State of New Mexico Energy Minerals and Natural Resources

JUN 3 0 2009

Form C-141 Revised June 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

1220 S. St. Francis Dr., Santa Fe, NM 8/505	Santa F	Fe, NM 87505				side of form	
30-015-36467 Release No	otificatio	n and Corrective Action	1				
MLB 0920853986		OPERATOR	🗌 Initia	Report	\boxtimes	Final Repo	
Name of Company: COG Operating LLC	229137	Contact: Pat Ellis					
Address: 550 W. Texas, Suite 1300, Midland, Tx 79'	701	Telephone No. (432) 683-7443					
Facility Name: Electra Federal North Battery		Facility Type: Tank Battery					
Surface Owner Charles Martin Mir	eral Owner	Unknown	Lease N	o. API# 3	0-015-	364687	
I	OCATIO	ON OF RELEASE	- t	· · · · · · · · · · · · · · · · · · ·			
Unit Letter Section Township Range Feet from B 10 17S 30E 1170'	n the North	h Line h 2310' East	Line	County Eddy			
	NATURE	E OF RELEASE					
Type of Release Oil		Volume of Release 150 BBLs	Volume R	ecovered (0 BBI	\$	
Source of Release Tank Overflowed	Date and Hour of Occurrence	Date and H	Hour of Dise	covery			
		Unknown	03/05/09 -	8:00 am			
Was Immediate Notice Given?	NT /	If YES, To Whom?					
Required	Not						
By whom? C	Date and Hour						
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	tercourse.					
🔲 Yes 🛛 No		N/A					
If a Watercourse was Impacted, Describe Fully.* N/A							
Describe Cause of Problem and Remedial Action Taken.* Tank overflowed and was contained within firewall. Site v	vas vacuumed	1 and soils excavated.					
Describe Area Affected and Cleanup Action Taken.* All oil was contained within firewall. COG Operating LLC sampled site on 03/10/09. Upon completion of delineation	C vacuumed a , remaining h	Il liquids from ground and as of 03/06/ ydrocarbon impacted soils were excava	09 dug and rend	emoved soi	ls. Teti for pro	ra Tech per disposal	
I hereby certify that the information given above is true and regulations all operators are required to report and/or file of public health or the environment. The acceptance of a C-14 should their operations have failed to adequately investigat or the environment. In addition, NMOCD acceptance of a federal, state, or local laws and/or regulations.	d complete to ertain release 41 report by t e and remedia C-141 report	the best of my knowledge and understa notifications and perform corrective ac the NMOCD marked as "Final Report" ate contamination that pose a threat to g does not relieve the operator of response	and that purse tions for rele does not relia ground water sibility for co	uant to NM ases which eve the oper , surface wa ompliance w	OCD ru may er rator of ater, hun vith any	ules and ndanger liability man health v other	
		OIL CONSERV	VATION	DIVISIC	DN		
Signature: SALL K.			:/				
Stown Start During		Signed By M1/4)KARNICH				
Printed Name: Jeffrey Kindley as agent for COG		Approved by District Supervisor.					
Title: Division Senior Environmental Geologist		Approval Date: JUL 27 2009	Expiration I	Date: NA			
E-mail Address: jeff.kind1ey@tetratech.com		Conditions of Approval: M/H		Attached			
Date: 06/24/09 Phone (432) 682-4559				Anached	Ļ		
Attach Additional Sheets If Necessary		l		1			
Attach Additional Sheets II Necessary	×.		ċ	2RP-3	24		

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SITE INFORMATION

REPORT TYPE: Assessment Report

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Re	port	Date:	June	24,	2009

General Site Information:			
Site:	Electra Federa	North Battery	
Company	COG Operating	aLLC	
Section, Township and Range	Section 10	Township 17S	Range 30E
Unit Letter:	B		a and Derive a survey of the provided and the second states
l ease Number:	API # 30-015-36	3468	
County:	Eddy County		
CDS:	N32° 51' 10 50"	\N/103° 57' 20 47"	
Surface Owner:	Charles Martin	W100 07 29.47	
Minoral Owner:	Unknown	· · · · · · · · · · · · · · · · · · ·	
Directione:	From Louington	NIM go west on Hus 82 to CP	215 Turn right on CD215 and travel
		, NW 90 West OIT HWY 82 to CR	215. Tull light on CR215 and traver
	1.7 miles to four v	way and turn right (east) and trave	for 0.8 miles to four way and turn
	left (north) and tra	avel for 0.4 miles and turn right (ea	ast) and travel 0.3 miles to TB
Release Data:	NO SAN		
Date Released:	3/5/2009		
Type Release:	Oil		
Source of Contamination:	Tank overflowe	d	
Fluid Released:	150 BBLS		
Fluids Recovered:	90 BBLS		
Official Communication:			
Name: Phidlic A Edu			
Name. Phylis Aseuwa		The fact of the second s	
Company: COG Operating	JEEC	The second s	Netra lech, inc
Address: 550 W. Texas,	Suite 1300		1910 N. Big Spring
P.O. Box		and the second	
City: Midland, Tx 79	701		Midland, Texas 79705
Phone number: (432) 685-4340	The states		(432) 682- 4559
Email:	horesources co		ike tavarez@tetratech.com
Destring Criterio			inc. to varezet to to the second seco
Kanking Gittena	Kanar Elevis a Statistica (Statistica)		
Depth to Groundwater:		Panking Sooro	Site Data
<50 ft			Sile Dala
50-99 ft		10	
>100 ft.		0	Average Depth >350
WellHead Protection:		Ranking Score	Site Data
Water Source <1,000 ft., Private <2	200 ft.	20	None
Water Source >1,000 ft., Private >2	200 ft	0	
		-	·····
Surface Body of Water:		Ranking Score	Site Data
<200 ft.		20	None
200 ft - 1,000 ft.		10	None
>1,000 II.	······································	<u> </u>	
Tatal Davidson A			
i otal Ranking Sco	<u>re:</u>	<u> </u>	
			The second se
	Accepta	ble Soil RRAL (mg/kg)	
	Benzene	Total BTEX	<u>TPH</u>
	10	50	5,000



June 24, 2009

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

Re: Assessment and Closure Report for the COG Operating LLC., Electra Federal North Battery, Unit B, Section 10, Township 17 South, Range 30 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. was contacted by COG Operating, LLC (COG) to assess a spill from the Electra Federal North Battery, located in Unit B, Section 10, Township 17 South, Range 30 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32° 51' 10.59", W 103° 57' 29.47". The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on March 5, 2009. Approximately 150 barrels of oil were released, when a tank overflowed. The spill covered a 35 foot by 90 foot area and 160 foot by 10 to 20 foot area within the berm of the tank battery. Of the 150 barrels released approximately 90 barrels were recovered by vacuum trucks. The soils within the berm were scraped to a maximum depth of 1 foot below ground surface on March 6, 2009. The initial and final C-141 is enclosed in Appendix A.

Groundwater

No water wells were found within Township 17 South and Range 37 East. However, according to the ChevronTexaco *Eddy County Depth to Groundwater Water Well Facility Map*, the approximate depth to groundwater in the region is approximately 350 feet below ground surface (bgs). Copies of the groundwater depth information for this site are included 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 Results

On March 10, 2009, Tetra Tech inspected and sampled the spill area. A total of eight (8) auger holes (AH-1 through AH-8) were installed using a stainless steel hand auger to assess the impacted soils within the tank battery. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. All of the samples analyzed were below the RRAL for both BTEX and TPH with the exception of auger hole AH-2, AH-3, and AH-4 at 0 to 1 foot below excavation bottom (BEB). All chloride concentrations were less than 20 mg/kg in all samples collected and analyzed. All sampling results are summarized in Table 1. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The spill area and the auger hole locations are shown on Figure 3.

Soil Remediation

Upon completion of the sampling at the site, COG excavated the first foot of hydrocarbon impacted soils from around auger hole AH-2, AH-3, and AH-4. Soils from the excavation were transported offsite for proper disposal.

Conclusions

The remedial activities performed at the site leave no residual TPH or BTEX concentrations that exceed the RRAL. With groundwater depth at approximately 350 feet bgs, it does not appear that any residual hydrocarbons remaining within the soils would pose an imminent threat to groundwater.

Based upon the results of the assessment and work performed at this site, COG requests closure of this site. If you have any question or comments concerning the assessment or the activities performed at the Site, please call me at (432) 682-4559.



Respectfully submitted, TETRA TECH, Inc.

Juffing Kindley Jeffrey Kindley, P.G. Sr. Project Manager

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FIGURES

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Table 1 COG Electra Tank Battery Eddy County, New Mexico

Sample	Date	Sample	Soil S	Status		TPH (mg/kg	g)	Benzene	Toluene	Ethlybenzene	Xylene	Chloride
ID	Sampled	Depth (ft)	In-Situ	Removed	DRO	GRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-1	3/10/2009	0-1 BEB (2.0')	X		<50.0	11.7	11.7	-	-	-	-	<200
AH-2	3/10/2009	0-1\BEB (4")		X	8,090	1 5,740	13,830	68.6	196	139	183	<200
	3/10/2009	1-1.5 BEB (4")	x		<50.0	<1 .00	<50.0	<0.0100	0.123	0.129	0.370	•
	3/10/2009	2-2.5 BEB (4")	x		<50.0	<1.00	<50.0		-	-	-	-
AH-3	3/10/2009	-0-1 BEB (4")		X	5,580	2,910	8,490	29.0	104	85.2	121	<200
	3/10/2009	1-1.5 BEB (4")	х		<50.0	<1.00	<50.0	<0.0100	<0.0100	0.123	0.342	-
AH-4	3/10/2009	0-1 BEB (4")		X	2,860	3,100	5,960	18.5	81.1	65.8	89.3	<200
	3/10/2009	1-1.5 BEB (4")	Х		<50.0	<1.00	<50.0	<0.0100	<0.0100	<0.0100	<0.0100	-
AH-5	3/10/2009	0-1 BEB (4")	<u> </u>		591	263	854	0.294	2.02	3.09	4.58	<200
AH-6	3/10/2009	0-1 BEB (1.0)	X		421	115	536	-	-	-	-	<200
AH-7	3/10/2009	0-1 BEB (6")	Х		<50.0	5.23	5.23	-		-		<200
AH-8	3/10/2009	0-1.0'	Х	, i	99.2	4.69	103.89	-	-	-	-	<200

(-) Not Analyzed

APPENDIX A INITIAL AND FINAL C-141

ι.

