District I

1625 N. French Dr., Hobbs, NM 88240

State of New Mexico **Energy Minerals and Natural Resources**

Form C-141

Revised October 10, 2003

District II

1301 W. Grand Avenue, Artiesa, NM 88210

1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 8750

Oil Conservation Division 1120 South St. Francis Dr. Santa Fe, NM 97505

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

			Kelaes	se Motifica	ition and Correct	tive Action	_		$\supset \setminus$
	_				OPERATOR	[lr	nitial Report	☑ Fin	al Report
Name of Com	ipany		che Corpo		Contact		Guinn Bur		
Address				e,TX 79731	Telephone No.		432-556-91		
Facility Name		Elli	iot Federal	Btty	Facility Type		Tank Batte	ery	
		****		T			-		
Surface Owne	<u>) </u>	NN :	State	Mineral Owne	<u> </u>	BLM	API#	30-025-0	6332
				LOCAT	ION OF RELEAS	E			
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Lir	ne	County
,	A	218	37E				,		
L	1	210	3/E						
***************************************			Latitude		Longitud	de			
				*·····································					
	·			NATUI	RE OF RELEASE	<u> </u>			
Type of Releas	ie			Volume of Rele			Volume Recovered	<u> </u>	
Source of Rele				Daste/Hour of 0	Occurrence	·····	Date /Hour of Disco		
Was Immediate	Notice Give	n?		If Yes, To Who	m?				
Yes	☐ No	<u>, </u>	Not Required	i e					
By Whom?				Date and Hour					
Was a Waterco	ourse Reache Yes	, - ,	No	If YES, Volume	e Impacting the Watercour	rse.			
If a Watercours				1					
	•		•						
					NA				
Describe Caus	e of Problem	and Remedial	Action Taken.	*	<u> </u>	······································			
				N	otice of Closure				
Describe Area	Affordad and	Clagnup Actio	n Takan *						······································
Describe Area	Affected anu	Cleanup Action	n Jaken.						
This b	attery site !	has been co	mpletely ren	nediated and	restored to natural co	onditions and re	seeded with SLO	requireme	nts.
I herby certify t	hat the inform	nation given ab	ove is true and	d complete to the	e best of my knowledge ar	nd understand that	pursuant to NMOCE	rules and re	oulations
all operators ar	e required to	report and/or f	ile certain rele	ase notifications	s and perform correc				garane
,,,								***	
	$\neg \ell$	~ ~	1 1		<u>C</u>)il Conserva	ation Divisio	n	
Signature:		- (6040 - 1	DUISKA	~	_	A	-Dhurson		
		daideicheicheige	Wall of the same o		1	P10//D01/11	(a 10		
Printed Name:		Guin	n Burks		Approved by the District	SEPENISH ONM	ENTAL ENGIN	JFFR	

Approval Date

Conditions of Approval:

Expiration Date:

Attached

*Attach Additional Sheets if Necessary

7/18/2007

Permian Environmental Coordinator

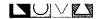
guinn.burks@usa.apachecorp.com

432-556-9143

Phone:

Title:

Email Address:



SITE CLOSURE REPORT

ELLIOTT FEDERAL LEASE FORMER TANK BATTERY Northeast of Eunice, New Mexico Lea County, New Mexico **RP#1423**

Prepared for:

APACHE CORPORATION

P.O. Box 728 Crane, Texas 79731



NOVA Safety and Environmental

2057 Commerce Street Midland, Texas 79703

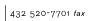
July 2007

Ronald K. Rounsaville

Project Manager

Todd Choban, P.G.

Vice - President, Technical Services



GEOLOGY

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1.0 INTRODUCTION

NOVA Safety and Environmental (NOVA) is pleased to submit to Apache Corporation (Apache) this Site Closure Report for the former Apache Elliott Federal Lease Tank Battery Site. The site is located approximately 7 miles northeast of Eunice, Lea County, New Mexico. The site is located in the southwest quarter of Section 1, Township 21 South, Range 37 East. A Site Location Map is provided as Figure 1.

On January 5, 2007, Apache submitted a Release Notification and Corrective Action (Form C-141) reporting a 388 barrel crude oil release with 257 barrels recovered, resulting in a net loss of 131 barrels. Soil was placed on the spilled crude to absorb the fluids prior to commencing remediation activities.

