED: REMARKS: C intact Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.																							

Page Number: 1 of 6

Summary Report

Kim Dorey Tetra Tech 1910 N. Big Spring Street Midland, TX 79705

Report Date: December 17, 2010

Work Order: 10121027

Project Location: Eddy Co., NM

Project Name: COG/Schley Federal TB

Project Number: 114-6400740

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
252933	AH-1 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252934	AH-1 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252935	AH-1 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252936	AH-1 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252937	AH-1 4-4.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252938	AH-1 5-5.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252939	AH-2 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252940	AH-2 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252941	AH-2 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252942	AH-2 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252943	AH-3 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252944	AH-3 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252945	AH-3 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252946	AH-3 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252947	AH-3 4-4.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252948	AH-4 0-1'	soil	2010-12-06	00:00	2010-12-10
252949	AH-4 1-1.5'	soil	2010-12-06	00:00	2010-12-10
252950	AH-4 2-2.5'	soil	2010-12-06	00:00	2010-12-10
252951	AH-4 3-3.5'	soil	2010-12-06	00:00	2010-12-10
252952	AH-4 4-4.5'	soil	2010-12-06	00:00	2010-12-10
252953	AH-4 5-5.5'	soil	2010-12-06	00:00	2010-12-10
252954	AH-4 6-6.5'	soil	2010-12-06	00:00	2010-12-10
252955	AH-4 7-7.5'	soil	2010-12-06	00:00	2010-12-10
252956	AH-4 8-8.5'	soil	2010-12-06	00:00	2010-12-10
252957	AH-4 9-9.5'	soil	2010-12-06	00:00	2010-12-10
252958	AH-5 0-1'	soil	2010-12-06	00:00	2010-12-10
252959	AH-5 1-1.5'	soil	2010-12-06	00:00	2010-12-10
252960	AH-5 2-2.5'	soil	2010-12-06	00:00	2010-12-10
252961	AH-5 3-3.5°	soil	2010-12-06	00:00	2010-12-10
252962	AH-5 4-4.5'	soil	2010-12-06	00:00	2010-12-10

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
252963	AH-5 5-5.5'	soil	2010-12-06	00:00	2010-12-10
252964	AH-5 6-6.5'	soil	2010-12-06	00:00	2010-12-10

	BTEX			TPH DRO - NEW	TPH GRO	
	Benzene	Toluene	Ethylbenzene	Xylene	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
252933 - AH-1 0-1' 1' BEB	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 50.0	< 2.00
252939 - AH-2 0-1' 1' BEB	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 50.0	< 2.00
252943 - AH-3 0-1' 1' BEB	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 50.0	< 2.00
252948 - AH-4 0-1'	< 0.0200	< 0.0200	< 0.0200	< 0.0200	137	< 2.00
252958 - AH-5 0-1'	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 50.0	< 2.00

Sample: 252933 - AH-1 0-1' 1' BEB

Param	Flag	Result	Units	RL
Chloride		6580	mg/Kg	4.00

Sample: 252934 - AH-1 1-1.5' 1' BEB

Param	Flag	Result	Units	RL
Chloride		393	mg/Kg	4.00

Sample: 252935 - AH-1 2-2.5' 1' BEB

Param	Flag	Result	Units	RL
Chloride		< 200	mg/Kg	4.00

Sample: 252936 - AH-1 3-3.5' 1' BEB

Param	Flag	Result	Units	RL
Chloride		216	mg/Kg	4.00

Sample: 252937 - AH-1 4-4.5' 1' BEB

Param	Flag	Result	Units	RL
Chloride		265	mg/Kg	4.00

Sample: 252938 - AH-1 5-5.5' 1' BEB

Report Date: December 17, 2010		Work Order: 10121027	Page	Page Number: 3 of 6	
Param	Flag	Result	Units	RL	
Chloride		550	mg/Kg	4.00	
Sample: 252939	- AH-2 0-1' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		7340	mg/Kg	4.00	
Sample: 252940	- AH-2 1-1.5' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		5660	mg/Kg	4.00	
Sample: 252941	- AH-2 2-2.5' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		5930	mg/Kg	4.00	
Sample: 252942	- AH-2 3-3.5' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		354	mg/Kg	4.00	
Sample: 252943	- AH-3 0-1' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		7950	mg/Kg	4.00	
Sample: 252944	- AH-3 1-1.5' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		2650	mg/Kg	4.00	
Sample: 252945	- AH-3 2-2.5' 1' BEB				
Param	Flag	Result	Units	RL	
Chloride		500	mg/Kg	4.00	

Report Date: December 17, 2010		Work Order: 10121027	Рад	ge Number: 4 of 6
Sample: 252946 -	AH-3 3-3.5' 1' BEB			
Param	Flag	Result	Units	RL
Chloride		2230	mg/Kg	4.00
Sample: 252947 -	· AH-3 4-4.5' 1' BEB			
Param	Flag	Result	Units	RL
Chloride		2270	mg/Kg	4.00
Sample: 252948 -	· AH-4 0-1'			
Param	Flag	Result	Units	RL
Chloride		5080	mg/Kg	4.00
Sample: 252949 -	AH-4 1-1.5			
Param	Flag	Result	Units	RL
Chloride		2310	mg/Kg	4.00
Sample: 252950 -	AH-4 2-2.5'			
Param	Flag	Result	Units	RL
Chloride		846	mg/Kg	4.00
Sample: 252951 -	AH-4 3-3.5'			
Param	Flag	Result	Units	RL
Chloride		827	mg/Kg	4.00
Sample: 252952 -	AH-4 4-4.5'			
Param	Flag	Result	Units	RL
Chloride		884	mg/Kg	4.00
Sample: 252953 -	AH-4 5-5.5'			
Param	Flag	Result	Units	RL
Chloride	5	1040	mg/Kg	4.00

Report Date: December 17, 2010		Work Order: 10121027	Рад	ge Number: 5 of 6
Sample: 252954 -	AH-4 6-6.5'			
Param	Flag	Result	Units	RL
Chloride		920	mg/Kg	4.00
Sample: 252955 -	AH-4 7-7.5'			
Param	Flag	Result	Units	RL
Chloride		1670	mg/Kg	4.00
Sample: 252956 -	AH-4 8-8.5'			
Param	Flag	Result	Units	RL
Chloride		1350	mg/Kg	4.00
Sample: 252957 -	AH-4 9-9.5'			
Param	Flag	Result	Units	RL
Chloride		1430	mg/Kg	4.00
Sample: 252958 -	AH-5 0-1'			
Param	Flag	Result	Units	RL
Chloride		5460	mg/Kg	4.00
Sample: 252959 -	AH-5 1-1.5'			
Param	Flag	Result	Units	RL
Chloride		5320	mg/Kg	4.00
Sample: 252960 -	AH-5 2-2.5'			
Param	Flag	Result	Units	RL
Chloride		5600	mg/Kg	4.00
Sample: 252961 -	AH-5 3-3.5'			
Param	Flag	Result	Units	RL
Chloride		7240	mg/Kg	4.00

Report Date: December 17, 2010		Work Order: 101210)27	Page Number: 6 of 6		
Sample: 252962 - AH-5 4-4.5'						
Param	Flag	Result	Units	RL		
Chloride		7480	mg/Kg	4.00		
Sample: 252963	- AH-5 5-5.5'					
Param	Flag	Result	Units	RL		
Chloride		4140	mg/Kg	4.00		
Sample: 252964	- AH-5 6-6.5'					
Param	Flag	Result	Units	RL		
Chloride		1130	mg/Kg	4.00		



6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, Suite E 5002 Basin Street, Suite A1

El Paso, Texas 79922 Midland, Texas 79703 800 • 378 • 1296 806 • 794 • 1296 888 • 588 • 3443 915 • 585 • 3443 432 • 689 • 6301