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

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

			Rele	ase Notific	atio	n and Co	rrective A	ction		an fan de heer gester fan de ferster en ser fe	in sinces	an <u>Alter</u> agea a marao di marao di Sana di S
						OPERAT	TOR		🕅 Initia	l Report		Final Report
Name of Co	mpany C	OG OPERA	TING LI	LC		Contact Pl	nyllis A. Edward	ds			Lond	
Address 55	0 W. Texa	s, Suite 1300) Midlan	id, TX 79701		Telephone No. 432-685-4340						
Facility Nar	ne – El	ectra Federal	North I	Battery		Facility Typ	e- Battery					
Surface Ow	ner Char	les Martin		Mineral C	Iwner		· · · · · · · · · · · · · · · · · · ·		Lease N	lo. API#	30-01	5-36468
			-	LOCA	ATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	South Line	Feet from the	East/	East/West Line County			
В	10	17S	30E	1170		North	2310		East		Eddy	
L	<u></u>	L	La	titude_ <u>32,8529</u>	41	Longi	tude_ <u>103.9581</u>	86		L		<u> </u>
				NAT	rure	OF REL	EASE					
Type of Rele	Type of Release- OIL					Volume of	Release- 150 B	BLS	Volume 1	Recovered-	90 BB	ILS
Source of Re	elease- tai	ik overflowed				Date and I	four of Occurrent Unknown	ce-	Date and	Hour of Di 3/5/09-	scover 8:00ar	y n
Was Immedi	ate Notice (Given?	Yes 🛛	🕽 No 📋 Not R	equired	If YES, To	Whom?		•			
By Whom?						Date and I	lour					
Was a Water	Was a Watercourse Reached?					If YES, V	olume Impacting	the Wat	tercourse.			
If a Waterco	If a Watercourse was Impacted, Describe Fully.*											
		-	-									
							·····					
Describe Ca	use of Prob	lem and Reme	dial Actio	on Taken.*								
All oil was c	ontained in	the firewall.	90 BBLS	was recovered &	60 BB	LS was lost ac	cording to gauge	s.				
COG Operat	ting LLC ha	s vacuumed	all liquids	from ground & a	s of 3-6	-09 has starte	d digging & remo	oving co	ontaminated	l caliche.		
COG Opera	ing LLC na	is contacted 1	etra i ech i	to sample & define	eate thi	s spin.						
		1.01	A	1								
Describe Ar	ea Affected	and Cleanup	Action Ta	iken.*								
I hereby cer	tify that the	information g	to report	e is true and com	plete to	the best of m	y knowledge and	underst	and that pu	rsuant to N	MOCD	rules and
public healt	h or the env	ironment. Th	e acceptai	nce of a C-141 rep	port by	the NMOCD 1	marked as "Final"	Report"	does not re	lieve the op	perator	of liability
should their	operations	have failed to	adequate	ly investigate and	remed	ate contamina	tion that pose a th	hreat to	ground wat	er, surface	water, ł	uman health
federal, stat	e, or local h	addition, NM	ulations.	eptance of a C-14	i repor	does not relie	eve the operator o	t respon	isibility for	compliance	with a	ny other
,	Δt			\cap			OIL CON	NSER	VATION	V DIVIS	ION	
Signature:	They	lis (2.	Eleva	a	e					<u></u>	
Printed Nar	ne: Phylli	s A. Edwards				Approved b	y District Superv	isor:		<u> </u>		
Title: Reg	ulatory Ana	alyst				Approval D	ate:		Expiratio	n Date:		
E-mail Add	ress pedw	ards@concho	resources.	com		Conditions	of Approval:			Attach	ed 🔲	
Date: 3/	12/09		Phor	ne: 432-685-4340)							

* Attach Additional Sheets If Necessary

APPENDIX B WATER WELL DATA

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Water Well Data COG - Electra Federal North Tank Battery Average Depth to Groundwater (ft)

16 South

18 South

	16 So	outh	29 East				
6	5	4	3	2	1		
7	8	9	10	11	12		
18	17	16	15	14	13		
19 110	20	21	22	23	24		
30	29	28	27	26	25		
31	32	33	34	35	36		

	17 So	uth	29		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22 80	23	24
30	29 210 208 '	28	27	26	25
31	32	33	34	35	36

	18 So	uth	29	East	
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

30 East

	16	South			
6	5	4	3	2	1
7	8	9	10	11	12 288
18	17	16	15	14	13 113
19	20	21	22	23	24
30	29	28	27	26	25
31 290	32	33	34	35	36

31 East

40.0

. . .

17 So	uth	30	East				17 So	uth
5	4	3	2	1	:	6	5	4
3	9	10 SITE	11	12		7	8	9
17	16	15	14	13		18	17	16
20	21	22	23	24		19	20	21
29	28	27	26	25		30	29	28
32	33	34	35	36		31	32	33

30 East

6	18	South	10	B1 Eas	t
31	32	33	34 271	35	36
30	29	28	27	26	25
19	20	21	22	23	24
18	17	16	15	14	13

6	5	4	3	2	1
7	8	9	10	11	12 400
18	17	16	15	14 317	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 261	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6) Geology and Groundwater Resources of Eddy County, NM (Report 3)

NMOCD - Groundwater Data

123 Field water level

		New Mexic POD	o Office of the S Reports and Do	State Engineer ownloads	
	Township: 17S	Range: 30E	Sections:		
	NAD27 X:	Y:	Zone:	Search Radius	:
County:	В	asin:		Number:	Suffix:
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	POD / Su	urface Data Repo	rt][Avg Depth to Water Re	eport
		Wa	ater Column F	Report	
		Clear Form		RS Menu	
AVER	AGE DEPTH OF WA	TER REPORT 04/0	L/2009 (Depth 1	Water in Feet)	
lsn Tws Rng	Sec Zone	X Y We	lls Min	Max Avg	
No Records fo	und, try again				

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New Mexico Office of the State Engineer POD Reports and Downloads									
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	VERAGE DEE	TH OF WA	TER REPO	RT 04/01/	2009 (Depth)	Water :	in Feet)		
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		POL	ico Office of the S Reports and Do	itate Engineer wnloads	
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	NAD27 X:	Y:	Zone:	Search Radius:	
County:		Basin:		Number: Suffix	
Owner 1	Name: (First)	(L	ast)	\bigcirc Non-Domestic \bigcirc D	omestic 🔘
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AN Ben Twe T	VERAGE DEPTH OF	WATER REPORT 04/	01/2009 (Depth) alls Min	Mater in Feet) Max Avg	
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NAD27 X:	Y	':	Zone:		Search Radius:		
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Bsn Tws Rng Sec Zone	x	Y Well	s Min	Max	Avg		
∛o Records found, try a	gain						

APPENDIX C LABORATORY ANALYTICAL

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EDNI Aneldeen (Wenut, Suite R. J. 200 Eart Sunsei Roed, Suite E. J. 5882 Basin Sticet, Suite A1. J. 6615 Harris Parlium, Suite 110. Fr

Lebraci, Texas 79424 800+378+1255 El Paso, Texas 79927 808+384+3 Midrand, Texas 79705 Fi Worth, Texas 79705 Fi Worth, Texas 76132 F-Mart: Ion/Citrast subject com

800+378+1205 306+794+1296 800+588+3445 915+585+3440 432+059+6501 817+201+5260

Fax 806•794•1298 Fax 915•595•4944 Fax 432•689•6313

WBENC: 237019

HUB:1752439743100-86536NCTRCAWFWB38444Y0909

Certifications

DBE: VN 20657

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: March 17, 2009

Work Order: 9031110

Project Location:Eddy Co., NMProject Name:COG/Electra TBProject Number:114-6400141

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
189774	AH-1 0-1' 2' BEB	soil	2009-03-10	00:00	2009-03-11
189777	AH-2 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189778	AH-2 1'-1.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189779	AH-2 2'-2.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189781	AH-3 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189782	AH-3 1'-1.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189785	AH-4 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189786	AH-4 1'-1.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189788	AH-5 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189791	AH-6 0-1' 1' BEB	soil	2009-03-10	00:00	2009-03-11

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
189794	AH-7 0-1' 6 in. BEB	soil	2009-03-10	00:00	2009-03-11
189797	AH-8 0-1'	soil	2009-03-10	00:00	2009-03-11

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 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blain Lepturch

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project COG/Electra TB were received by TraceAnalysis, Inc. on 2009-03-11 and assigned to work order 9031110. Samples for work order 9031110 were received intact at a temperature of 5.1 deg. C.

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

		Prep	Prep	\mathbf{QC}	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (Titration)	SM 4500-Cl B	49138	2009-03-11 at 12:58	57524	2009-03-12 at 09:11
TPH DRO	Mod. 8015B	49181	2009-03-12 at 12:00	57583	2009-03-12 at 13:50
TPH DRO	Mod. 8015B	49244	2009-03-16 at 09:00	57661	2009-03-16 at 10:00
TPH GRO	S 8015B	49146	2009-03-11 at 13:09	57523	2009-03-11 at 13:09
TPH GRO	S 8015B	49197	2009-03-12 at 10:25	57588	2009-03-12 at 10:25
TPH GRO	S 8015B	49239	2009-03-13 at 15:19	57636	2009-03-13 at 15:19

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 9031110 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.

Analytical Report

Sample: 189774 - AH-1 0-1' 2' BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	57524	Date Analyzed:	2009-03-12	Analyzed By:	AR
Prep Batch:	49138	Sample Preparation:	2009-03-11	Prepared By:	AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<200	mg/Kg	50	4.00

Sample: 189774 - AH-1 0-1' 2' BEB

Laboratory:	Midland						
Analysis:	TPH DRO		Analytical M	lethod: Mod	i. 8015B	Prep	Method: N/A
QC Batch:	57583		Date Analyz	ed: 200	9-03-12	Analy	zed By: LD
Prep Batch:	49181		Sample Prep	aration: 200	9-03-12	Prepa	ared By: LD
			\mathbf{RL}				
Parameter	Fla	g	Result		Units	Dilution	\mathbf{RL}
DRO			<50.0	m	g/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	ne	52.2	mg/Kg	1	100	52	13.2 - 219.3

Sample: 189774 - AH-1 0-1' 2' BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57523 49146		Analytica Date Ana Sample P	l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11		Prep Me Analyzec Preparec	thod: S 5035 ł By: ME ł By: ME
	-		\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	\mathbf{RL}
GRO			11.7		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	0	0.969	mg/Kg	1	1.00	97	68.5 - 119.4
4-Bromofluo	robenzene (4-BFB)		0.944	mg/Kg	1	1.00	94	52 - 117

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114-6400141	COG/Electra TB	Eddy Co., NM

Sample: 189777 - AH-2 0-1' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland Chloride (Titration) 57524 49138	Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2009-03-12 : 2009-03-11	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<200	mg/Kg	50	4.00

Sample: 189777 - AH-2 0-1' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH DRO 57583 49181		Analytical M Date Analyz Sample Prep	fethod: Mo ed: 200 paration: 200	d. 8015B 9-03-12 9-03-12	Prep Analy Prep	Method: N/A yzed By: LD ared By: LD
Parameter		Flag	RL Result		Units	Dilution	RL
DRO			8090	m	ng/Kg	5	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	e ¹	438	mg/Kg	5	100	438	13.2 - 219.3

Sample: 189777 - AH-2 0-1' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57588 49197		Analytical Date Anal Sample Pr	Method: lyzed: reparation:	S 8015B 2009-03-12 2009-03-12		Prep Me Analyzec Prepared	thod: S 5035 l By: ME l By: ME
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	\mathbf{RL}
GRO			5740		mg/Kg		100	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		88.1	mg/Kg	100	100	88	68.5 - 119.4
4-Bromofluo	robenzene (4-BFB)	2	147	mg/Kg	100	100	147	52 - 117

¹High surrogate recovery due to peak interference.