Apache reported their decision to remove the tank battery out of service to the New Mexico Oil Conservation Division (NMOCD) on May 11, 2007 and submitted a Release Notification and Corrective Action Report (NMOCD Form C-141) to the NMOCD, District I office located in Hobbs, New Mexico on May 11, 2007. The NMOCD Release Notification and Corrective Action Report Form C-141 is provided in Appendix C.

Apache completed the removal of all battery equipment and NOVA began remediation of the Elliott Federal Lease Tank Battery site on May 22, 2007. This report summarizes remediation and confirmation sampling activities conducted to demonstrate compliance with NMOCD site closure standards.

2.0 NMOCD - SITE CLASSIFICATION

Based on information provided by Larry Johnson of the NMOCD Hobbs District I office, the Apache release site is located in a region where groundwater is present at a depth of between 50 and 99 feet below ground surface (bgs). Based on NMOCD site ranking criteria the site would consequently have a ranking score of 10-19 points. The soil action levels for a site with this score, as determined by the *Guidelines for Remediation of Leaks, Spills and Releases* (NMOCD, 1993), are as follows: Benzene=10 mg/Kg, BTEX=50 mg/Kg and TPH=1,000 mg/Kg. Consequently, assessment and clean up concentrations for regulatory compliance were performed to these action levels at the Elliott Federal Lease Tank Battery Release Site.

3.0 SUMMARY OF FIELD ACTIVITIES

3.1 Excavation Activities – Tank Battery

Upon Apache completing tank abandonment activities, NOVA mobilized equipment to the site on May 22, 2007 to begin assessment and remedial activities. Inspection of the area surrounding the battery site revealed evidence of hydrocarbon impact within the secondary containment area of the battery and areas of asphaltene impacted soil located west of the battery. Impacted soil removal activities began by excavating impacted soil located within the limits of the battery containment area, measuring approximately 100 feet by 75 feet, to a depth of approximately 6 feet below ground

surface (bgs) to determine vertical delineation. Samples were collected at depths of 10 and 12 feet bgs. Confirmation soil samples collected from the floor and walls of the excavation were submitted for laboratory analysis of Total Petroleum Hydrocarbons (TPH), Method 8015M (DRO/GRO), benzene, toluene, ethyl-benzene, and xylenes (BTEX, Method 8021B) and Chlorides, Method SM 4500.

3.2 Excavation Activities – Asphaltene Impacted Soil

Excavation activities continued on asphaltene impacted soils located west of the tank battery area. Impacted soil was removed from an area measuring approximately 60 feet in length by 45 feet wide and approximately 15 feet in depth. Confirmation soil samples collected from the floor and walls of the excavation were submitted for laboratory analysis of TPH, Method 8015M (DRO/GRO), benzene, toluene, ethyl-benzene, and xylenes (BTEX, Method 8021) and Chlorides, Method SM 4500).

Based on visual and olfactory observations, excavation activities were finalized pending the analytical results of laboratory submitted confirmation soil samples collected at locations within the excavation areas. The tank battery excavation area measured approximately 120 feet in length by 100 feet in width and averaged approximately 12 feet in depth. The asphaltene excavation area measured approximately 100 feet in length by 75 feet in width and averaged approximately 15 feet in depth. Figure 2 is a site details map illustrating the former tank battery and asphaltene excavation areas, soil sample locations and other site details.

As a result of excavation activities, an estimated 5,500 cubic yards of impacted soil was brought to the surface and transported to the Sundance Services Landfill (Sundance), NM Permit # NM-01-0003, for disposal. Non-impacted caliche soil was transported to the site from a clean borrow source and used to backfill the excavation areas.

3.3 Confirmation Soil Samples and Results

On May 23 through May 31, 2007, upon completing excavation activities, confirmation soil samples were collected from the floor and sidewalls of each of the excavation areas. Table 1 presents the analytical results of the confirmation soil samples.

Confirmation samples were submitted for laboratory analysis for Total Petroleum Hydrocarbons (TPH) by EPA Method 8015M (DRO/GRO) modified and benzene, toluene, ethyl-benzene, and xylenes (BTEX) by EPA Method 8021b. Laboratory submitted samples were placed in 4-ounce glass containers supplied by the laboratory. The container was filled to capacity to limit headspace and sealed with a plastic teflon lined lid. Each container was labeled and placed on ice in an insulated cooler and transported to TraceAnalysis, located in Midland Texas. Proper chain-of-custody documentation was maintained throughout the sampling process.