FAX 806 • 794 • 1298 FAX 915 • 585 • 4944 FAX 432 • 689 • 6313

6015 Harris Parkway, Suite 110

Ft. Worth, Texas 76132

817 • 201 • 5260

E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

LELAP-02003

Kansas E-10317

El Paso: T104704221-08-TX

LELAP-02002

Midland:

T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez Tetra Tech

1910 N. Big Spring Street Midland, TX, 79705

Report Date: December 17, 2010

Work Order: 10121027

Eddy Co., NM Project Location:

Project Name:

COG/Schley Federal TB

Project Number:

114-6400740

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	rime	Date
Sample	Description	Matrix	Taken	Taken	Received
252933	AH-1 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252934	AH-1 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252935	AH-1 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252936	AH-1 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252937	AH-1 4-4.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252938	AH-1 5-5.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252939	AH-2 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252940	AH-2 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252941	AH-2 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252942	AH-2 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
252943	AH-3 0-1' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252944	AH-3 1-1.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252945	AH-3 2-2.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252946	AH-3 3-3.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252947	AH-3 4-4.5' 1' BEB	soil	2010-12-06	00:00	2010-12-10
252948	AH-4 0-1'	soil	2010-12-06	00:00	2010-12-10
252949	AH-4 1-1.5'	soil	2010-12-06	00:00	2010-12-10
252950	AH-4 2-2.5'	soil	2010-12-06	00:00	2010-12-10
252951	AH-4 3-3.5'	soil	2010-12-06	00:00	2010-12-10
252952	AH-4 4-4.5'	soil	2010-12-06	00:00	2010-12-10
252953	AH-4 5-5.5'	soil	2010-12-06	00:00	2010-12-10
252954	AH-4 6-6.5'	soil	2010-12-06	00:00	2010-12-10
252955	AH-4 7-7.5'	soil	2010-12-06	00:00	2010-12-10
252956	AH-4 8-8.5'	soil	2010-12-06	00:00	2010-12-10
252957	AH-4 9-9.5'	soil	2010-12-06	00:00	2010-12-10
252958	AH-5 0-1'	soil	2010-12-06	00:00	2010-12-10
252959	AH-5 1-1.5'	soil	2010-12-06	00:00	2010-12-10
252960	AH-5 2-2.5'	soil	2010-12-06	00:00	2010-12-10
252961	AH-5 3-3.5'	soil	2010-12-06	00:00	2010-12-10
252962	AH-5 4-4.5'	soil	2010-12-06	00:00	2010-12-10
252963	AH-5 5-5.5'	soil	2010-12-06	00:00	2010-12-10
252964	AH-5 6-6.5'	soil	2010-12-06	00:00	2010-12-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director Dr. Michael Abel, Project Manager

Michael about

Standard Flags

 $\, B \,$ - $\,$ The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project COG/Schley Federal TB were received by TraceAnalysis, Inc. on 2010-12-10 and assigned to work order 10121027. Samples for work order 10121027 were received intact at a temperature of 3.6 C.

Samples were analyzed for the following tests using their respective methods.

		Prep	Prep	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	65313	2010-12-14 at 10:54	76151	2010-12-14 at 12:48
Chloride (Titration)	SM 4500-Cl B	65250	2010-12-13 at 10:17	76127	2010-12-14 at 12:59
Chloride (Titration)	SM 4500-Cl B	65377	2010-12-16 at 10:00	76228	2010-12-16 at 14:00
Chloride (Titration)	SM 4500-Cl B	65377	2010-12-16 at 10:00	76231	2010-12-16 at 15:00
Chloride (Titration)	SM 4500-Cl B	65377	2010-12-16 at 10:00	76236	2010-12-16 at 16:00
Chloride (Titration)	SM 4500-Cl B	65377	2010-12-16 at 10:00	76260	2010-12-17 at 09:00
TPH DRO - NEW	S 8015 D	65320	2010-12-14 at 09:15	76161	2010-12-14 at 09:15
TPH DRO - NEW	S 8015 D	65321	2010-12-14 at 09:15	76162	2010-12-14 at 09:15
TPH GRO	S 8015 D	65313	2010-12-14 at 10:54	76152	2010-12-14 at 12:48

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10121027 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 4 of 31 Eddy Co., NM

Analytical Report

Sample: 252933 - AH-1 0-1' 1' BEB

Laboratory: Midland

Analysis: BTEX QC Batch: 76151 Prep Batch: 65313

Analytical Method: Date Analyzed:

S 8021B 2010-12-14 Sample Preparation: 2010-12-14 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RI

		1617			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0200	mg/Kg	1	0.0200
Toluene		< 0.0200	mg/Kg	1	0.0200
Ethylbenzene		< 0.0200	mg/Kg	1	0.0200
Xylene		< 0.0200	mg/Kg	1	0.0200

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.29	mg/Kg	1	2.00	114	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.39	mg/Kg	1	2.00	120	38.4 - 157

Sample: 252933 - AH-1 0-1' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 76127 Prep Batch: 65250

Analytical Method: Date Analyzed:

SM 4500-Cl B 2010-12-14 Sample Preparation: 2010-12-13

Prep Method: N/A Analyzed By: AR

AR

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		6580	mg/Kg	100	4.00

Sample: 252933 - AH-1 0-1' 1' BEB

Laboratory:

Midland

Analysis: TPH DRO - NEW QC Batch: 76162 Prep Batch: 65321

Analytical Method: Date Analyzed:

S 8015 D 2010-12-14 Sample Preparation: 2010-12-14

Prep Method: N/A Analyzed By: kg Prepared By: kg

RL.

Parameter	Flag	Result	Units	Dilution	$\mathrm{RL}_{_}$
DRO		< 50.0	mg/Kg	1	50.0

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 5 of 31 Eddy Co., NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		104	mg/Kg	1	100	104	70 - 130

Sample: 252933 - AH-1 0-1' 1' BEB

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 76152 Prep Batch: 65313

Analytical Method: S 8015 D Date Analyzed: 2010-12-14

Sample Preparation: 2010-12-14 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

2.00

RLDilution Parameter Flag Result Units GRO < 2.00 mg/Kg

Spike Percent Recovery Flag Result Units Dilution Amount Recovery Limits Surrogate Trifluorotoluene (TFT) 2.00 126 48.5 - 152 2.51mg/Kg 1 4-Bromofluorobenzene (4-BFB) 2.38 mg/Kg 1 2.00 119 42 - 159

Sample: 252934 - AH-1 1-1.5' 1' BEB

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 76228 Prep Batch: 65377

Analytical Method: Date Analyzed:

SM 4500-Cl B 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By: AG Prepared By: AG

RLResult Dilution Parameter Flag Units RLChloride 393 mg/Kg 50 4.00

Sample: 252935 - AH-1 2-2.5' 1' BEB

Laboratory:

Midland

Chloride (Titration) Analysis: QC Batch: 76228 Prep Batch: 65377

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2010-12-16 2010-12-16

Prep Method: N/A Analyzed By: AGPrepared By: AG

RL

4.00

RLDilution Units Parameter Flag Result Chloride <200 mg/Kg 50

Report Date: December 17, 2010 Work Order: 10121027 Page Number: 6 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM Sample: 252936 - AH-1 3-3.5' 1' BEB Midland Laboratory: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A 76228 QC Batch: Date Analyzed: 2010-12-16 Analyzed By: AG 65377 Prep Batch: Sample Preparation: 2010-12-16 Prepared By: AG RLParameter Flag Result Units Dilution RL4.00 Chloride 216 mg/Kg 50 Sample: 252937 - AH-1 4-4.5' 1' BEB Midland Laboratory: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: AG76228 Date Analyzed: 2010-12-16 Analyzed By: Prep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AG RLResult Parameter Flag Dilution RLUnits Chloride $\overline{265}$ 50 4.00 mg/Kg Sample: 252938 - AH-1 5-5.5' 1' BEB Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76228 2010-12-16 Date Analyzed: Analyzed By: AGSample Preparation: Prep Batch: 65377 2010-12-16 Prepared By: AG RLFlag Parameter Result Units Dilution RLChloride 550 mg/Kg 50 4.00 Sample: 252939 - AH-2 0-1', 1', BEB Laboratory: Midland Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 76151 Date Analyzed: 2010-12-14 Analyzed By: MEPrep Batch: 65313 Sample Preparation: 2010-12-14 Prepared By: ME

RL

Result

< 0.0200

< 0.0200

Flag

Parameter

Benzene

Toluene

continued ...