²High surrogate recovery due to peak interference.

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114-6400141	COG/Electra TB	Eddy Co., NM

Sample: 189778 - AH-2 1'-1.5' 4 in. BEB

Laboratory:	Midland						
Analysis:	TPH DRO		Analytical M	lethod: Mod	. 8015B	Prep	Method: N/A
QC Batch:	57661		Date Analyz	ed: 2009	-03-16	Analy	zed By: LD
Prep Batch:	49244		Sample Prep	aration: 2009	-03-16	Prepa	ared By: LD
			RL				
Parameter	Fla	g	Result	U	Inits	Dilution	RL
DRO			<50.0	mg	/Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	e	134	mg/Kg	1	100	134	13.2 - 219.3

Sample: 189778 - AH-2 1'-1.5' 4 in. BEB

Laboratory:	Midland							
Analysis:	TPH GRO		Analytical	Method:	S 8015B		Prep Me	thod: S 5035
QC Batch:	57636		Date Anal	lyzed:	2009-03-13		Analyzed	By: ME
Prep Batch:	49239		Sample P	reparation:	2009-03-13		Prepared	By: ME
			\mathbf{RL}					
Parameter	\mathbf{Flag}		Result		Units		Dilution	\mathbf{RL}
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)		0.915	mg/Kg	1	1.00	92	68.5 - 119.4
4-Bromofluor	obenzene (4-BFB)		0.666	mg/Kg	1	1.00	67	52 - 117

Sample: 189779 - AH-2 2'-2.5' 4 in. BEB.

n-Triacontan	e	89.9	mg/Kg	11	100	90	13.2 - 219.3
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
					Spike	Percent	Recovery
DRO			<50.0	mg	/Kg	1	50.0
Parameter	Fla	5	Result	U	nits	Dilution	RL
			DĪ				
Prep Batch:	49244		Sample Prep	aration: 2009	-03-16	Prepa	ared By: LD
QC Batch:	57661		Date Analyz	ed: 2009	-03-16	Analy	zed By: LD
Analysis:	TPH DRO		Analytical M	lethod: Mod	8015B	Prep	Method: N/A
Laboratory:	Midland						

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114-6400141	COG/Electra TB	Eddy Co., NM

Sample: 189779 - AH-2 2'-2.5' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57636 49239		Analytica Date Ana Sample P	l Method: lyzed: reparation:	S 8015B 2009-03-13 2009-03-13		Prep Me Analyzec Preparec	thod: S 5035 1 By: ME 1 By: ME
			\mathbf{RL}					
Parameter	\mathbf{Flag}		Result		Units		Dilution	RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		0.958	mg/Kg	1	1.00	96	68.5 - 119.4
4-Bromofluor	robenzene (4-BFB)		0.640	mg/Kg	1	1.00	64	52 - 117

Sample: 189781 - AH-3 0-1' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland Chloride (Titration) 57524 49138	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2009-03-12 2009-03-11	Prep Method: Analyzed By: Prepared By:	N/A AR AR
Parameter	Flag	RL Result	Units	Dilution	\mathbf{RL}
Chloride	0	<200	mg/Kg	50	4.00

Sample: 189781 - AH-3 0-1' 4 in. BEB

n-Triacontan	e 3	340	mg/Kg	5	100	340	13.2 - 219.3
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
DRO			5580	n	ng/Kg	5	50.0
Parameter	Fla	<u>بو</u>	RL Result		Units	Dilution	RL
Prep Batch:	49181		Sample Prepa	aration: 200	09-03-12	Prepa	red By: LD
Laboratory: Analysis: OC Batch:	Midland TPH DRO 57583		Analytical M Date Analyze	ethod: Mo ed: 200	od. 8015B 09-03-12	Prep Analy	Method: N/A zed By: LD

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³High surrogate recovery due to peak interference.

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114-6400141	COG/Electra TB	Eddy Co., NM

Sample: 189781 - AH-3 0-1' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57588 49197		Analytical Date Ana Sample Pr	l Method: lyzed: reparation:	S 8015B 2009-03-12 2009-03-12		Prep Me Analyzeo Prepareo	thod: S 5035 l By: ME l By: ME
			RL					
Parameter	Flag		Result		Units		Dilution	RL
GRO			2910		mg/Kg		100	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		83.6	mg/Kg	100	100	84	68.5 - 119.4
4-Bromofluo	robenzene (4-BFB)	4	125	mg/Kg	100	100	125	52 - 117

Sample: 189782 - AH-3 1'-1.5' 4 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH DRO 57661 49244		Analytical M Date Analyz Sample Prep	lethod: Mo ed: 200 aration: 200	d. 8015B 9-03-16 9-03-16	Prep Analy Prepa	Method: N/A vzed By: LD ared By: LD
Parameter DRO	Fla	g	RL Result	m	Units	Dilution	RL
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	e	101	mg/Kg	1	100	101	13.2 - 219.3

Sample: 189782 - AH-3 1'-1.5' 4 in. BEB

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	57636	Date Analyzed:	2009-03-13	Analyzed By:	ME
Prep Batch:	49239	Sample Preparation:	2009-03-13	Prepared By:	ME
		RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

⁴High surrogate recovery due to peak interference.

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Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Rec Li	overy mits
Trifluorotolue	ene (TFT)	`	1.01	mg/Kg	1	1.00	101	68.5	- 119.4
4-Bromoliuor	obenzene (4-BFB)	0.649	mg/Kg	1	1.00	65	52	- 117
Sample: 18	9785 - AH-4 0-	1' 4 in. BEl	3						
Laboratory:	Midland								
Analysis:	Chloride (Titrat	ion)	Analy	ytical Method	1: SM 45	00-Cl B	Prep	Method:	N/A
QC Batch:	57524 40120		Date	Analyzed:	2009-0	3-12	Analy	zed By:	
Frep Datch:	43130		Jamp	ne r reparatio	JII: 2009-0	9-11	гтера	пец ву:	AR
			RL						
Parameter	Fla	g	Result		Units		Dilution		\mathbf{RL}
Chloride			<200		mg/Kg		50		4.00
QC Batch: Prep Batch:	57583 49181		Date An Sample I	alyzed: Preparation:	2009-03-12 2009-03-12	2 2	Analy Prepa	zed By: ared By:	LD LD
D .	F-1		RL		TT •.				DI
Parameter	Fla	g	Result		Units		Dilution		
			2000		mg/Kg				
						Spike	Percent	Re	covery
Surrogate	Flag	Result	Units	Dilu	ion	Amount	Recovery	L	imits
n-Triacontan	ne 5	232	mg/K _{	g1		100	232	13.2	219.3
Sample: 18	89785 - AH-4 0-	1' 4 in. BE	в						
Laboratory	Midland								
Analysis:	TPH GRO		Analytic	al Method:	S 8015B		Pred M	lethod:	S 5035
QC Batch:	57588		Date An	alyzed:	2009-03-1	2	Analyz	ed By:	ME
Prep Batch:	49197		Sample	Preparation:	2009-03-1	2	Prepar	ed By:	ME
Paramatar	ចារ	arr	RL Result		Unita		Dilution		זם
GRO	<u>F</u> to	<u>*5</u>	3100		mg/Kg		50		
			0110						

⁵High surrogate recovery due to peak interference.

114-6400141	March 17, 2009		Work Order: 9031110 COG/Electra TB			Page Number: 10 of 24 Eddy Co., NM		
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolue	ne (TFT)		45.5	mg/Kg	50	50.0	91	68.5 - 119.4
4-Bromofluoro	bbenzene (4-BFB)	0	77.3	mg/Kg	50	50.0	155	52 - 117
Sample: 189	9786 - AH-4 1'-1	.5' 4 in. B	EB					
Laboratory: Analysis:	Midland TPH DRO		Analytica	l Method:	Mod. 8015B		Prep M	lethod: N/A
QC Batch:	57661		Date Ana	lyzed:	2009-03-16		Analyz	ed By: LD
Prep Batch:	49244		Sample P	reparation:	2009-03-16		Prepar	ed By: LD
			RL					
Parameter	Flag		Result		Units		Dilution	RI
DRO			<50.0		mg/Kg		1	50.
					S	nike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilu	tion An	nount	Recovery	Limits
n-Triacontane	<u> </u>	108	mg/Kg	1	1	100	108	13.2 - 219.
Sample: 189 Laboratory: Analysis: QC Batch: Prep Batch:	9786 - AH-4 1'-1 Midland TPH GRO 57636 49239	.5' 4 in. E	BEB Analytica Date Ana Sample P RL	l Method: lyzed: reparation:	S 8015B 2009-03-13 2009-03-13		Prep Me Analyze Preparee	thod: S 503 d By: ME d By: ME
Sample: 189 Laboratory: Analysis: QC Batch: Prep Batch: Parameter	9786 - AH-4 1'-1 Midland TPH GRO 57636 49239 Flag	.5' 4 in. E	BEB Analytica Date Ana Sample P RL Result	l Method: lyzed: reparation:	S 8015B 2009-03-13 2009-03-13 Units		Prep Me Analyze Prepare Dilution	thod: S 503 d By: ME d By: ME R
Sample: 189 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO	9786 - AH-4 1'-1 Midland TPH GRO 57636 49239 Flag	.5' 4 in. F	BEB Analytica Date Ana Sample P RL Result <1.00	l Method: lyzed: reparation:	S 8015B 2009-03-13 2009-03-13 Units mg/Kg		Prep Me Analyze Prepare Dilution 1	thod: S 503 d By: ME d By: ME R R 1.0
Sample: 189 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO	9786 - AH-4 1'-1 Midland TPH GRO 57636 49239 Flag	.5' 4 in. E	BEB Analytica Date Ana Sample P RL Result <1.00 Result	l Method: lyzed: reparation:	S 8015B 2009-03-13 2009-03-13 Units mg/Kg Dilution	Spike	Prep Me Analyze Prepare Dilution 1 Percent Recovery	thod: S 503 d By: ME d By: ME Recovery Limits
Sample: 189 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Triflyorotolue	9786 - AH-4 1'-1 Midland TPH GRO 57636 49239 Flag	.5' 4 in. E Flag	BEB Analytica Date Ana Sample P RL Result <1.00 Result 0.959	l Method: lyzed: reparation: Units mg/Kg	S 8015B 2009-03-13 2009-03-13 Units mg/Kg Dilution	Spike Amount 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 96	thod: S 503 d By: ME d By: ME R R 1.0 Recovery Limits 68.5 - 119

Sample: 189788 - AH-5 0-1' 4 in. BEB

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	57524	Date Analyzed:	2009-03-12	Analyzed By:	AR
Prep Batch:	49138	Sample Preparation:	2009-03-11	Prepared By:	AR

⁶High surrogate recovery due to peak interference.