For reference, Figure 2 displays the locations of all soil samples analyzed and Table 1 presents the analytical results of soil samples. The laboratory analytical reports are provided in Appendix A.

3.3.1 Analytical Results - Former Tank Battery Excavation

On May 23, 2007, four confirmation soil samples were collected from each quadrant of the tank battery excavation area floor at a depth of 10.0 feet bgs (NWFLR-10', NEFLR-10', SWFLR-10', and SEFLR-10') along with soil samples collected from each sidewall (NWall-3', SWall-3', WWall-3' and EWall-3') of the excavation area (Figure 2). The laboratory analytical results confirmed TPH (DRO & GRO) concentrations in two of the four floor soil samples exceeded the NMOCD guidelines of 1,000 mg/Kg. The two soil sample collected from the northeast and southeast quadrants of the excavation floor exhibited total TPH (DRO & GRO) concentrations of 6,780 mg/Kg and 5,190 mg/Kg, respectively. The analytical results indicated BTEX constituent concentrations were below applicable NMOCD guidelines ranging from below method detection limits of <0.01 mg/Kg to 0.0341 mg/Kg (xylene). One sample analyzed for Chlorides indicated a maximum concentration of 442 mg/Kg.

On May 30, 2007, upon review of the all analytical results, NOVA, as directed by Apache, excavated an additional 2 feet of impacted soil from the tank battery floor. Two additional confirmation samples were collected from the northeast and southeast quadrants of the floor at a depth of 12 feet bgs and submitted for laboratory analysis of TPH (DRO & GRO) and Chlorides. Analytical results on the samples collected at the 12-foot interval indicated TPH and chlorides concentrations were below the NMOCD regulatory levels of 1,000 mg/Kg for TPH and 250 mg/Kg for chlorides.

3.3.2 Analytical Results - Asphaltene Excavation

On May 24, 25, and 31, 2007, four confirmation soil samples (AS-1, AS-4, AS-5, AS-6) were collected from the floor of the asphaltene excavation area at depths ranging from 1 foot to 15 feet bgs along with four sidewall samples. The laboratory analytical results confirmed one floor sample, identified as AS-5, 15', exhibited a TPH (DRO & GRO) concentration of 1,242 mg/Kg, exceeding the NMOCD guidelines of 1,000 mg/Kg. Analytical results on the four sidewall samples indicated TPH, BTEX and Chlorides concentrations were below NMOCD regulatory guidelines. The impacted soil within the asphaltene excavation area represented by sample AS-6, 8' was brought to the surface and subsequently added to the soil transported to the landfill for disposal.

Apache provided the laboratory analytical data to the NMOCD District Office via telephone conversation and requested the NMOCD grant permission to backfill the excavation areas with non-impacted soil transported to the site from a clean borrow area and restore site conditions. The request was verbally granted on May 31, 2007 by Mr. Larry Johnson of the NMOCD office in Hobbs. Mr. Johnson indicated he would allow the TPH concentration level of 1,242 mg/Kg from the asphaltene floor sample, AS-5, 15', to remain in place due to low chloride concentration levels in the soil. NOVA completed site restoration activities on June 11, 2007.

4.0 CONCLUSIONS & CLOSURE REQUEST

Based on the analytical results of laboratory confirmation soil samples, the horizontal and vertical extent of impacted soil has been remediated to below applicable site specific NMOCD regulatory guidelines (as set forth by *The Guidelines for Remediation of Leaks, Spills and Releases*, NMOCD, 1993) for soil concentrations of Chlorides, BTEX and TPH guidelines of 1,000 mg/Kg. The excavation was backfilled with non-impacted soil imported from a clean borrow area and impacted soil brought to surface was transported to a landfill for disposal.

Consequently, no further action is recommended or planned for the site and Apache Corporation respectfully requests the NMOCD grant closure to the former Apache Elliott Federal Tank Battery.

5.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA Safety and Environmental has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA Safety and Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA Safety and Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA Safety and Environmental also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Apache Corporation. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA Safety and Environmental and/or Apache Corporation.