Dilution

1

1

 $\frac{\mathrm{RL}}{0.0200}$

0.0200

Units

mg/Kg

mg/Kg

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 7 of 31 Eddy Co., NM

sample 252939 continued ...

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
Ethylbenzene		< 0.0200	mg/Kg	1	0.0200
Xylene		< 0.0200	mg/Kg	1	0.0200

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.20	mg/Kg	1	2.00	110	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.33	mg/Kg	1	2.00	116	38.4 - 157

Sample: 252939 - AH-2 0-1' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 76228 Analytical Method:

SM 4500-Cl B 2010-12-16

Prep Method: N/A Analyzed By: AG

Prep Batch: 65377

Date Analyzed: Sample Preparation:

2010-12-16

Prepared By: AG

		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		7340	mg/Kg	100	4.00

Sample: 252939 - AH-2 0-1' 1' BEB

Laboratory: Midland

TPH DRO - NEW Analysis:

QC Batch: 76161 Prep Batch: 65320

Analytical Method: S 8015 D Date Analyzed: Sample Preparation:

2010-12-14 2010-12-14

Prep Method: N/A Analyzed By: kg Prepared By: kg

RLDilution Parameter Flag Result Units RL< 50.0 mg/Kg DRO 50.0

C	Dl	Danule	T7:4	Dilution	Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		111	mg/Kg	1	100	111	70 - 130

Sample: 252939 - AH-2 0-1' 1' BEB

Laboratory: Midland

Analysis: TPH GRO QC Batch: 76152 Prep Batch: 65313

Analytical Method: S 8015 D Date Analyzed: 2010-12-14 Sample Preparation: 2010-12-14

Prep Method: S 5035 Analyzed By: MEPrepared By: ME

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 8 of 31 Eddy Co., NM

0.00		D	Units		Result		9	Parameter
2.00	1		mg/Kg		< 2.00		0	GRO
Recovery	Percent	Spike						
Limits	Recovery	Amount	Dilution	Units	Result	Flag	rogate	Surrogate
48.5 - 152	120	2.00	1	mg/Kg	2.41		luorotoluene (TFT)	Trifluorotoluene (Tl
42 - 159	118	2.00	1	mg/Kg	2.35		romofluorobenzene (4-BFB)	4-Bromofluorobenze
	120	2.00	1 1	mg/Kg	2.41	riag	luorotoluene (TFT)	Trifluorotoluene (Tl

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

QC Batch: Prep Batch: 65377

76228

Date Analyzed: Sample Preparation: 2010-12-16 2010-12-16

Analyzed By: \mathbf{AG} Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		5660	mg/Kg	100	4.00

Sample: 252941 - AH-2 2-2.5' 1' BEB

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B

Prep Method: N/A

QC Batch: Prep Batch:

Parameter

Chloride

76228 65377

Date Analyzed: Sample Preparation:

2010-12-16 2010-12-16

Units

mg/Kg

Analyzed By: AGAG

RLFlag Result 5930 Prepared By:

Dilution RL100 4.00

Sample: 252942 - AH-2 3-3.5' 1' BEB

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method:

SM 4500-Cl B 2010-12-16

Prep Method: N/A Analyzed By: AG

QC Batch: Prep Batch:

76228 65377

Date Analyzed: Sample Preparation:

2010-12-16

Prepared By: AG

RLFlag Parameter Result Units Dilution RLChloride 354 mg/Kg 50 4.00 Report Date: December 17, 2010 Work Order: 10121027 Page Number: 9 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM

Sample: 252943 - AH-3 0-1' 1' BEB

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 76151 Date Analyzed: 2010-12-14 Analyzed By: ME Prep Batch: 65313 Sample Preparation: 2010-12-14 Prepared By: ME

RLParameter Flag Result Units Dilution RL0.0200 Benzene < 0.0200 mg/Kg 1 Toluene 1 0.0200 < 0.0200 mg/Kg 0.0200 Ethylbenzene < 0.0200 mg/Kg 1 Xylene mg/Kg 1 0.0200 < 0.0200

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.90	mg/Kg	1	2.00	95	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.00	mg/Kg	1	2.00	100	38.4 - 157

Sample: 252943 - AH-3 0-1' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76228 Date Analyzed: 2010-12-16 Analyzed By: AG

Prep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AG

Sample: 252943 - AH-3 0-1' 1' BEB

Laboratory: Midland

Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A QC Batch: 76162 Date Analyzed: 2010-12-14 Analyzed By: kg Prep Batch: 65321 Sample Preparation: 2010-12-14 Prepared By: kg

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		103	mg/Kg	1	100	103	70 - 130

Report Date: December 17, 2010 Work Order: 10121027 Page Number: 10 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM

Sample: 252943 - AH-3 0-1' 1' BEB

Laboratory: Midland

Analysis: TPH GRO QC Batch: 76152 Prep Batch: 65313 Analytical Method: S 8015 D
Date Analyzed: 2010-12-14
Sample Preparation: 2010-12-14

Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.08	mg/Kg	1	2.00	104	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.02	mg/Kg	1	2.00	101	42 - 159

Sample: 252944 - AH-3 1-1.5' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 76231 Prep Batch: 65377 Analytical Method: SM 4500-Cl B Date Analyzed: 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A
Analyzed By: AG
Prepared By: AG

RL

Sample: 252945 - AH-3 2-2.5' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration)
QC Batch: 76231
Prep Batch: 65377

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-12-16
Sample Preparation: 2010-12-16

Analyzed By: AG Prepared By: AG

N/A

Prep Method:

Sample: 252946 - AH-3 3-3.5' 1' BEB

Laboratory: Midland

Analysis: Analytical Method: SM 4500-Cl B Chloride (Titration) Prep Method: N/A QC Batch: 76231 Date Analyzed: 2010-12-16 Analyzed By: AG Prep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AG

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 11 of 31 Eddy Co., NM

		\mathtt{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		2230	mg/Kg	100	4.00

Sample: 252947 - AH-3 4-4.5' 1' BEB

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 76231 Prep Batch: 65377

Analytical Method: SM 4500-Cl B

Date Analyzed: 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By:

AGPrepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		2270	mg/Kg	100	4.00

Sample: 252948 - AH-4 0-1'

Midland Laboratory:

BTEX Analysis: QC Batch: 76151 Prep Batch: 65313

Analytical Method: S 8021B Date Analyzed: 2010-12-14 Sample Preparation: 2010-12-14

Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RLDilution Parameter Flag Result Units RLBenzene 0.0200 < 0.0200 mg/Kg 1 0.0200 Toluene < 0.0200 mg/Kg 1 1 0.0200 Ethylbenzene < 0.0200 mg/Kg Xylene < 0.0200 mg/Kg 1 0.0200

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.32	mg/Kg	1	2.00	116	38.4 - 157

Sample: 252948 - AH-4 0-1'

Laboratory: Midland

Analysis: Chloride (Titration) QC Batch: 76231 Prep Batch: 65377

Analytical Method: SM 4500-Cl B Date Analyzed: 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A \mathbf{AG} Analyzed By: Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
Chloride		5080	mg/Kg	100	4.00

RL

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 12 of 31 Eddy Co., NM

Sample: 252948 - AH-4 0-1'

Laboratory:

Midland

Analysis:

TPH DRO - NEW

QC Batch: 76162 Prep Batch: 65321

Analytical Method: Date Analyzed:

S 8015 D 2010-12-14 Sample Preparation: 2010-12-14 Prep Method: N/A Analyzed By: kg

Prepared By: kg

RL

Parameter Flag Result DRO 137

Units mg/Kg Dilution RL50.0 1

Spike Percent Recovery Surrogate Result Units Dilution Amount Recovery Limits Flag 70 - 130 100 136 n-Tricosane 136mg/Kg 1

Sample: 252948 - AH-4 0-1'

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 76152 Prep Batch: 65313

Analytical Method:

S 8015 D Date Analyzed: 2010-12-14 2010-12-14 Sample Preparation:

Prep Method: S 5035

ME Analyzed By: ME Prepared By:

RL

Flag Dilution Parameter Result Units RLGRO < 2.00 mg/Kg 1 2.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.40	mg/Kg	1	2.00	120	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.33	mg/Kg	11	2.00	116	42 - 159

Sample: 252949 - AH-4 1-1.5'

Laboratory:

Midland

Chloride (Titration) Analysis: QC Batch: 76231 Prep Batch: 65377

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2010-12-16 2010-12-16

Prep Method: N/A Analyzed By: AG Prepared By: AG

RL

Parameter Result Units Dilution RLFlag 100 Chloride 2310 mg/Kg 4.00

¹ High surrogate recovery due to peak interference.