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			RL						
Parameter	Flag		Result		Units		Dilution]	RL
Chloride			<200		mg/Kg		50	4	1.00
Sample: 18	9788 - AH-5 0-1'	4 in. BEI	3						
Laboratory:	Midland								
Analysis:	TPH DRO		Analytical	Method:	Mod. 8015	В	Prep l	Method: N	I/A
QC Batch:	57583		Date Anal	yzed:	2009-03-12		Analy	zed By: L	Ď
Prep Batch:	49181		Sample Pi	reparation:	2009-03-12		Prepa	red By: L	D
			\mathbf{RL}						
Parameter	Flag		Result		Units		Dilution		RL
DRO			591		mg/Kg		11	5	50.0
						Spike	Percent	Recover	ery
Surrogate	Flag	Result	Units	Dilu	tion A	mount	Recovery	Limits	s
n-Triacontan Sample: 18	e 9788 - AH-5 0-1	122 ' 4 in. BEl	mg/Kg B	1		100	122	13.2 - 21	19.3
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch:	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146	122 ' 4 in. BEl	mg/Kg B Analytica Date Ana Sample P	1 l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11	100	122 Prep M Analyze Prepare	13.2 - 21 ethod: S 5 ed By: ME ed By: ME	19.3 5035 E F
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch:	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146	122 ' 4 in. BEl	mg/Kg B Analytica Date Ana Sample P RL	l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11	100	122 Prep M Analyze Prepare	13.2 - 21 ethod: S 5 ed By: ME ed By: ME	19.3 5035 E E
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Parameter	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag	122 ' 4 in. BE	mg/Kg B Analytica Date Ana Sample P RL Result	1 I Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11 Units	100	122 Prep M Analyze Prepare Dilution	13.2 - 21 ethod: S 5 ed By: ME ed By: ME	19.3 6035 E E RL
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag	122 ' 4 in. BEl	mg/Kg B Analytica Date Ana Sample P RL Result 263	l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11 Units mg/Kg	100	122 Prep M Analyze Prepare Dilution 2	13.2 - 21 ethod: S 5 ed By: ME ed By: ME	19.3 6035 E E RL 1.00
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag	122 ' 4 in. BEl	mg/Kg B Analytica Date Ana Sample P RL Result 263 Result	1 Method: lyzed: reparation: Units	S 8015B 2009-03-11 2009-03-11 Units mg/Kg Dilution	100 Spike Amount	122 Prep M Analyze Prepare Dilution 2 Percent Recovery	13.2 - 21 ethod: S 5 ed By: ME ed By: ME	19.3 6035 E E RL 1.00 ery ts
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: <u>Parameter</u> <u>GRO</u> <u>Surrogate</u> Trifluorotolu	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag Flag	122 ' 4 in. BEl Flag	mg/Kg B Analytica Date Ana Sample P RL Result 263 Result 2.07	1 I Method: lyzed: reparation: Units mg/Kg	S 8015B 2009-03-11 2009-03-11 Units mg/Kg Dilution 2	100 Spike Amount 2.00	122 Prep M Analyze Prepare Dilution 2 Percent Recovery 104	13.2 - 21 ethod: S 5 ed By: ME ed By: ME Recove Limit 68.5 - 1	19.3 6035 E E RL 1.00 ery ts 19.4
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag rene (TFT) robenzene (4-BFB)	122 7 4 in. BEI Flag 7	mg/Kg B Analytica Date Ana Sample P RL Result 263 Result 2.07 4.41	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2009-03-11 2009-03-11 Units mg/Kg Dilution 2 2	100 Spike Amount 2.00 2.00	122 Prep M Analyze Prepare Dilution 2 Percent Recovery 104 220	13.2 - 21 ethod: S 5 ed By: ME ed By: ME Recove Limit 68.5 - 1 52 - 1	19.3 6035 E E RI 1.00 ery ts 19.4 17
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 18 Laboratory: Analysis: QC Batch	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag robenzene (4-BFB) 39791 - AH-6 0-1 Midland Chloride (Titrati	122 7 4 in. BE Flag 7 7 1, BEB 1000)	mg/Kg B Analytica Date Ana Sample P RL Result 263 Result 2.07 4.41	1 Method: lyzed: reparation: Units mg/Kg mg/Kg mg/Kg	S 8015B 2009-03-11 2009-03-11 Units mg/Kg Dilution 2 2	100 Spike Amount 2.00 2.00 00-Cl B	122 Prep M Analyze Prepare Dilution 2 Percent Recovery 104 220 Prep	13.2 - 21 ethod: S 5 ed By: ME ed By: ME Recove Limit 68.5 - 11 52 - 11	19.3 5035 E E RI 1.00 ery ts 19.4 17
n-Triacontan Sample: 18 Laboratory: Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 18 Laboratory: Analysis: QC Batch:	e 9788 - AH-5 0-1 Midland TPH GRO 57523 49146 Flag eene (TFT) robenzene (4-BFB) 39791 - AH-6 0-1 Midland Chloride (Titrati 57524	122 7 4 in. BEI Flag 7 7 1, BEB 500)	mg/Kg B Analytica Date Ana Sample P RL Result 263 Result 2.07 4.41	I Method: lyzed: reparation: Units mg/Kg mg/Kg ytical Meth Analyzed:	S 8015B 2009-03-11 2009-03-11 Units mg/Kg Dilution 2 2	100 Spike Amount 2.00 2.00 00-Cl B 03-12	122 Prep M Analyze Prepare Dilution 2 Percent Recovery 104 220 Prep Anal	13.2 - 21 ethod: S 5 ⁱ ed By: ME ed By: ME gd By: ME Limit 68.5 - 11 52 - 11 52 - 11 yzed By: A	19.3 50355 E E I1.00 ery ts 19.4 17 N/A AR

continued ...

⁷High surrogate recovery due to peak interference.

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114-6400141	COG/Electra TB	Eddy Co., NM

sample 189791 continued ...

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

Sample: 189791 - AH-6 0-1' 1' BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH DRO 57583 49181		Analytical Date Analy Sample Pre	Method: Mod. yzed: 2009- eparation: 2009-	8015B 03-12 03-12	Prep Analy Prepa	Method: N/A zed By: LD ared By: LD
			\mathbf{RL}				
Parameter		Flag	Result	U	nits	Dilution	\mathbf{RL}
DRO		·····	421	mg	/Kg	1	50.0
a					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	ne	104	mg/Kg	1	100	104	13.2 - 219.3

Sample: 189791 - AH-6 0-1' 1' BEB

Laboratory:	Midland							
Analysis:	TPH GRO		Analytical	Method:	S 8015B		Prep Me	thod: S 5035
QC Batch:	57523		Date Ana	lyzed:	2009-03-11		Analyzed	By: ME
Prep Batch:	49146		Sample P	reparation:	2009-03-11		Prepared	By: ME
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	RL
GRO			115		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluo	robenzene (4-BFB)	8	1.91	mg/Kg	1	1.00	191	52 - 117

⁸High surrogate recovery due to peak interference.

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114-6400141	COG/Electra TB	Eddy Co., NM

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Sample: 189794 - AH-7 0-1' 6 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland Chloride (Titration) 57524 49138	Analytical Method: Date Analyzed: Sample Preparation	SM 4500-Cl B 2009-03-12 : 2009-03-11	Prep Method: Analyzed By: Prepared By:	N/A AR AR
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<200	mg/Kg	50	4.00

Sample: 189794 - AH-7 0-1' 6 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH DRO 57583 49181		Analytical M Date Analyze Sample Prep	lethod: Mo ed: 200 aration: 200	d. 8015B 9-03-12 9-03-12	Prep Analy Prepa	Method: N/A vzed By: LD ared By: LD
Parameter	F	lag	RL Result		Units	Dilution	RL
			< 30.0	11	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	68.8	mg/Kg	1	100	69	13.2 - 219.3

Sample: 189794 - AH-7 0-1' 6 in. BEB

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57523 49146		Analytical Date Anal Sample Pr	l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11		Prep Me Analyzec Preparec	thod: S 5035 1 By: ME 1 By: ME
			RL					
Parameter	Flag		Result		Units		Dilution	\mathbf{RL}
GRO			5.23		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	<u>`</u> `	1.02	mg/Kg	1	1.00	102	68.5 - 119.4
4-Bromofluo	robenzene (4-BFB)		0.927	mg/Kg	1	1.00	93	52 - 117

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114-6400141	COG/Electra TB	Eddy Co., NM

Sample: 189797 - AH-8 0-1'

Laboratory:	Midland				
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	57524	Date Analyzed:	2009-03-12	Analyzed By:	AR
Prep Batch:	49138	Sample Preparation	: 2009-03-11	Prepared By:	AR
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 189797 - AH-8 0-1'

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH DRO 57583 49181		Analytical M Date Analyz Sample Prep	lethod: Mod ed: 2009 aration: 2009	. 8015B -03-12 -03-12	Prep Analy Prepa	Method: N/A zed By: LD wed By: LD
			\mathbf{RL}				
Parameter	Fla	ag	Result	ι	Jnits	Dilution	RL
DRO		······	99.2	mg	g/Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	e	62.4	mg/Kg	1	100	62	13.2 - 219.3

Sample: 189797 - AH-8 0-1'

Laboratory: Analysis: QC Batch: Prep Batch:	Midland TPH GRO 57523 49146		Analytical Date Anal Sample Pi	l Method: lyzed: reparation:	S 8015B 2009-03-11 2009-03-11		Prep Me Analyzec Prepared	thod: S 5035 l By: ME l By: ME
			\mathbf{RL}					
Parameter	F	lag	Result		Units		Dilution	RL
GRO			4.69		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluo	robenzene (4-BH	FB)	0.898	mg/Kg	1	1.00	90	52 - 117

Report Date: March 114-6400141	17, 2009		W	/ork Orde COG/El	er: 9031110 ectra TB		Page Nu	mber: 15 of 24 Eddy Co., NM
Method Blank (1)	QC	Batch: 57523						
QC Batch: 57523			Date Ana	lyzed:	2009-03-11		Analy	zed By: ME
Prep Batch: 49146			QC Prep.	aration:	2009-03-11		Prepa	red By: ME
				MI	DL			
Parameter		Flag		Res	ult	Ur	nits	RL
GRO				<0.4	82	mg	/Kg	1
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TF'	Γ)		0.862	mg/Kg	g 1	1.00	86	75.8 - 98.5
4-Bromofluorobenzen	e (4-BFB	5)	0.888	mg/Kg	<u>g 1</u>	1.00	89	56.5 - 109.5
Method Blank (1) QC Batch: 57524 Prep Batch: 49138	QC	Batch: 57524	Date An QC Prep	alyzed: paration:	2009-03-12 2009-03-11		Analy Prepa	yzed By: AR ared By: AR
				MI	DL			
Parameter		Flag		Res	ult	U	nits	RI
Chloride			<u> </u>	<2.	.01	mg	/Kg	4
Method Blank (1)	\mathbf{QC}	Batch: 57583						
QC Batch: 57583			Date An	alyzed:	2009-03-12		Anal	yzed By: LD
Prep Batch: 49181			QC Prep	paration:	2009-03-12		Prep	ared By: LD
				MI	DL			
Parameter		Flag		Res	ult	U	nits	RI
DRO			<u> </u>	<1	3.4	me	g/Kg	50
						Spike	Percent	Recovery
Surrogate	Flag	Kesult		~	Dilution	Amount	Recovery	Limits
		/// 1	1010T/K	D.	1	11111	7X	1.4 1.7.9