6.0 DISTRIBUTION

Apache Corporation Elliott Federal Lease Tank Battery Site Closure Report

Copy 1, 2 to: Mr. Larry Johnson;

Mrs. Pat Richards

New Mexico Energy, Minerals and Natural Resources

Oil Conservation Division, District I

1625 N. French Dr.

Hobbs, New Mexico 88240

Copy 3 to: Trishia Bad Bear

Bureau of Land Management Natural Resource Specialist

414 West Taylor

Hobbs, New Mexico 8824079731

Copy 4 to: Guinn Burks

Apache Corporation

P.O. box 728

Crane, Texas 79731

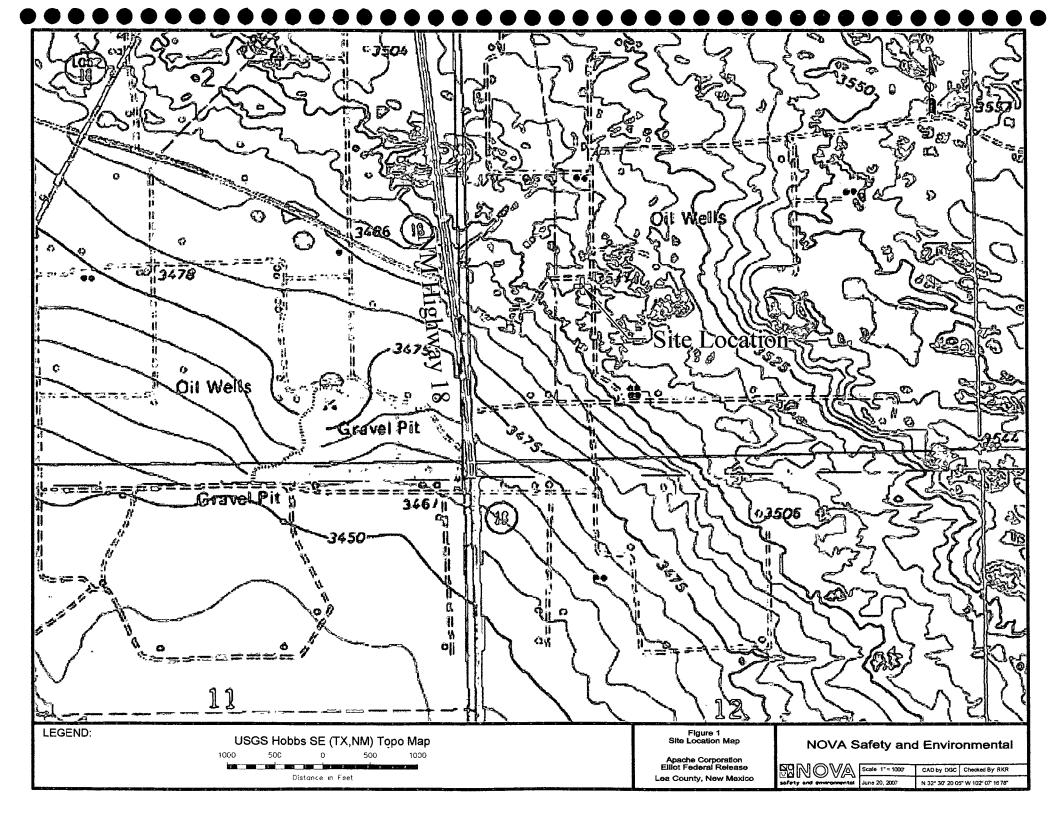
Copy 5 to: NOVA Safety and Environmental