Eddy Co., NM 114-6400740 COG/Schley Federal TB Sample: 252950 - AH-4 2-2.5' Midland Laboratory: Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76231 Date Analyzed: 2010-12-16 Analyzed By: AGSample Preparation: Prep Batch: 65377 Prepared By: AG2010-12-16 RLResult Parameter Flag Units Dilution RL846 Chloride mg/Kg 100 4.00 Sample: 252951 - AH-4 3-3.5' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76231 Date Analyzed: 2010-12-16 Analyzed By: AG65377 Sample Preparation: Prep Batch: 2010-12-16 Prepared By: AG RLResult RLParameter Flag Units Dilution Chloride 827 mg/Kg 50 4.00 Sample: 252952 - AH-4 4-4.5' Midland Laboratory: Chloride (Titration) SM 4500-Cl B Analysis: Analytical Method: Prep Method: N/A 76231 QC Batch: Date Analyzed: 2010-12-16 Analyzed By: AGSample Preparation: Prep Batch: 65377 2010-12-16 Prepared By: AG RLParameter Flag Result Units Dilution RL884 100 4.00 Chloride mg/Kg Sample: 252953 - AH-4 5-5.5' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76231 Date Analyzed: Analyzed By: 2010-12-16 AGPrep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AGRLResult

Units

mg/Kg

Dilution

100

RL

4.00

Work Order: 10121027

Page Number: 13 of 31

Report Date: December 17, 2010

Parameter

Chloride

Flag

1040

114-6400740 COG/Schley Federal TB Eddy Co., NM Sample: 252954 - AH-4 6-6.5' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76236 Date Analyzed: 2010-12-16 Analyzed By: AG Prep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AGRLParameter Result Units Dilution RLFlag 4.00 Chloride 920 mg/Kg 50 Sample: 252955 - AH-4 7-7.5' Laboratory: Midland Analysis: Chloride (Titration) Prep Method: N/A Analytical Method: SM 4500-Cl B QC Batch: Analyzed By: 76236 Date Analyzed: 2010-12-16 AG Prep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AGRLParameter Result Units Dilution RLFlag Chloride 1670 50 4.00 mg/Kg Sample: 252956 - AH-4 8-8.5' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76236 2010-12-16 Analyzed By: AGDate Analyzed: Prep Batch: 65377 Sample Preparation: Prepared By: AG2010-12-16 RLParameter Dilution Flag Result Units RLChloride 1350 mg/Kg 50 4.00 Sample: 252957 - AH-4 9-9.5' Laboratory: Midland Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76236 Date Analyzed: 2010-12-16 Analyzed By: AGPrep Batch: 65377 Sample Preparation: 2010-12-16 Prepared By: AG RLParameter Flag Result Units Dilution RL

1430

mg/Kg

Work Order: 10121027

Page Number: 14 of 31

4.00

50

Report Date: December 17, 2010

Chloride

Report Date: December 17, 2010 Work Order: 10121027 Page Number: 15 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM

Sample: 252958 - AH-5 0-1'

Laboratory: Midland Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 Date Analyzed: Analyzed By: QC Batch: 76151 2010-12-14 ME Sample Preparation: 2010-12-14 Prepared By: Prep Batch: 65313 ME

		RL			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0200	mg/Kg	1	0.0200
Toluene		< 0.0200	mg/Kg	1	0.0200
Ethylbenzene		< 0.0200	mg/Kg	1	0.0200
Xylene		< 0.0200	mg/Kg	1	0.0200

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	52.8 - 137
4-Bromofluorobenzene (4-BFB)		2.26	mg/Kg	1	2.00	113	38.4 - 157

Sample: 252958 - AH-5 0-1'

Laboratory: Midland

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A QC Batch: 76236 Date Analyzed: 2010-12-16 Analyzed By: AGSample Preparation: Prepared By: Prep Batch: 65377 2010-12-16 AG DТ

		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		5460	mg/Kg	100	4.00

Sample: 252958 - AH-5 0-1'

Laboratory: Midland

Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A QC Batch: 76162 Date Analyzed: 2010-12-14 Analyzed By: kg Prep Batch: 65321 Sample Preparation: 2010-12-14 Prepared By: kg

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0
			0, 0	_	

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		114	mg/Kg	1	100	114	70 - 130

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 16 of 31

Eddy Co., NM

Sample: 252958 - AH-5 0-1'

Laboratory:

Midland

Analysis: QC Batch: Prep Batch: 65313

TPH GRO 76152

Analytical Method: Date Analyzed:

S 8015 D

2010-12-14 Sample Preparation: 2010-12-14 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		< 2.00	mg/Kg	1	2.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.42	mg/Kg	1	2.00	121	48.5 - 152
4-Bromofluorobenzene (4-BFB)		2.27	mg/Kg	1	2.00	114	42 - 159

Sample: 252959 - AH-5 1-1.5'

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 76236 Prep Batch: 65377 Analytical Method:

SM 4500-Cl B Date Analyzed: 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By: AG

AG

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		5320	mg/Kg	100	4.00

Sample: 252960 - AH-5 2-2.5'

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 76236 Prep Batch: 65377

Analytical Method: Date Analyzed:

SM 4500-Cl B 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By: AG Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		5600	mg/Kg	100	4.00

Sample: 252961 - AH-5 3-3.5'

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 76236 Prep Batch: 65377

Analytical Method: SM 4500-Cl B Date Analyzed: 2010-12-16 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By: AG Prepared By: AG

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 17 of 31 Eddy Co., NM

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		7240	mg/Kg	100	4.00

Sample: 252962 - AH-5 4-4.5'

Laboratory:

Midland

Analysis: Chloride (Titration)

QC Batch: 76236 Prep Batch: 65377

Analytical Method: SM 4500-Cl B Date Analyzed:

Sample Preparation: 2010-12-16

Prep Method: N/A 2010-12-16 Analyzed By: AG Prepared By: AG

RLParameter Flag Result Units Dilution RLChloride 7480 mg/Kg 100 4.00

Sample: 252963 - AH-5 5-5.5'

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 76236 Prep Batch: 65377

Analytical Method: SM 4500-Cl B Date Analyzed: 2010-12-16 Sample Preparation:

2010-12-16

Prep Method: N/A Analyzed By: AGPrepared By: \mathbf{AG}

RLUnits Parameter Flag Result Dilution RLChloride 4140 mg/Kg 100 4.00

Sample: 252964 - AH-5 6-6.5'

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 76260 Prep Batch: 65377

Analytical Method: SM 4500-Cl B Date Analyzed: 2010-12-17 Sample Preparation: 2010-12-16

Prep Method: N/A Analyzed By: AG Prepared By: AG

RL Parameter Flag Result Units Dilution RLChloride 1130 mg/Kg 50 4.00

Method Blank (1) QC Batch: 76127

QC Batch: 76127 Prep Batch: 65250 Date Analyzed: 2010-12-14 QC Preparation: 2010-12-13