Method Blank (1) QC Batch: 57588

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QC Batch:	57588	Date Analyzed:	2009-03-12	Analyzed By:	ME
Prep Batch:	49197	QC Preparation:	2009-03-12	Prepared By:	ME

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Parameter	Flag		MDI Result	-	Uni	te	RL
GRO	1 106		< 0.482	2	mg/	<u>nL</u> 1	
						0	
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.878	mg/Kg	1	1.00	88	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.905	mg/Kg	1	1.00	90	56.5 - 109.5
Method Blank (1) QC H	Batch: 57636						
QC Batch: 57636		Date Ana	lvzed: 2	009-03-13		Analy	zed By: ME
Prep Batch: 49239		QC Prepa	ration: 2	2009-03-13		Prepa	red By: ME
-						-	2
_	-		MDI	L			
Parameter	Flag		Resul	t	Uni	its	RL
GRO	· · · · · · · · · · · · · · · · · · ·		<0.48	2	mg/	Kg	1
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	6	0.865	mg/Kg	1	1.00	86	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.702	mg/Kg	1	1.00	70	56.5 - 109.5
Method Blank (1) QC I QC Batch: 57661 Prep Batch: 49244	Batch: 57661	Date Ana QC Prep.	alyzed:	2009-03-16 2009-03-16		Anal Prep	yzed By: LD ared By: LD
Description	El		MD]	L	TT.	•,	DI
DRO	riag			ւ 6		ILS Kσ	<u>KL</u>
<u> </u>			<u> </u>	<u> </u>	ng/	115	00
					Spike	Percent	Recovery
Surrogate Flag	Result	Units	Di	lution	Amount	Recovery	Limits
	172	ma/Ka		1	100	173	13 178 5

Date Analyzed: 2009-03-11 QC Preparation: 2009-03-11 Analyzed By: ME Prepared By: ME

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QC Batch:

Prep Batch: 49146

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Param	LCS Resul	t t	Jnits	Dil.	Sp Am	oike Iount	Ma Re	atrix esult	Rec.	F L	lec. imit
GRO	7.32	m	g/Kg	1	1	0.0	<0	.482	73	60.5	- 100.1
Percent recovery is based on the s	pike result. I	RPD is	based of	n the spik	e and s	spike dı	plicat	te resu	lt.		
U				~			•		-		
0	LCSD	t In the	Dil	Spike	Ma A D	atrix	D	т	Rec.	חחח	RPD
CPO		Units	<u>D11.</u> 1	Amoun		esuit	72 Rec.	60 5	Limit	RPD	Limit
	1.30		<u>_</u>	10.0		.402	-10) - 100.1	<u> </u>	
Percent recovery is based on the s	spike result.	RPD 1S	based of	n the spik	e and	spike di	iplica	te resu	lt.		
	LCS	\mathbf{LC}	SD			\mathbf{Spil}	æ	LCS	LCSD	F	Rec.
Surrogate	Result	Res	ult	Units	Dil.	Amo	unt	Rec.	Rec.	\mathbf{L}	imit
Trifluorotoluene (TFT)	0.888	0.8	93 1	mg/Kg	1	1.0	0	89	89	78.8	- 104.7
4-Bromofluorobenzene (4-BFB)	0.902	0.9	14 1	mg/Kg	1	1.0	0	90	91	66.1	- 107.3
Laboratory Control Spike (Le QC Batch: 57524 Prep Batch: 49138	CS-1)	Date Ar QC Pre	nalyzed paratio	: 2009-4 n: 2009-4	03-12 03-11				Ana Prep	lyzed By bared By	r: AR :: AR
Param	LC Resi	S alt	Units	Dil.		Spike Amount		Matri Besul	x t Re	C.	Rec. Limit
Chloride	10)	mg/Kg	1		100		<2.0	$\frac{1}{1}$ 10	0 8	85 - 115
Percent recovery is based on the	spike result.	RPD is	based o	on the spil	ke and	spike d	uplica	te resi			
						- F					
D	LCSD	T T *.	D.1	Spil	ke .	Matrix	D		Rec.		RPD
Param Chlorido	Result	Units		. Amo	unt	Result	R	$\frac{10}{10}$	Limit 95 115	$\frac{\text{RPD}}{2}$	Limit
Percent recovery is based on the	spike result.	RPD is	based o	on the spil	ke and	spike d	uplica	te resi	<u></u> 11t.	2	20
Laboratory Control Spike (L	CS-1)										
OC Batch: 57583		Date A	nalvzed	l· 2009.	.03-12				Ans	alvzed R	v LD
Prep Batch: 49181		QC Pro	eparatic	on: 2009-	-03-12				Pre	pared \mathbf{B}	y: LD
L		•									,
	LOG	r				1		.			D
Param	LUX Room	5 14	Unite	וית	۲.	pike	IV. D		Roc	1	nec. Limit
DRO	2.36	10	ng/Ko	<u>1</u>	A	250		$\frac{134}{134}$	<u> </u>	57 4	4 - 133 4
Percent recovery is based on the	spike result.	RPD is	based (on the spi	ke and	spike o	luplic	ate res	ult.		
	LCSD			Spile	<u>, л</u>	latriv			Roc		חמק
Param	Result	Units	Dil	Аточ	nt F	Result	Rec		Limit	RPD	Limit
DRO	232	mg/Ka	<u> </u>	250		<13.4	03	57	4 - 133 4		20
			, ~								