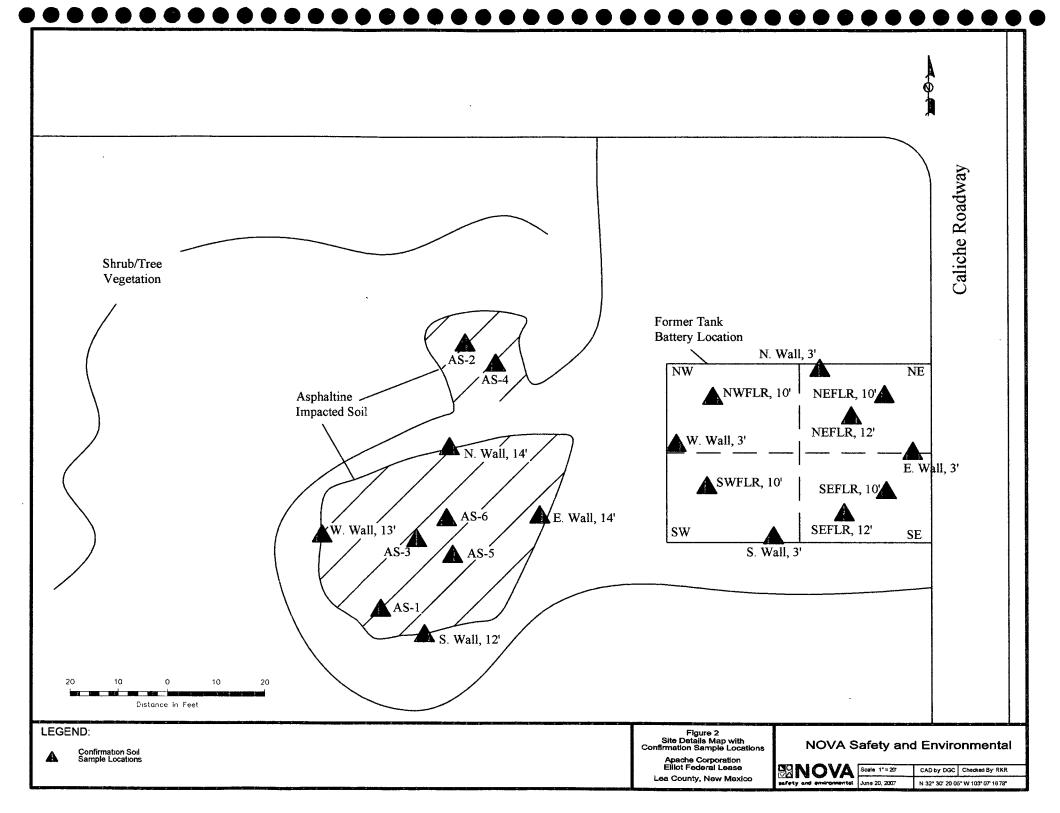
2057 Commerce

Midland, Texas 79703

rrounsaville@novatraining.cc

FIGURES





TABLES

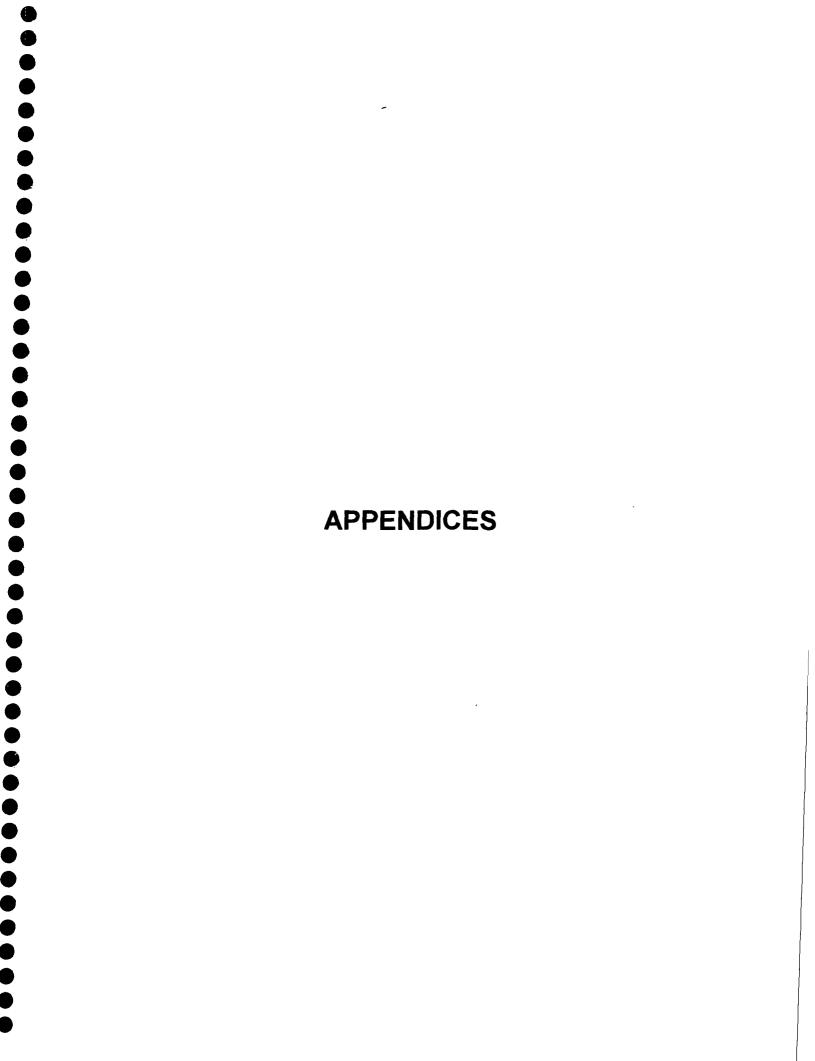
TABLE 1

Analytical Results - Confirmation Soil Samples Elliott Federal Lease Tank Battery Apache Corporation Eunice, Lea County, New Mexico