Analyzed By: Prepared By: AR

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 18 of 31

Eddy Co., NM

		MDL		
Parameter	Flag	Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1)

QC Batch: 76151

QC Batch:

76151

Date Analyzed:

2010-12-14

Analyzed By: ME

Prep Batch: 65313

QC Preparation: 2010-12-14

Prepared By: ME

		MDL		
Parameter	Flag	Result	Units	RL
Benzene		< 0.0150	mg/Kg	0.02
Toluene		< 0.00950	${ m mg/Kg}$	0.02
Ethylbenzene		< 0.0106	${ m mg/Kg}$	0.02
Xylene		< 0.00930	m mg/Kg	0.02

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.94	mg/Kg	1	2.00	97	66.6 - 122
4-Bromofluorobenzene (4-BFB)		2.02	mg/Kg	1	2.00	101	55.4 - 132

Method Blank (1)

QC Batch: 76152

QC Batch:

76152

Date Analyzed:

2010-12-14

Analyzed By: ME

Prep Batch: 65313

QC Preparation: 2010-12-14

Prepared By: ME

MDL

Parameter	Flag	Result	Units	RL
GRO		< 1.65	mg/Kg	2

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	67.6 - 150
4-Bromofluorobenzene (4-BFB)		2.03	mg/Kg	1	2.00	102	52.4 - 130

Method Blank (1)

QC Batch: 76161

QC Batch: Prep Batch: 65320

76161

Date Analyzed:

2010-12-14

QC Preparation: 2010-12-14

Analyzed By: kg

Prepared By: kg

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 19 of 31 Eddy Co., NM

Parameter	Flag	MDL Result Units				m RL
DRO	riag		4.6		mg/Kg	50
				Spike	$\operatorname{Percent}$	Recovery
Surrogate Flag			Dilution	Amount	Recovery	Limits
n-Tricosane	91.6	mg/Kg	1	100	92	70 - 130
Method Blank (1)	QC Batch: 76162					
QC Batch: 76162		Date Analyzed:	2010-12-14		Ana	alyzed By: kg
Prep Batch: 65321		QC Preparation:				pared By: kg
-						
_			DL		**	
Parameter	Flag	Res			Units	RL
DRO		<1	4.6		mg/Kg	50
				Spike	Percent	Recovery
Surrogate Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	112	mg/Kg	1	100	112	70 - 130
Method Blank (1) QC Batch: 76228	QC Batch: 76228	Date Analyzed:	2010-12-16			yzed By: AG
Prep Batch: 65377		QC Preparation:	2010-12-16		Prep	ared By: AG
		M	DL			
Parameter	Flag	Res		•	Units	RL
Chloride	3		.18		mg/Kg	4
Method Blank (1)	QC Batch: 76231					
QC Batch: 76231		Date Analyzed:	2010-12-16		Anal	yzed By: AG
Prep Batch: 65377		QC Preparation:	2010-12-16			ared By: AG
D	D'		DL		T7 . '	1 5. 7
Parameter	Flag	Res			Units	RL
Chloride		<2	.18		mg/Kg	4

Method Blank (1)

QC Batch: 76236

QC Batch: 76236 Prep Batch: 65377 Date Analyzed: 2010-12-16 QC Preparation: 2010-12-16 Analyzed By: AG Prepared By: AG

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 20 of 31 Eddy Co., NM

		MDL		
Parameter	Flag	Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1)

QC Batch: 76260

QC Batch:

76260

Date Analyzed:

2010-12-17

Analyzed By: AG

65377 Prep Batch:

QC Preparation:

2010-12-16

Prepared By: AG

RL

4

MDL

Parameter Flag Result Units < 2.18 Chloride mg/Kg

Laboratory Control Spike (LCS-1)

QC Batch:

76127 Prep Batch: 65250 Date Analyzed:

2010-12-14

Analyzed By: AR

QC Preparation: 2010-12-13

Prepared By: AR

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	96.2	mg/Kg	1	100	< 2.18	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	104	mg/Kg	1	100	<2.18	104	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

76151

Date Analyzed:

2010-12-14

Analyzed By: ME

Prep Batch: 65313

QC Preparation: 2010-12-14

Prepared By: ME

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Benzene 1.82 mg/Kg 1 2.00 < 0.0150 91 81.9 - 108 1.80 mg/Kg Toluene 1 2.00 < 0.00950 90 81.9 - 107 1.82 Ethylbenzene mg/Kg 1 2.00 < 0.0106 91 78.4 - 107 Xylene 5.50 mg/Kg 1 6.00 < 0.00930 92 79.1 - 107

114-6400740

Work Order: 10121027

Page Number: 21 of 31 Eddy Co., NM

COG/Schley Federal TB

Param	$egin{array}{c} ext{LCSD} \\ ext{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.98	mg/Kg	1	2.00	< 0.0150	99	81.9 - 108	8	20
Toluene	1.96	mg/Kg	1	2.00	< 0.00950	98	81.9 - 107	8	20
Ethylbenzene	2.00	mg/Kg	1	2.00	< 0.0106	100	78.4 - 107	9	20
Xylene	6.03	mg/Kg	1	6.00	< 0.00930	100	79.1 - 107	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.76	1.76	mg/Kg	1	2.00	88	88	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.94	1.89	mg/Kg	1	2.00	97	94	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:

76152 65313 Date Analyzed:

2010-12-14 QC Preparation: 2010-12-14 Analyzed By: ME Prepared By: ME

LCS Spike Matrix Rec. Param Result Dil. Limit Units Amount Result Rec. GRO 16.7 mg/Kg 20.0 < 1.65 84 69.9 - 95.4 1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	16.7	mg/Kg	1	20.0	<1.65	84	69.9 - 95.4	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.03	2.04	mg/Kg	1	2.00	102	102	61.9 - 142
4-Bromofluorobenzene (4-BFB)	2.02	2.00	mg/Kg	1	2.00	101	100	65.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch:

76161 Prep Batch:

65320

Date Analyzed:

QC Preparation: 2010-12-14

2010 - 12 - 14

Analyzed By: kg

Prepared By: kg

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	192	mg/Kg	1	250	<14.6	77	47.5 - 144.1

114 - 6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 22 of 31 Eddy Co., NM

		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec .	Limit	RPD	Limit
DRO		214	mg/Kg	1	250	<14.6	86	47.5 - 144.1	11	20
Percent recovery is	s based on the sp	ike result.	RPD is b	ased o	n the spike a	and spike o	luplicat	e result.		
•	-				one spine					
·	LCS	LCSD			v »p	Spike	-	CS LCS	D	Rec.
Surrogate	LCS Result			nits	Dil.	-	I			Rec. Limit

Laboratory Control Spike (LCS-1)

QC Batch: 76162 Prep Batch: 65321 Date Analyzed: 2010-12-14 QC Preparation: 2010-12-14 Analyzed By: kg Prepared By: kg

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	247	mg/Kg	1	250	<14.6	99	47.5 - 144.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	246	mg/Kg	1	250	<14.6	98	47.5 - 144.1	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	122	122	mg/Kg	1	100	122	122	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 76228 Prep Batch: 65377 Date Analyzed: 2010-12-16 QC Preparation: 2010-12-16 Analyzed By: AG Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	95.4	mg/Kg	1	100	<2.18	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	91.9	mg/Kg	1	100	<2.18	92	85 - 115	4	20

114-6400740

Work Order: 10121027

Page Number: 23 of 31

COG/Schley Federal TB Eddy Co., NM

Laboratory Control Spike (LCS-1)

QC Batch:

76231

Date Analyzed:

2010-12-16

Analyzed By: AG

Prep Batch: 65377

QC Preparation: 2010-12-16

Prepared By: AG

	$_{ m LCS}$			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$
Chloride	94.1	mg/Kg	1	100	< 2.18	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	95.7	mg/Kg	1	100	< 2.18	96	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