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114-6400141	2009		C	OG/Elect	ra TB					Eddy C	o., NM
Surrogate	LCS Result	LCSD Result	Units	Dil	Sj . Am	pike 10unt	LCS Rec	5 I 	LCSD Rec.	R Li	ec. mit
n-Triacontane	62.5	64.2	mg/K	g 1]	100	62		64	48.5	146.7
Laboratory Control S QC Batch: 57588	Spike (LCS	5-1)	Date Analy	vzed: 20	09-03-12				Analy	zed By:	ME
Prep Batch: 49197		I	QC Prepar	ation: 20	09-03-12				Prepa	ared By:	ME
		LCS			ç	Snike	Ma	triv		R	AC
Param		Resul	t Uni	ts D	il Ai	nount	Re	sult	Rec	Li	nit
GRO	· · · · · · · · · · · · · · · · · · ·	7 61	mg/			10.0	<0	482	76	60.5	-100 1
Percent recovery is based	d on the sp	ike result	RPD is has	ed on the	spike and	spike d	unlicat	e result	10	00.0	100.1
	a on the sp			cu on the	·i »		apincat		•		DDD
D		LUSD Decult	Unite	51 D:1 A	DIKE IV		Dee	К. т:	.ec.	חחח	RPD
raram		result 7 21	UIIIIS .	$\frac{DH}{1}$ Am	ount F	cesult	<u>rec.</u>		100 1		
7 M D C N		1.01	mg/ng	1 1	0.0 <	0.482	13	00.5	- 100.1	4	20
GRO			DDD in Loo	ed on the	spike and	l spike d	uplicat	e result			
GRO Percent recovery is base	d on the sp	ike result.	RED is das	bed on the	•		•				
GRO Percent recovery is base	d on the sp	ike result.	LCSD		•	Spi	ke	LCS	LCSD	F	lec.
GRO Percent recovery is base Surrogate	d on the sp	ike result. LCS Result	LCSD t Result	Units	5 Dil.	Spi Amo	ke unt	LCS Rec.	LCSD Rec.	F L	lec. imit
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT)	d on the sp	ike result. LCS Result 0.905	LCSD t Result	Units mg/K	g Dil.	Spi Amo 1.(ke unt0	LCS Rec. 90	LCSD Rec. 91	F L 78.8	lec. imit - 104.7
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (d on the sp 4-BFB)	ike result. LCS Result 0.905 0.927	LCSD t Result 0.908 0.929	Units mg/K mg/K	s Dil. g 1 g 1	Spi Amo 1.(1.(ke unt 0	LCS Rec. 90 93	LCSD Rec. 91 93	F L 78.8 66.1	tec. imit - 104.7 - 107.3
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1)	LCSD t Result 0.908 0.929 Date Anal QC Prepar	Units mg/K mg/K yzed: 20 ration: 20	s Dil. g 1 g 1 009-03-13 009-03-13	Spi <u>Amo</u> 1.0 1.0	ke unt0 0	LCS Rec. 90 93	LCSD Rec. 91 93 Anal Prep	F 278.8 66.1 yzed By ared By:	tec. imit - 104.7 - 107.3 - 107.3 - 107.3 - 107.3 - 107.3
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1)	LCSD t Result 0.908 0.929 Date Anal QC Prepar	Units mg/K mg/K yzed: 20 ration: 20	s Dil. g 1 g 1 009-03-13 009-03-13	Spi Amo 1.(1.(ke unt 0 0	LCS Rec. 90 93	LCSD Rec. 91 93 Anal Prep	F 278.8 66.1 yzed By ared By:	tec. imit - 104.7 - 107.3 - 107.3 - 107.3 - 107.3 - 107.3 - 107.3
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239	d on the sp 4-BFB) Spike (LC	LCS Result 0.905 0.927 S-1)	LCSD t Result 0.908 0.929 Date Anal QC Prepar	Units Mg/K Mg/K yzed: 20 ration: 20	s Dil. g 1 g 1 009-03-13 009-03-13	Spi Amo 1.(1.(Spike	ke unt 0 0 0 Ma Re	LCS Rec. 90 93	LCSD Rec. 91 93 Anal Prep	F L 78.8 66.1 yzed By ared By	tec. imit - 104.7 - 107.3 - 104.7 - 107.3 - 107.5 - 10
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GBO	d on the sp 4-BFB) Spike (LC	LCS Result 0.905 0.927 S-1) LCS Resu	LCSD t Result 0.908 0.929 Date Anal QC Prepar	Units mg/K mg/K yzed: 20 ration: 20 its D	s Dil. A	Spi Amo 1.(1.(Spike mount	ke unt 0 0 0 Ma <u>Re</u>	LCS Rec. 90 93 93 etrix esult	LCSD Rec. 91 93 Anal Prepa Rec. 66	F L 78.8 66.1 yzed By ared By I L 60.5	tec. imit - 104.7 - 107.3 - ME ME tec. imit - 100 1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1) LCS Resu 6.62 ike result.	LCSD t Result 0.908 0.929 Date Anal QC Prepar b t Un 2 mg/ RPD is bas	Units mg/K mg/K yzed: 20 ration: 20 its D /Kg sed on the	S Dil. g 1 009-03-13 009-03-13 009-03-13 009-03-13 0il. A 1	Spike mount 10.0 1.0 1.0	ke unt 0 0 0 Ma Re <0 uplicat	LCS Rec. 90 93 93 atrix esult .482 te result	LCSD Rec. 91 93 Anal Prep Rec. 66	F L 78.8 66.1 yzed By ared By I L 60.5	tec. imit - 104.7 - 107.3 - ME ME ME Rec. imit - 100.1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1) LCS Resu 6.62 ike result.	LCSD t Result 0.908 0.929 Date Anal QC Prepar S It Un RPD is base	Units mg/K mg/K yzed: 20 ration: 20 its D /Kg sed on the	s Dil. g 1 2009-03-13 2009-03-13 2009-03-13 2010. A 1 spike and pike and	Spike mount 10.0 d spike d	ke unt 0 0 0 Ma Re <0 uplicat	LCS Rec. 90 93 93 extrix esult 0.482 te resul	LCSD Rec. 91 93 Anal; Prep: Rec. 66 t.	F L 78.8 66.1 yzed By ared By: I L 60.5	tec. imit - 104.7 - 107.3 - 107.3 - ME ME ME Rec. imit - 100.1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1) S-1) LCS Result LCSD Result	LCSD t Result 0.908 0.929 Date Anal QC Prepar blt Un RPD is bas	Units mg/K mg/K yzed: 20 ration: 20 its <u>C</u> Kg sed on the S	S Dil. 1 1 009-03-13 009-03-13 009-03-13 009-03-13 0il. A 1 1 spike and 1 pike 1	Spike mount 10.0 I spike d Matrix Result	ke unt 0 0 0 Ma Re <0 uplicat	LCS Rec. 90 93 atrix esult 0.482 te result	LCSD Rec. 91 93 Analy Preps Rec. 66 t. Rec. imit	F L 78.8 66.1 yzed By ared By: L 60.5	tec. imit - 104.7 - 107.3 - ME ME ME Rec. imit - 100.1 RPD L imit
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param GRO	d on the sp 4-BFB) Spike (LC	ike result. LCS Result 0.905 0.927 S-1) S-1) LCS Result LCSD Result 6.82	LCSD t Result 0.908 0.929 Date Analy QC Prepar C Prepar t Un RPD is base Units	Units mg/K mg/K yzed: 20 ration: 20 its E Kg sed on the S Dil. An	S Dil. g 1 009-03-13 009-03-13 009-03-13 0 Dil. A 1	Spike Mount 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	ke unt 0 0 0 0 0 0 0 uplicat Rec. 68	LCS Rec. 90 93 93 extrix esult .482 te result E E E 60 5	LCSD Rec. 91 93 Anal Prepa Rec. 66 t. Rec. imit	F L 78.8 66.1 yzed By ared By: I L 60.5 RPD 3	tec. imit - 104.7 - 107.3 - 107.1 - 100.1 - 100.1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param GRO Percent recovery is base	d on the sp 4-BFB) Spike (LC ed on the sp	ike result. LCS Result 0.905 0.927 S-1) S-1) LCS Result 6.62 ike result. LCSD Result 6.82 ike result	LCSD t Result 0.908 0.929 Date Anal QC Prepar C Prepar C Prepar NPD is base Units mg/Kg RPD is base	Units mg/K mg/K yzed: 20 ration: 20 its D Kg sed on the S Dil. An 1 1 sed on the	S Dil. 1 1 009-03-13 009-03-13 009-03-13 009-03-13 0il. A 1 1 spike and 1 pike N nount 1 10.0 4	Spike Mount 10.0 1 spike d Matrix Result <0.482 1 spike d	ke unt 0 0 0 0 Ma Re <0 uplicat Rec. 68	LCS Rec. 90 93 93 extrix esult 0.482 te resul E 60.5	LCSD Rec. 91 93 Analy Preps Rec. 66 t. Rec. imit - 100.1	F L 78.8 66.1 yzed By ared By: H L 60.5 RPD 3	tec. imit - 104.7 - 107.3 - 107.1 - 100.1 - 100.1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param GRO Percent recovery is base	d on the sp 4-BFB) Spike (LC ed on the sp ed on the sp	LCS Result 0.905 0.927 S-1) LCS Result 6.62 ike result. LCSD Result 6.82 oike result.	LCSD t Result 0.908 0.929 Date Anal QC Prepar C Prepar C Mage RPD is bas Units mg/Kg RPD is bas	Units mg/K mg/K yzed: 20 ration: 20 its E Kg sed on the S Dil. An 1 1 sed on the	S Dil. g 1 009-03-13 009-03-13 009-03-13 009-03-13 Dil. A 1 1 spike and 1 10.0 4 spike and 1	Spike mount 1.0 1.0 Spike mount 10.0 I spike d Matrix Result <0.482 I spike d	ke unt 0 0 0 0 0 0 0 uplicat Rec. 68 uplicat	LCS Rec. 90 93 93 extrix esult 0.482 te result E 60.5 te resul	LCSD Rec. 91 93 Anal: Prep: Rec. 66 t. Rec. imit - 100.1 t.	F L 78.8 66.1 yzed By ared By I L 60.5 RPD 3	tec. imit - 104.7 - 107.3 - 107.3 - ME ME ME tec. imit - 100.1 RPD Limit 20
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param	d on the sp 4-BFB) Spike (LC ed on the sp ed on the sp	ike result. LCS Result 0.905 0.927 S-1) S-1) LCS Result 6.62 ike result. LCSD Result 6.82 ike result. LCS	LCSD t Result 0.908 0.929 Date Anal QC Prepar C Prepar C Prepar B t Un RPD is bas Units mg/Kg RPD is bas LCSD	Units mg/K mg/K yzed: 20 ration: 20 its D Kg sed on the S Dil. An 1 1 sed on the	s Dil. g 1 g 1 009-03-13 009-03-13 001. A 1 1 spike and 1 10.0 4 spike and 1 10.0 4 spike and 1	Spike mount 10.0 Spike d Spike d Matrix Result <0.482 d spike d Sp	ke unt 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LCS Rec. 90 93 93 extrix esult 0.482 te resul E 60.5 te resul LCS	LCSD Rec. 91 93 Anal Prepa Rec. 66 t. Rec. imit - 100.1 t. LCSD	F 1 78.8 66.1 yzed By ared By I 1 60.5 RPD 3	tec. imit - 104.7 - 107.3 - 107.1 - 100.1 - 100.1
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate	d on the sp 4-BFB) Spike (LC ed on the sp ed on the sp	ike result. LCS Result 0.905 0.927 S-1) LCS Result 6.62 ike result. LCSD Result 6.82 bike result. LCS Result 6.82 bike result. LCS Result	LCSD t Result 0.908 0.929 Date Anal QC Prepar C	Units mg/K mg/K yzed: 20 ration: 20 its D Kg sed on the S Dil. An 1 1 sed on the t Unit	$\begin{array}{cccc} s & Dil. \\ g & 1 \\ g & 1 \\ 009-03-13$	Spike mount 10.0 1 spike d Matrix Result <0.482 1 spike d Sp Amo	ke unt 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LCS Rec. 90 93 atrix esult 0.482 te resul E 60.5 te resul LCS Rec.	LCSD Rec. 91 93 Anal Prepa Rec. 66 t. Rec. imit - 100.1 t. LCSD Rec.	F 1 78.8 66.1 yzed By ared By I L 60.5 RPD 3	tec. imit - 104.7 - 107.3 - 107.3 - 107.3 - 107.3 - 107.1 REC. imit - 20 Rec. imit
GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control S QC Batch: 57636 Prep Batch: 49239 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT)	d on the sp 4-BFB) Spike (LC ed on the sp ed on the sp	ike result. LCS Result 0.905 0.927 S-1) LCS Result 6.62 ike result. LCSD Result 6.82 oike result. LCSD Result 0.903	LCSD t Result 0.908 0.929 Date Anal QC Prepar lt Un RPD is bas Units mg/Kg RPD is bas LCSD t Result 5 0.896	Units mg/K mg/K yzed: 20 ration: 20 its <u>C</u> Kg sed on the <u>S</u> Dil. An <u>1</u> sed on the <u>t</u> Unit mg/F	$\frac{1}{2}$ $\frac{1}$	Spike mount 10.0 d spike d Matrix Result <0.482 d spike d Sp Amo 1.4	ke unt 0 0 0 0 0 0 uplicat Rec. 68 uplicat ike ount 00	LCS Rec. 90 93 93 extrix esult 0.482 te resul E 60.5 te resul LCS Rec. 90	LCSD Rec. 91 93 Analy Preps Rec. 66 t. Rec. imit - 100.1 t. LCSD Rec. 90	F L 78.8 66.1 yzed By ared By: I C 60.5 RPD 3 1 78.8	tec. imit - 104.7 - 107.3 - 107.3 - ME ME ME Rec. imit - 100.1 RPD Limit 20 Rec. imit - 104.7

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Report Date: March 17 114-6400141	, 2009		1		Page Nu	mber: 1 Eddy C	9 of 24 o., NM				
Laboratory Control S	Spike (LC	S-1)									
OC Batch: 57661		Г	Date Ar	alvzed:	2009-03	-16			Analy	vzed Bv	LD
Prep Batch: 49244		Ģ	QC Pre	paration	n: 2009-03	-16			Prepa	ared By	LD
				,							
~		LCS		· · ·	D.1	Spike	Ma	trix	D	F	lec.
aram		Result 280		$\frac{0}{nits}$		Amour 250	$\frac{1}{2}$		Rec.	57 4	$\frac{\text{mit}}{132.4}$
Democrate macastrone in hoor	d on the a	aileo mogulé D		hered or	n the enilse	and anil	-24		104	57.4	- 100.4
ercent recovery is base	a on the sp	pike result. n	IFD IS	based of	n the spike	and spik	e duplicat	e resu	16.		
		LCSD			Spike	Matri	x]	Rec.		RPD
'aram		Result	Units	Dil.	Amount	Resul	t Rec.	L	imit	RPD	Limit
)RO		<u>268</u> r	ng/Kg	1	250	24.6	97	57.4	- 133.4	4	20
Percent recovery is base	ed on the sp	pike result. R	RPD is	based o	n the spike	and spik	e duplicat	e resu	lt.		
	LCS	LCSD				Spike	\mathbf{LC}	S	LCSD	F	Rec.
Surrogate	Result	Result	U	nits	Dil.	Amoun	t Re	с.	Rec.	L	imit
n-Triacontane	122	119	mg	g/Kg	1	100	12	2	119	48.5	- 146.
Prep Batch: 49146		_ (QC Pre	paratio	n: 2009-03	3-11			Prep	ared By	ME
		MS				Spike	e Ma	atrix]	Rec.
Param		Result	t 1	Units	Dil.	Amou	nt Re	sult	Rec.	I	imit
GRO		10.2	n	ng/Kg	1	10.0	<0	.482	100	12.8	- 175.5
Percent recovery is bas	ed on the s	pike result. I	RPD is	based c	on the spike	and spil	ke duplica	te resu	lt.		
		MSD			Spike	Matri	x		Rec.		RPI
Param		Result	Units	Dil.	Amount	Resu	lt Rec.]	Limit	RPD	Limi
GRO		10.0 1	mg/Kg	1	10.0	< 0.48	<u>32</u> 98	12.8	8 - 175.2	2	20
Percent recovery is bas	ed on the s	pike result. l	RPD is	based o	on the spike	e and spi	ke duplica	te resu	ılt.		
		MS	М	ISD			Spike	MS	MSD		Rec.
Surrogate		Result	t Re	esult	Units	Dil.	Amount	Rec	. Rec.	I	imit
Trifluorotoluene (TFT)		1.02	1	.03	mg/Kg	1	1	102	103	60.8	- 132.
4-Bromofluorobenzene	(4-BFB)	0.912	0.	912	mg/Kg	1	1	91	91	31.3	- 161.
	\										
Matrix Spike (MS-1) Spike	d Sample: 18	9797								
QC Batch: 57524			Date A	nalyzed	d: 2009-0	3-12			Ana	lyzed B	y: AF
Prep Batch: 49138			QC Pr	eparatio	on: 2009-0	3-11			Pre	pared B	/: AF