			oratory Anal Method 80	-	Method SM 4500			atory Ana Method 80	•		
SAMPLE DATE	SAMPLE IDENTIFICATION	DEPTH	TPH DRO mg/Kg	TPH GRO mg/Kg	Total TPH	Chlorides mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl- Benzene mg/Kg	Xylene mg/Kg	Total BTEX mg/Kg
NMO	OCD Remediation Action Levels (ppm)			1,000	250	10				50
	Tank Battery Excavation Area										
05/23/07	SWALL, 3'	3 ft.	<50.0	2	2.49	na	na	na	na	na	
05/23/07	NWALL, 3'	3 ft.	. 52	3	54.29	na	< 0.01	< 0.01	< 0.01	0.0341	0.0341
05/23/07	EWALL, 3'	3 ft.	<50.0	<1.00	<50	na	na	na	na	na	
05/23/07	WWALL,3'	3 ft.	<50.0	<1.00	<50	na	na	na	na	na	
05/23/07	NWFLR, 10'	10 ft.	<50.0	1.76	1.76	na	na	na	na	na	
05/23/07	SWFLR, 10'	10 ft.	<50.0	<1.00	< 50	442	na	na	na	na	
05/23/07	NEFLR, 10'	10 ft.	6,780	<1.00	6,780	na	na	na	na	na	
05/23/07	SEFLR, 10'	10 ft.	5,190	<1.00	5,190	na	na	na	na	na	
05/30/07	NE FLR-12'	12 ft.	<50.0	<1.00	<50	59.3	na	na	na	na	
05/30/07	SE FLR-12'	12 ft.	<50.0	<1.00	<50	84	na	na	na	na	
	Asphaltene Excavation Area										
05/24/07	AS-1, 3'	3 ft.	<50.0	1.6	1.6	16.5	na	na	na	na	
05/24/07	AS-4, 1'	1 ft.	< 50.0	1.02	1.02	15	na	na	na	na	
05/24/07	AS-5, 15'	15 ft.	1,190	52	1,242	86	na	na	na	na	
05/24/07	AS-6, 8'	8 ft.	2,680	213	2,893	13	<0.01	<0.01	0.557	1.01	1.567
05/25/07	N. Wall, 14'	14 ft.	556	1.12	557	na	na	na	na	na	
05/25/07	W. Wall, 13'	13 ft.	<50.0	1.11	1.11	na	na	na	na	na	
05/25/07	S. Wall, 12'	12 ft.	<50.0	<1.00	<50	na	na	na	na	na	
05/31/07	E. Wall	14 ft.	<50	10.1	10.1	170	na	na	na	na	
05/31/07	Backfill-1		<50	3.09	3.09	121	na	na	na	na	
05/31/07	Backfill-2		<50	1.82	1.82	84	na	na	na	na	

Bold: Indicates TPH concentration above regulatory guidelines

na = not analyzed



APPENDIX A: Laboratory Analytical Reports Report Date: May 31, 2007

Work Order: 7052410 Apache Elliot Federal

Page Number: 1 of 1 5 miles NE of Eunice, N.M.

Summary Report

Jennifer Lange

Nova Safety & Environmental

2057 Commerce St. Midland, TX, 79703 Report Date: May 31, 2007

Work Order: 7052410

Project Location 5 miles NE of Eunice, N.M.