76236

Date Analyzed:

2010-12-16

Analyzed By: AG

Prep Batch: 65377

QC Preparation: 2010-12-16

Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:

76260 Prep Batch: 65377 Date Analyzed:

2010-12-17

Analyzed By: AG Prepared By: AG

	LCS			$\mathbf{S}_{\mathbf{pike}}$	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	99.9	mg/Kg	1	100	< 2.18	100	85 - 115

QC Preparation: 2010-12-16

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD.	Limit
Chloride	100	mg/Kg	1	100	< 2.18	100	85 - 115	0	20

114-6400740

Work Order: 10121027 COG/Schley Federal TB

Page Number: 24 of 31 Eddy Co., NM

Matrix Spike (MS-1)

Spiked Sample: 252933

QC Batch:

76127 Prep Batch: 65250 Date Analyzed:

2010-12-14

QC Preparation: 2010-12-13

Analyzed By: AR

Prepared By: AR

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$
Chloride	16300	mg/Kg	100	10000	6580	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	16900	mg/Kg	100	10000	6580	103	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 252958

QC Batch:

76151 Prep Batch: 65313 Date Analyzed:

2010-12-14

Analyzed By: ME

Prepared By: ME

Param	$rac{ ext{MS}}{ ext{Result}}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.93	mg/Kg	1	2.00	< 0.0150	96	80.5 - 112
Toluene	1.94	mg/Kg	1	2.00	< 0.00950	97	82.4 - 113
Ethylbenzene	2.02	mg/Kg	1	2.00	< 0.0106	101	83.9 - 114
Xylene	6.13	mg/Kg	1	6.00	< 0.00930	102	84 - 114

QC Preparation: 2010-12-14

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.00	mg/Kg	1	2.00	< 0.0150	100	80.5 - 112	4	20
Toluene	2.03	mg/Kg	1	2.00	< 0.00950	102	82.4 - 113	4	20
Ethylbenzene	2.10	mg/Kg	1	2.00	< 0.0106	105	83.9 - 114	4	20
Xylene	6.38	mg/Kg	1	6.00	< 0.00930	106	84 - 114	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.17	2.15	mg/Kg	1	2	108	108	41.3 - 117
4-Bromofluorobenzene (4-BFB)	2.31	2.29	$_{ m mg/Kg}$	1	2	116	114	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 253025

QC Batch: Prep Batch:

76152 65313 Date Analyzed:

2010-12-14

QC Preparation: 2010-12-14

Analyzed By: ME

ME

Prepared By:

Work Order: 10121027 114-6400740 COG/Schley Federal TB Page Number: 25 of 31 Eddy Co., NM

		MS				Spike		trix			Rec.
Param		Resu		Units	Dil.	Amoun		sult	Rec.		Limit
GRO		17.6		mg/Kg	1	20.0		.65	88	6	1.8 - 114
Percent recovery is based	on the s	pike result.	RPD is	based or	n the spike	and spike	duplicate	result.			
		MSD			Spike	Matrix		Rec	c.		RPD
Param		Result	Units	Dil.	Amount	Result		Lim		RPD	Limit
GRO		18.5	mg/K	g 1	20.0	< 1.65	92	61.8 -	114	5	20
Percent recovery is based	on the s	pike result.	RPD is	based or	n the spike	and spike	duplicate	result.			
		MS	,	MSD			Spike	MS	MS	D	Rec.
Surrogate		Resu		Result	Units	Dil.	Amount	Rec.	Re		Limit
Trifluorotoluene (TFT)		2.40)	2.40	mg/Kg	1	2	120	12	0	50 - 162
4-Bromofluorobenzene (4	-BFB)	2.43	3	2.44	mg/Kg	11	2	122	12	2	50 - 162
Matrix Spike (MS-1) QC Batch: 76161 Prep Batch: 65320	Spiked	l Sample: 25	Date A	Analyzed reparatio						lyzed I pared I	
		MS				Spike	Mati	rix			Rec.
Param		Resul		Units	Dil.	Amount	Rest		Rec.		Limit
DRO		231	1	mg/Kg	11	250	<14	.6	92	11.	7 - 152.3
Percent recovery is based	on the s	pike result.	RPD is	based or	n the spike	and spike	duplicate	result.			
		MSD			Spike	Matrix		Rec			RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limi		RPD	Limit
DRO			mg/Kg		250	<14.6	90	11.7 - 1		3	20
Percent recovery is based	on the s	pike result.	RPD is	based or	n the spike	and spike	duplicate	result.			
	MS	MSD				Spike	N	4S	MSD		Rec.
Surrogate	Result	Result		Units	Dil.	Amoun		ec.	Rec.		Limit
n-Tricosane	124	125	n	ng/Kg	1	100	1	24	125		70 - 130
Matrix Spike (MS-1) QC Batch: 76162 Prep Batch: 65321	Spiked	l Sample: 25	Date A	Analyzed reparation		3-14	26.			yzed l ared I	By: kg
Danana		MS	ı	Tīmi+-	וים	Spike	Mati		D		Rec.
Param DRO		Resul 210		Units ng/Kg	Dil.	Amount 250	Resu		Rec. 84		Limit 7 - 152.3

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 26 of 31 Eddy Co., NM

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	Limit
DRO	213	mg/Kg	1	250	<14.6	85	11.7 - 152.3	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	${ m Rec.}$	Limit
n-Tricosane	120	124	mg/Kg	1	100	120	124	70 - 130

Matrix Spike (MS-1)

Spiked Sample: 252943

QC Batch: 76228 Date Analyzed:

2010-12-16

Analyzed By: AG

Prep Batch: 65377

QC Preparation: 2010-12-16 Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	19400	mg/Kg	100	10000	7950	114	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	2	19500	mg/Kg	100	10000	7950	116	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 252953

QC Batch:

Param

Chloride

76231

Date Analyzed:

2010-12-16

Analyzed By: AG

Prepared By: AG

Prep Batch:

65377

QC Preparation:

mg/Kg

2010-12-16

MSMatrix Rec. Spike Result Units Dil. Amount Result Rec. Limit 11100 100 10000 1040 101 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	10900	mg/Kg	100	10000	1040	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 252954

QC Batch:

76236

Date Analyzed:

2010-12-16

Analyzed By: AG

65377

Prep Batch:

QC Preparation: 2010-12-16

Prepared By: AG

²MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.

114-6400740

Work Order: 10121027 COG/Schley Federal TB Page Number: 27 of 31 Eddy Co., NM

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	6650	mg/Kg	50	5000	920	115	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	6540	mg/Kg	50	5000	920	112	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)

Spiked Sample: 253107

QC Batch: 76260 Prep Batch: 65377 Date Analyzed: 2010-12-17 QC Preparation: 2010-12-16 Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	5690	mg/Kg	50	5000	387	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	5630	mg/Kg	50	5000	387	105	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 76127

Date Analyzed: 2010-12-14

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	99.1	99	85 - 115	2010-12-14

Standard (CCV-1)

QC Batch: 76127

Date Analyzed: 2010-12-14

Analyzed By: AR

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-12-14

Work Order: 10121027 Page Number: 28 of 31 Report Date: December 17, 2010 Eddy Co., NM COG/Schley Federal TB

114-6400740

Standard (CCV-1)				
QC Batch: 76151	Date Analyzed:	2010-12-14	Analyzed By:	ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0965	96	80 - 120	2010-12-14
Toluene		mg/Kg	0.100	0.0970	97	80 - 120	2010-12-14
Ethylbenzene		mg/Kg	0.100	0.0967	97	80 - 120	2010-12-14
Xylene		mg/Kg	0.300	0.295	98	80 - 120	2010-12-14

Standard (CCV-2)

Analyzed By: ME QC Batch: 76151 Date Analyzed: 2010-12-14

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0941	94	80 - 120	2010-12-14
Toluene		mg/Kg	0.100	0.0923	92	80 - 120	2010-12-14
Ethylbenzene		mg/Kg	0.100	0.0889	89	80 - 120	2010-12-14
Xylene		mg/Kg	0.300	0.274	91	80 - 120	2010-12-14