Report Date: March 17, 2009 114-6400141)			Work Ord COG/E	er: 903111 lectra TB	.0		Page N	umber: Eddy (20 of 24 Co., NM
Param		MS Resul	t	Units	Dil.	Spike Amount	Matı Resu	rix ılt Re	с.	Rec. Limit
Chloride		5500)	mg/Kg	50	5000	<10	0 11	0 8	85 - 115
Percent recovery is based on t	the spike	result. F	RPD is	based on t	he spike a	nd spike du	plicate res	sult.		
	•					1				
D		MSD	TT • .	DU	Spike	Matrix	D	Rec.	DDD	RPD
Param		Result	Units	Dil.	Amount	Result	<u>Kec.</u>	Limit	RPD	Limit
Chloride		5410	mg/K	g 50	5000	<100	108	85 - 115	2	20
Percent recovery is based on	the spike	e result. F	RPD is	based on t	the spike ε	and spike du	plicate res	sult.		
Matrix Spike (MS-1) S	piked Sa	mple: 189	9585 Data A	n olarno de	2000.02	10		4	hard D	
QC Batch: 57583			Date A	nalyzed:	2009-03-	1Z 19		Ana	lyzed B	Y: LD
Prep Batch: 49181			QU Pre	eparation:	2009-03-	12		Prej	pared b	y: LD
		MS				Spike	Matrix			Rec.
Param		Resul	t	Units	Dil.	Amount	Result	Rec.	[Limit
DRO		1570	I	ng/Kg	<u>l</u>	250	1570	0	35.2	2 - 167.1
Percent recovery is based on	the spike	e result. l	RPD is	based on	the spike a	and spike du	iplicate re	sult.		
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	10	1520	mg/K	g 1	250	1570	0 3	5.2 - 167.1	3	20
Percent recovery is based on	the spik	e result.]	RPD is	based on	the spike	and spike d	uplicate re	sult.		
			-							_
	MS	MS	D	TT *.	D.1	Spike	MS	MSD		Rec.
Surrogate	Result	Kest	11t		1	Amount		199		Limit
n-Irlacontane	189	184	2	mg/Kg	1	100	189	182	34.	5 - 178.4
Matrix Spike (MS-1) S QC Batch: 57588	Spiked Sa	ample: 18	9900 Date A	nalyzed:	2009-03	-12		Ana	lyzed B	y: ME
Prep Batch: 49197			QC Pr	eparation:	2009-03	-12		Pre	pared B	y: ME
-										
		MS				Spike	Matrix	<i>r</i>		Rec
Param		Resul	lt	Units	Dil.	Amount	Result	; Rec.		Limit
GRO		9.91		mg/Kg	1	10.0	< 0.48	2 97	12.	8 - 175.2

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

⁹Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control. ¹⁰Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

¹¹High surrogate recovery due to peak interference.

¹²High surrogate recovery due to peak interference.

Report Date: March 17, 2009 114-6400141			Work (COG	Order: 9031 S/Electra T	110 B				Page Nu	ımber: 2 Eddy C	21 of 24 o., NM
Param	MSD Result	Units	Dil.	Spike Amount	Mat	trix sult	Rec.	R Li	ec. mit	RPD	RPD Limit
GRO	10.2	mg/Kg	1	10.0	<0.	482	100	12.8 -	- 175.2	3	20
Percent recovery is based on the s	pike result.	RPD is	based	on the spike	e and sp	pike d	uplicate	e result			
	MS	M	SD			Sn	ike	MS	MSD	F	Rec
Surrogate	Resul	t Re	sult	Units	Dil	Am	ount	Rec	Rec.	L	imit
Trifluorotoluene (TFT)	1.11	1.	11	mg/Kg	1		1	111	111	60.8	- 132.1
4-Bromofluorobenzene (4-BFB)	0.921	0.9	921	mg/Kg	1		1	92	92	31.3	- 161.7
Matrix Spike (MS-1) Spiked	i Sample: 18	9786									
QC Batch: 57636		Date A	nalyzeo	d: 2009-0	3-13				Anal	yzed By:	: ME
Prep Batch: 49239		QC Pre	paratio	on: 2009-0	3-13				Prepa	ared By:	ME
	MS				Sp	ike	Ma	trix		F	Rec.
Param	Resu	lt	Units	Dil.	Ame	ount	Res	sult	Rec.	L	imit
GRO	9.09	n n	ng/Kg	1	10).0	<0.	482	91	12.8	- 175.2
Percent recovery is based on the s	spike result.	RPD is	based	on the spik	e and s	pike o	duplicate	e resul	t.		
	MSD			Snike	Ma	triv		В	loc		RDD
Param	Result	Units	Dil	Amount	t Re	sult	Bec	L	init	RPD	Limit
GRO	9.32	mg/Kg	1	10.0	<0	.482	93	12.8	- 175.2	2	20
Percent recovery is based on the s	spike result.	RPD is	based	on the spik	e and s	spike o	luplicat	e resul	t.		
	MS	м	ISD			S	nike	MS	MSD	1	Rec
Surrogate	Resu	lt Re	esult	Units	Dil.	Am	ount	Rec.	Rec.	L	imit
Trifluorotoluene (TFT)	1.00) 1	.01	mg/Kg	1		1	100	101	60.8	- 132.1
4-Bromofluorobenzene (4-BFB)	0.67	70.	682	mg/Kg	1		1	68	68	31.3	- 161.7
Matrix Spike (MS-1) Spike	d Sample: 1	89778									
QC Batch: 57661		Date A	nalyze	ed: 2009-0	03-16				Ana	lvzed By	v: LD
Prep Batch: 49244		QC Pr	eparati	ion: 2009-0	03-16				Prej	pared By	/: LD
	MS	5	** *.		S	oike	Ma	atrix			Rec.
Param DBO	Kesu		Units	Dil.	Am	ount	Ke	sult	Kec.	1	Jimit
Percent recovery is based on the	spike result.	RPD is	mg/Kg based	on the spik	$\frac{2}{1}$ ke and a	spike	3 duplicat	ə.ə te resul	85	35.2	2 - 107.
	MSD			Spike	M	atrix		1	Rec.		RPD
		.	D:1	~	4 D.	l+	Roc	Ţ	imit	RDD	Limi
Param	Result	Units		i. Amoun	n n	esun	net.	1	/111110	111 D	D 11101
Param DRO	Result 227	Units mg/Ka	$\frac{D_1}{g}$	<u>1. Amoun</u> 250	3	5.8	76	35.2	- 167.1	9	20

Report Dat 114-640014	e: March 17, 1	, 2009		Work C COG		Page Nu	mber: 22 of 24 Eddy Co., NM		
Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triaconta	ne	89.4	79.2	Mg	1	100	89	79	34.5 - 178.4
Standard ((ICV-1)								
QC Batch:	57523		Dat	e Analyzed	: 2009-03	-11		Analy	zed By: ME
			ICV	6]	[CVs	ICVs	Р	'ercent	
			True	e F	ound	Percent	Re	ecovery	Date
Param	Flag	Units	Cone	;. (Conc.	Recovery	Ι	Limits	Analyzed
GRO		mg/Kg	1.00)).914	91	8	5 - 115	2009-03-11
Standard	(CCV-1)								
QC Batch:	57523		Dat	e Analyzed	: 2009-03	3-11		Anal	yzed By: ME
			CCV	s (CCVs	CCVs	F	Percent	
			Tru	e I	Found	Percent	R	ecovery	Date
Param	Flag	Units	Con	c. (Conc.	Recovery]	Limits	Analyzed
GRO		mg/Kg	1.00)	1.06	106	8	5 - 115	2009-03-11
Standard	(ICV-1)								
QC Batch:	57524		Da	te Analyzec	l: 2009-0	3-12		Anal	yzed By: AR
			IC	Vs	ICVs	ICVs	J	Percent	
			Tr	ue	Found	Percent	R	lecovery	Date
Param	Flag	Units	Co	nc.	Conc.	Recovery		Limits	Analyzed
Chloride		mg/Kg	. 10	00	102	102	8	35 - 115	2009-03-12
Standard	(CCV-1)								
QC Batch:	57524		Da	te Analyzeo	l: 2009-0	3-12		Ana	lyzed By: AR
			CC	Vs	CCVs	CCVs		Percent	
			Tr	ue	Found	Percent	F	Recovery	Date
Param	Flag	Units	Co	nc.	Conc.	Recovery		Limits	Analyzed
Chloride		mg/Kg	ş <u>1</u> (00	98.3	98		85 - 115	2009-03-12
Standard	(CCV-1)								
QC Batch:	57583		Da	te Analyze	d: 2009-()3-12		Ana	lvzed Bv: LD

Report Date 114-6400141	: March 17,	2009	W	ork Order: 903 COG/Electra 1	1110 CB	Page Nu	mber: 23 of 24 Eddy Co., NM
Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	217	87	85 - 115	2009-03-12
Standard (CCV-2)						
QC Batch:	57583		Date Ana	alyzed: 2009-03	3-12	Anal	yzed By: LD
			CCVs True	CCVs Found	CCVs Percent	Percent	Date
Param	Flag	Units	Conc.	Conc.	Recoverv	Limits	Analyzed
DRO		mg/Kg	250	213	85	85 - 115	2009-03-12
Standard (CCV-3)						
QC Batch:	57583		Date An	alyzed: 2009-0	3-12	Anal	lyzed By: LD
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Standard ((ICV-1)						
QC Batch:	57588		Date An	alyzed: 2009-0	3-12	Anal	yzed By: ME
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.869	87	85 - 115	2009-03-12
Standard ((CCV-1)						
QC Batch:	57588		Date An	alyzed: 2009-0	03-12	Ana	lyzed By: ME
			CCVs	CCVs	CCVs	Percent	
Dener	El	I I to -	True	Found	Percent	Recovery	Date
$\frac{raram}{CRO}$	Flag		<u> </u>	<u> </u>		85 115	Analyzed
Standard	(ICV-1)	<u> </u>					
QC Batch:	57636		Date Ar	alyzed: 2009-0)3-13	Ana	lyzed By: ME