Standard (CCV-3)

QC Batch: 76151 Date Analyzed: 2010-12-14 Analyzed By: ME

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0960	96	80 - 120	2010-12-14
Toluene		mg/Kg	0.100	0.0951	95	80 - 120	2010-12-14
Ethylbenzene		mg/Kg	0.100	0.0933	93	80 - 120	2010-12-14
Xylene		mg/Kg	0.300	0.282	94	80 - 120	2010-12-14

Standard (CCV-1)

QC Batch: 76152 Date Analyzed: 2010-12-14 Analyzed By: ME

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.07	107	80 - 120	2010-12-14

Report Date: December 17, 2010 Work Order: 10121027 Page Number: 29 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM Standard (CCV-2) QC Batch: 76152 Date Analyzed: 2010-12-14 Analyzed By: ME **CCVs** CCVs CCVsPercent True Found Recovery Date Percent Flag Units Analyzed Param Conc. Conc. Recovery Limits 80 - 120 2010-12-14 GRO mg/Kg 1.00 1.02 102 Standard (CCV-3) Date Analyzed: 2010-12-14 Analyzed By: ME QC Batch: 76152 **CCVs CCVs CCVs** Percent True Found Percent Recovery Date Analyzed Param Flag Units Conc. Conc. Recovery Limits GRO mg/Kg 1.00 0.969 97 80 - 120 2010-12-14 Standard (CCV-3) QC Batch: 76161 Date Analyzed: 2010-12-14 Analyzed By: kg **CCVs CCVs** CCVsPercent True Found Date Percent Recovery Param Flag Units Conc. Conc. Recovery Limits Analyzed $\overline{\text{DRO}}$ mg/Kg 250 253 80 - 120 2010-12-14 101 Standard (CCV-4) QC Batch: 76161 Date Analyzed: 2010-12-14 Analyzed By: kg **CCVs CCVs** CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Limits Analyzed Recovery DRO 250 257 80 - 120 2010-12-14 mg/Kg 103 Standard (CCV-1) QC Batch: 76162 Date Analyzed: 2010-12-14 Analyzed By: kg CCVs **CCVs** CCVsPercent

Found

Conc.

255

Percent

Recovery

102

Recovery

Limits

80 - 120

Date

Analyzed

2010-12-14

True

Conc.

250

Flag

Param

DRO

Units

mg/Kg

Standard (CCV-2) Date Analyzed: 2010-12-14 Analyzed By: kg QC Batch: 76162 CCVsCCVsCCVsPercent True Found Percent Recovery Date Flag Limits Analyzed Units Conc. Conc. Recovery Param 240 80 - 120 250 96 2010-12-14 DRO mg/Kg Standard (ICV-1) QC Batch: 76228 Date Analyzed: 2010-12-16 Analyzed By: AG **ICVs ICVs ICVs** Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed 2010-12-16 Chloride 100 99.8 100 85 - 115 mg/Kg Standard (CCV-1) Date Analyzed: 2010-12-16 Analyzed By: AG QC Batch: 76228 CCVs**CCVs** CCVsPercent True Found Percent Recovery Date Flag Units Conc. Conc. Recovery Limits Analyzed Param 2010-12-16 Chloride mg/Kg 100 100 100 85 - 115 Standard (ICV-1) Date Analyzed: 2010-12-16 QC Batch: 76231 Analyzed By: AG **ICVs ICVs ICVs** Percent Found True Percent Recovery Date Param Units Conc. Conc. Recovery Limits Analyzed Flag 99.1 99 85 - 115 2010-12-16 Chloride mg/Kg 100

Work Order: 10121027

COG/Schley Federal TB

Report Date: December 17, 2010

114-6400740

Standard (CCV-1)

QC Batch: 76231

Chloride

Page Number: 30 of 31

Analyzed By: AG

2010-12-16

85 - 115

Eddy Co., NM

V					_		, <u>,</u>
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	\mathbf{Date}
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed

101

101

100

mg/Kg

Date Analyzed: 2010-12-16

Report Date: December 17, 2010 Work Order: 10121027 Page Number: 31 of 31 114-6400740 COG/Schley Federal TB Eddy Co., NM Standard (ICV-1) QC Batch: 76236 Date Analyzed: 2010-12-16 Analyzed By: AG ICVs**ICVs** ICVsPercent True Found Percent Recovery Date Flag Units Conc. Param Conc. Recovery Limits Analyzed Chloride mg/Kg 100 99.0 99 85 - 115 2010-12-16 Standard (CCV-1) QC Batch: 76236 Date Analyzed: 2010-12-16 Analyzed By: AG **CCVs CCVs** CCVsPercent True Found Percent Recovery Date Param Flag Units Conc. Conc. Limits Analyzed Recovery Chloride mg/Kg 100 101 101 85 - 115 2010-12-16 Standard (ICV-1) QC Batch: 76260 Date Analyzed: 2010-12-17 Analyzed By: AG **ICVs ICVs ICVs** Percent True Found Percent Recovery Date Flag Units Conc. Analyzed Param Conc. Recovery Limits Chloride mg/Kg 100 98.9 85 - 115 2010-12-17 Standard (CCV-1)

Date Analyzed: 2010-12-17

CCVs

Found

Conc.

101

CCVs

Percent

Recovery

101

CCVs

True

Conc.

100

Analyzed By: AG

Date

Analyzed

2010-12-17

Percent

Recovery

Limits

85 - 115

QC Batch: 76260

Param

Chloride

Flag

Units

mg/Kg

~ *wo#: lopaloz7 **Analysis Request of Chain of Custody Record** PAGE: OF: **ANALYSIS REQUEST** (Circle or Specify Method No.) TETRA TECH (Ext. to C35) 8 8 1910 N. Big Spring St. 19 모 Midland, Texas 79705 £ Z (432) 682-4559 • Fax (432) 682-3946 5 5 CLIENT NAME: SITE MANAGER: **PRESERVATIVE** GC.MS Vol. 8240/8260/6 GC.MS Semi. Vol. 8270/6 PCB's 8080/608 Pest. 808/608 METHOD C.06 PROJECT NO.: PROJECT NAME: TCLP Metals Ag TCLP Semi Volati 114-6400740 TCLP Volatil LAB I.D. MATRIX DATE TIME COMP HNO3 SAMPLE IDENTIFICATION NUMBER 호 2010 252933 1' BEB 934 939 936 L' BEB 937 t' Beb 938 ' RER 939 940 941 942 RELINQUISHED BY: (Signature) 1020 Time: 2/00 RELINQUISHED BY: (Signature) FEDEX Time

RELINQUISHED BY: (Signature)

SAMPLE CONDITION WHEN RECEIVED

Aufle STATE:

RECEIVING LABORATORY:

Date:

Time:

REMARKS:

PHONE:

RECEIVED BY: (Signature)

RECEIVED BY: (Signature)

DATE:

Please fill out all copies - Laboratory retains follow copy - Refurn Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

West Dapu Dayle It Bowlede Date of 10 mg/19 On total BITES.

Served 577 mg/19

HAND DELIVERED UPS

TETRA TECH CONTACT PERSON:

Te E

OTHER:

Results by:

RUSH Charges Authorized:

Xwo #: 1012102																							
Analysis Request of Ch	F	le:	CO	ro		PAGE: 2 Or: 4																	
	•		_	ANALYSIS REQUEST (Circle or Specify Method No.)																			
TETRA TECH 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946																			TDS				
CLIENT NAME: SITE MANAG	ERS			SERV/	ATIVE	11	TX1005	8a G	88 Cd			0/624	8270/625					s, pH,					
PROJECT NO.: PROJECT NAME:	The Toverz	CONTAINERS	-	T		-	$\{ \ \ $	€ 20 20 20 20	\$	₹ S	1		3/826						atlon				
114-6400 740 COG/Schlay	Interior TB	8	<u>Ş</u>			1		E .	als A	als A			824	ni. Vo	89 89		20 1	stos)	28/0				
IARID X Y	Eddy Co, NPA PLE IDENTIFICATION	NUMBER OF	FILTERED (Y/N)	HN03	ICE	NON	121	TPH 8015	RCRA Metals Ag	TCLP Metals Ag	TCLP Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol.	PCB's 8080/608 Pest. 808/608	Chloride	Gamma Spec.	Aprila beta (Air) PLM (Asbestos)	Major Anions/Cattons,				
252943 12/6 5 X AH-3	0-1' 1'868				X		M	X								A			\prod				
944	1-15 1 BEB	\prod														Ý			П				
945 44-3	a-20- 1 BYB	I			П		П			П						V		T	П	T			
946 1 1 1 1 1 1 1 1	335 1818						\prod			П	1	T	П	1	1	Y	1		П				
947 44-3	4-45 1'RSB	$\parallel \parallel$						1	T		1	T	\sqcap		T	Y	\top	1	П	\top			
948 44-4	0-1	$\parallel \parallel$			Ш		X	对			\top	1	П	1	1	Y		T	\prod				
949 1 14-4	1-15	Ш	T					1			1	T				Ψ			П				
950 44 ~4	2-25											T				У	T		\prod				
951 AH-4	3-3-5		T												T	Y							
952 - X AH-4	445'	4			1											φ							
RELINQUISHED BY: (Signature) Date: 12/10/10 Time: 10/30	RECEIVED BY: (Signature)			Date: Time:	107	0:30	Ö	_ s	AMPL		r. (Pri		nitia)		LLS		-	Date: Time:		115	-		
RELINQUISHED BY: (Signature) / Date: Time:	RECEIVED BY (Signature)			Date: Time:					AMPL FEDE	E SHI	IPPEC	BY: ((Circle	;)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			RBILL HER:	-				
RELINQUISHED BY: (Signature) Date: Time:	RECEIVED BY: (Signature)			Date: Time:					ETRA							Results by:							
RECEIVING LABORATORY: 1/4// ADDRESS:	RECEIVED BY: (Signature)							The overez RI												RUSH Charges			
CITY: STATE: ZIP:	DATE:	_ TIM	E:															Au	rthorize Yes		No		
SAMPLE CONDITION WHEN RECEIVED: REMARKS:						•															į		

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

		λ	Y	ಎ	<i>‡</i>	t: 1012102	X7	e-5		•																			<u>. </u>		
Analysis Request of Chain of Custody Record									PAGE: - Or. 4																						
7 than 500 Hoquest of Orlant of Sustady Hocord										ANALYSIS REQUEST (Circle or Specify Method No.)																					
TETRA TECH 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946													- 1	05 (Ext. to C35)	Cd Cr Pb Hg Se	Vr Pd Hg										TDS					
CLIENT NAME: SITE MANAG								PRESERVATIVE METHOD			E		TX1005	8	88			0/624	70/82			1			H.			[
PROJECT NO · 1 PROJECT NAME·							Toward TB		P CONTAINERS	E		T				. I	als Ag As	als Ag As	tiles	TCLP Semi Volatiles	HCI GC.MS Vol. 8240/8280/624	mi. Vol. 82	PCB's 8080/608	808		(Air)	estos)	Major Anions/Cations, pH, TDS	į		
LAB I.D. NUMBER	DATE 2010	TIME	MATRIX	COMP	GRAB		LE IDENTIFICATION		NUMBER OF	FILTERED (Y/N)	HNO3	낊	NONE		ЈИ	TPH BOYS	RCRA Metals Ag /	TCLP Metals Ag	TCLP Volatiles	TCLP Serr	GC MS Vo	GC.MS Se	PCB's 808	Pest. 808/608	Chloride	Alnha Beta (Air)	PLM (Asbestos)	Major Ani			
252953	12/4		۲		X	AH-4 .	5-5-5		1			X					I											Ш			1
954						AH-4	4-4.5					$\parallel \parallel$						1						ľ	Ý	1		Ш			
955					П	AH-4	7-7.5					\prod												ľ	Y						_
956					\coprod	AH - 4	8-8.5					\coprod											Ц		P		L		\perp		
957					Ц	AH - 4	9-95		\prod				Ш			_	\perp	L							9			Ц		Ц	
958					\prod	AH-5	D-Y		Ц			Ц			X	<u> </u>						L	Ц	_	1		L	Ц	\perp		_
959			Ш			AH - 5	1-105		Ш	_		\coprod			_	\downarrow	\perp				1		Ц	1	1	1	$oldsymbol{\perp}$	\coprod	_	Ц	_
१७०			Ш	Ц		AH-5	2.25		Ц	\perp		Ц	Ц		\downarrow	\perp					1	\perp	Ц		4	\perp		Ц	\bot		
961			Щ		\prod	AH - 5	3-35		\prod	1	_	\prod			1	_	\perp		Ц	\downarrow	_					\perp	_	\sqcup	_	\coprod	
962	√	m) 47	4	, -	1	AH- 5	4-4.5		H		0.55	14			\perp	1					tohtia	Ĺ		K	4	1	2000	Ц	2/2		
RELINQUISHED BY: (Signature) Date: 12/10/10 Time: 103L					Time: 1036	BECEIVED BY (Signifium) Date: 1/10// Time: 10/30						9	_		_ 2				r: (Circ	<u>-h</u>	ed l	<u>lan</u>	41	10	ime:	24		_			
RELINQUISHED BY: (Signature) / Date:					Time:	RECEIVED BY (Signature)				Date: Time:					. [FED	EX_			βl	JS					HER:				-	
RELINQUISHED BY: (Signature) Date: Time:						RECEIVED BY: (Signature) Date: Time:						TETRA TECH CONTACT PERSON: Results											oy:		_						
RECEIVING LAS ADDRESS:	ORATORY:	STATE:		7	7	ZIP:	RECEIVED BY: (Signature)							Toreve Z RUSH Charges Authorized:												_					
CONTACT:	/Ters	r		_ PHO			DATE:		тмі	E:					Authorized: Yes No																
SAMPLE CONDITION WHEN RECEIVED: REMARKS: 3. L C WACH Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager																															
	Please f	fill out ail	cop	i es -	Lε	aboratory retains Yellov	v copy - Return Orginal co	py to Tetra	Toc	:h -	Pro	ject	Mana	ger	reta	ins	Pink	CO	ру -	- Ac	COU	nting	g rec	eive	es G	old	cop	ıy.			

~ Xwo#: 10121027 Analysis Request of Chain of Custody Record PAGE: **ANALYSIS REQUEST** (Circle or Specify Method No.) TETRA TECH (Ext. to C35) Hg Se 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946 δ≯ 8015 MOD. TX1005 PRESERVATIVE CLIENT NAME: SITE MANAGER: **METHOD** PROJECT NAME: PROJECT NO .: 114-6400 749 COG/SKHLEN Loden TCLP Semi LAB I.D. TIME SAMPLE IDENTIFICATION DATE GRAB ICE NUMBER ର୍ଯ୍ୟନ୍ତ ଓ SAMPLED BY: (Print & Initial) RELINQUISHED BY: (Signature) 0130 SAMPLE SHIPPED BY: (Circle) RELINQUISHED BY: (Signature) FEDEX BUS ₩AND DELIVERED UPS Типе: Time: OTHER: RELINQUISHED BY: (Signature) Date: RECEIVED BY: (Signature) TETRA TECH CONTACT PERSON: Results by: Tane: RECEIVING LABORATORY: RECEIVED BY: (Signature) **RUSH Charges** STATE: 78 ZIP: PHONE: No DATE: TIME: SAMPLE CONDITION WHEN RECEIVED: REMARKS:

Please fill out all copies - Laboratory retains Yellow copy - Return Orginal copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.