Report Date 114-6400141	e: March 17,	2009	W	/ork Order: 903 COG/Electra 1	Page Number: 24 of 2 Eddy Co., NN					
Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed			
GRU		mg/ Kg	1.00	0.047	00		2009-03-13			
Standard (CCV-1)									
QC Batch:	57636		Date Ana	alyzed: 2009-0	3-13	Anal	yzed By: ME			
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
GRO		mg/Kg	1.00	0.858	86	85 - 115	2009-03-13			
Standard ((CCV-1)									
QC Batch:	57661		Date An	alyzed: 2009-0	3-16	Ana	lyzed By: LD			
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
DRO		mg/Kg	250	251	100	85 - 115	2009-03-16			
Standard ((CCV-2)									
QC Batch:	57661		Date An	alyzed: 2009-0	3-16	Ana	lyzed By: LD			
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
DRO		mg/Kg	250	262	105	85 - 115	2009-03-16			

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Analysis Rec	uest of Chain of Custod	v Record	PAGE: OF: 3
			ANALYSIS REQUEST (Circle or Specify Method No.)
	TETRATECH 1910 N. Big Spring St. Midland, Texas 79705 (432) 682-4559 • Fax (432) 682-3946		6 (Ext. to C33) d Cr Pb Hg Se d Vr Pd Hg Se
CLIENT NAME: 10G	SITE MANAGER:	PRESERVATIVE	D/2225
РПОЈЕСТ NO.: РПОЈ 114- СИОСИЦ	ECT NAME: 10G1 / Electra TB	CONTAIN	Ag As Ag As a Ag Ag As a Ag
LAB I.D. NUMBER DATE TIME XILLY W	Eddy Cu, NM SAMPLE IDENTIFICATION	NUMBER OF HILTERED (Y HINO3 HINO3 ICE NONE	PATEX 8021B TTPH 8015 PAH 8270 PAH 8270 TCLP Metall TCLP Volatified TCLP Semi Volatified TCLP Volatified TCLP Semi Volatified TCLP Semi Volatified RCI GG.MS Vol. E GG.MS Semi Volatified Pest. 808/60 Pest. 808/60 Pest. 808/60 Pest. 808/60 Malor Antons Malor Antons
89774 3/10 5	X AH-1 0-1' Z'BEB	1	
775 (AH-1 1-1.5' Z' 13E13		
אן אין ארך אין	AH-1 2-2.5' Z' ISEB		
	AH-2 0-1' 4" BEB		X
778 /	AH-7 1-1.5 4' BEB		
779	AH-Z Z'-Z.5' 4" ISEB		
780	AH-Z 3'-3.5' 4" BEB		
781)	AIT-3 0-1' 41" IBEIB		
782 (AH-3 01-1.5 4" 13EB		
783 🖗 🖌	AH-3 Z'-Z.5' 4" BEB,		
RELINGUISHED BY: (Signature)	Time: 10:00 HECEIDED BT: (signature)	Time: <u>10.00</u>	SAMPLED BT: (Print & Initian) Date:
KELINYOUSHED BY: (Signature)	Dare: HECEIVED BY: (Signature)	Time:	FEDEX BUS AIRBILL #:
RELINQUISHED BY: (Signature)	Date: RECEIVED BY: (Signature)	Date: Time:	TETRA TECH CONTACT PERSON: Results by:
RECEIVING LABORATORY: ADDRESS: CITY:STATE: CONTACT:	RECEIVED BY: (Signature) ZIP: HONE: DATE:	TIME:	The Toward RUSH Charges Authorized: Yes No
SAMPLE CONDITION WHEN RECEIVED:	REMARKS: If total TPH excred's 5000 mm/103 1	run derpir horizon	(HOLD FOR BREX) All tests !

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

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Analysis	Reque	est of Cha	in of Cus	stody	F	lea	20	ro								PA	GE:		Z	C	DF:	3	
/ 1019 010					H			a %_a	•	-				l Cirri	ANAI le or	LYSIS Sper	REC	QUE: /ieth/	ST od N	(a.)			
		TETRA 1910 N. Big S Midland, Tex (432) 682-4559 •	TECH Spring St. as 79705 Fax (432) 682-3946								15 (Ext. to C35)	d Cr Pb Hg Se	d Vr Pd Hg Se							T	DS		
CLIENT NAME:		SITE MANAGER	R: Tavaraz		ERS	5	PRES	ERV/	ATIVE		1X10	Ba	Ba		0/624	70/625					s, pH,		
PROJECT NO.: 114 - 640 0141	PROJECT N	AME: DG / Electra	TB		CONTAIN	R	Π				MODM	s Ag As	is Ag As les	Volatiles	8240/826	i. Val. 82	808			Air) tos)	s/Cation		
LAB I.D. NUMBER DATE TIN	AL MATRIX COMP. GRAB	SAMPLI	E IDENTIFICATION		NUMBER OF	FILTERED (HOL	HN03	ICE	NONE	BTEX 8021	ТРН 8015 РАН 8270	RCRA Meta	TCLP Meta	TCLP Semi	GC.MS Vol.	GC.MS Ser	Pest. 808/6(Chloride	Gamma Spe	Alpha Beta PLM (Asbes	Major Anion	, 1	
89784 3%0	5 X	AH-3 3	-3.5 4	'BÊB	1			X														1	
785 /		AH-4 C).1 H"	BEB	$\langle $						X							Х				1	
786		AH-4 1'	-1.5' 4"	BEB	\square			À							_								
787		AH-4 2'-	2.5' 4"	这年了	$\left(\right)$			\square															
		All-4 3'-	3,5′ 4 "	BEB	.]]																		
788 /		AH-5 0-	1' 4"	BER	\square					_	X							X					
789		AH-5 1'-	1.5 4"	BEB																			
790		AH-5 21.	<u>г.5` 4</u> "	BEB	($\underline{\mathbf{A}}$											┝╼╋╸	\perp			
791 /		AH-L O-) ¹	B€B)]			4			X							X	$ \downarrow $				
792	4 4	AH-C 1-	1.5 1	BE13	1			*	<i>;</i> ///	4						Щ					LJ.		
RELINGUISHED BY: (Signature)		Date: 03/11/04 Time: 10:00	RECEIVED BY: (Signature)	<u>Ule</u>	2) T	vate: Time:	_1	0:0	ත්		AMPLE	U BY: (I	-rint &		7/	171	ĥ	-	Time:		<u>////</u>	
RELINQUISHED BY: (Signature)	L 7	Date:	RECEIVED BY: (Signature)			1	Date: Time:				s	FEDE	SHIPP		BU	le)' S			Al	RBILL	#:		
RELINQUISHED BY: (Signature)	Ĺ	Date:	RECEIVED BY: (Signature)			1	Date: Time:				{f	TIAND ETHA T	ECH C	ONTAC	UP T PEF	S RSON:				Re	sulta b	y:	
RECEIVING LABORATORY: ADDRESS: CITY:MIdlandST/	Trace.	ZIP:	ECEIVED BY: (Signature)		716.4						-	Ī	Ki	74	- V (1)	άZ				RŬ Au	ISH Ch thorize	arges d:	
CONTACT: SAMPLE CONDITION WHEN RECEIV	PHONE: _	REMARKS: It total TPH	exerned's 5010 m	plus, run	0	tre pr	~	hari	200	5		- 11	٥٤٢) (for		<u>er</u>	eΧ		<u></u>		257	<u>5</u> 1

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

An	alysis Request of Chain of Custody Recor									oro	b							NAL	PA	GE: S RE	QUE	<u>3</u> st		OF:		5		
						1910 N. Big S Midland, Tex (432) 682-4559	TECH Spring St. as 79705 Fax (432) 682-39	946							5 (Ext. to C35)		Cr Pb Hg Se) 	Sircle	e or	Spec	ify I	Vieth	od N	10.)	DS		
CLIENT NAM	ME: COG	 ! }		-		SITE MANAGEI	R: Transa		ERS		PRE	SER		/E	TX100		8 8 8 8			0/624	70/625					s, pH, T		
PROJECT N	0.:	·)	PRC	JE	CTI	NAME:	TR	·····	CONTAIN	ĺ2	T				NOD N		Ag As Ag As	S		240/826	Vol. 82	8			<u>5</u>	/Cation:		
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	avus	Eddy C, SAMPL	E IDENTIFICATIO	N	NUMBER OF (FILTERED (Y	HN03	ICE	NONE	BTEX ROOTE	(PH 8015	PAH 8270	TCLP Metals	TCLP Volatile		GC.MS Vol. 8	GC.MS Semi.	PCB'S 8080/6	Chloride >	Gamma Spec	Alpha Beta (/ PLM (Asbest	Major Anions		
89793	3/10		3	7	$\langle $	AH-C Z-Z.	- 1	1'BEB	1			×		T				\square										T
794	1		7	1	1	AH-7 0-1	1	C"BEB	$\left \right\rangle$			17			X								X					
795			Σ		T	A1+-7 1'-1.	5'	6"BEB	Π	\prod		$\left \right\rangle$																
796					1	AH-7 2-2	.5'	6" BEB	$\left[\right]$																			
797					\mathbf{V}	AH-8 0-1	1					$\left \right\rangle$			X								X					
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RELINQUISHED	BY: (Signatur		5			Time: 10100	RECEIVED BY: (Signat	in Uille	<u> </u>		Time: Date: Time:		10	<u></u>	2	SAN FE	IPLE S	HIPPEI	<u>7ر</u> BY:	(Circle BUS	67 B) S			A	Time: IRBILL	. #:		
	BY: (Signature	e)	weir-	~		Date:	RECEIVED BY: (Signature	e)			Date: Time:					TET	ND D	ELIVEB CH COI	ATAC	UP! F PER	SON:			0	Re	sults	by:	
DDRESS:	dland	STATE: _	TY	РНО	NE:	ZiP:C	ATE:	-,	_ TI	VE:							Tł	4 1	Tava		7				RL Au	JSH C ithori: Yes	harges ed:	No
SAMPLE CONDI	TION WHEN I	RECEIVED:				REMARKS: If total [P]	+ excends 5	000 mg/105	,	rur	de	eper	- h	or70	ins			(H		Fi	n	Бт	ŦX	\	AI.	/ ;	te	5/5

Summary Report

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

Report Date: March 19, 2009

Work Order: 9031110

Project Location:Eddy Co., NMProject Name:COG/Electra TBProject Number:114-6400141

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
189777	AH-2 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189778	AH-2 1'-1.5' 4 in. BEB	soil	2009-03-10	-00:00	2009-03-11
189781	AH-3 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189782	AH-3 1'-1.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189785	AH-4 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189786	AH-4 1'-1.5' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11
189788	AH-5 0-1' 4 in. BEB	soil	2009-03-10	00:00	2009-03-11

]	BTEX	
	Benzene	Toluene	Ethylbenzene	Xylene
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
189777 - AH-2 0-1' 4 in. BEB	68.6	196	139	183
189778 - AH-2 1'-1.5' 4 in. BEB	< 0.0100	0.123	0.129	0.370
189781 - AH-3 0-1' 4 in. BEB	29.0	104	85.2	121
189782 - AH-3 1'-1.5' 4 in. BEB	< 0.0100	< 0.0100	0.123	0.342
189785 - AH-4 0-1' 4 in. BEB	18.5	81.1	65.8	89.3
189786 - AH-4 1'-1.5' 4 in. BEB	< 0.0100	< 0.0100	<0.0100	<0.0100
189788 - AH-5 0-1' 4 in. BEB	0.294	2.02	3.09	4.58