Project Name. Apache Elliot Federal

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
125211	SWALL, 3'	soil	2007-05-23	13:55	2007-05-24
125212	NWALL, 3'	soil	2007-05-23	14:15	2007-05-24
125213	EWALL, 3'	soil	2007-05-23	14:35	2007-05-24
125214	WWALL, 3'	soil	2007-05-23	14:23	2007-05-24
125219	SWFLR, 10'	soil	2007-05-23	15:10	2007-05-24
125221	NEFLR, 10'	soil	2007-05-23	15:30	2007-05-24
125223	SEFLR, 10'	soil	2007-05-23	15:48	2007-05-24
125225	NWFLR, 10'	soil	2007-05-23	16:00	2007-05-24

		I	BTEX	MTBE	TPH DRO	TPH GRO	
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
125211 - SWALL, 3'						< 50.0	2.49
125212 - NWALL, 3'	< 0.0100	< 0.0100	< 0.0100	0.0341		51.6	2.69
125213 - EWALL, 3'						< 50.0	< 1.00
125214 - WWALL, 3'				Ì		< 50.0	<1.00
125219 - SWFLR, 10'						< 50.0	< 1.00
125221 - NEFLR, 10'				ļ		6780	<1.00
125223 - SEFLR, 10'						5190	<1.00
125225 - NWFLR, 10'						<50.0	1.76

Sample: 125219 - SWFLR, 10'

Param	Flag	Result	Units	RL
Chloride		442	mg/Kg	1.00

6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, 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

3 915 • 585 • 3443 432 • 689 • 6301 FAX 806 • 794 • 1298 FAX 915 • 585 • 4944 FAX 432 • 689 • 6313

817 • 201 • 5260

806 • 794 • 1296

E-Mail. lab@traceanalysis.com

Analytical and Quality Control Report

Jennifer Lange Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: May 31, 2007

Work Order: 7052410

Project Location: 5 miles NE of Eunice, N.M.
Project Name: Apache Elliot Federal
Apache Elliot Federal

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
125211	SWALL, 3'	soil	2007-05-23	13:55	2007-05-24
125212	NWALL, 3'	soil	2007-05-23	14:15	2007-05-24
125213	EWALL, 3'	soil	2007-05-23	14:35	2007-05-24
125214	WWALL, 3'	soil	2007-05-23	14:23	2007-05-24
125219	SWFLR, 10'	soil	2007-05-23	15:10	2007-05-24
125221	NEFLR, 10'	soil	2007-05-23	15:30	2007-05-24
125223	SEFLR, 10'	soil	2007-05-23	15:48	2007-05-24
125225	NWFLR, 10'	soil	2007-05-23	16:00	2007-05-24

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Apache Elliot Federal were received by TraceAnalysis, Inc. on 2007-05-24 and assigned to work order 7052410. Samples for work order 7052410 were received intact at a temperature of 4 deg C.

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

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 7052410 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.

Work Order 7052410 Apache Elliot Federal Page Number: 3 of 14 5 miles NE of Eunice, N.M

Analytical Report

Sample: 125211 - SWALL, 3'

Analysis: TPH DRO QC Batch: 37504 Prep Batch: 32522 Analytical Method: Mod. 8015B Date Analyzed: 2007-05-24 Sample Preparation: 2007-05-24 Prep Method: N/A
Analyzed By: AG
Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		187	m mg/Kg	1	150	125	32.9 - 167

Sample: 125211 - SWALL, 3'

Analysis: TPH GRO QC Batch. 37507 Prep Batch: 32524 Analytical Method: S 8015B
Date Analyzed: 2007-05-24
Sample Preparation: 2007-05-24

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

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		2.49	${ m mg/Kg}$	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
<u> </u>	riag	1005010	Omo	Dildilon	Amount	recovery	Lillics
Trifluorotoluene (TFT)		0.756	${ m mg/Kg}$	1	1.00	76	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.17	${ m mg/Kg}$	1	1.00	117	67.5 - 140.3

Sample: 125212 - NWALL, 3'

Analysis BTEX QC Batch: 37641 Prep Batch: 32617 Analytical Method S 8021B
Date Analyzed: 2007-05-29
Sample Preparation: 2007-05-29

RL

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	m mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	m mg/Kg	1	0.0100
Xylene		0.0341	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	ī	1.00	108	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	1	1.00	112	51.1 - 119.1

Work Order: 7052410 Apache Elliot Federal Page Number: 4 of 14 5 miles NE of Eunice, N.M.

Sample: 125212 - NWALL, 3'

Analysis: TPH DRO
QC Batch: 37504
Prep Batch: 32522

Analytical Method: Mod. 8015B Date Analyzed: 2007-05-24 Sample Preparation: 2007-05-24 Prep Method· N/A Analyzed By: AG Prepared By: AG

Parameter	Flag	Result	Units	Dilution	RL
DRO	<i>B</i>	51.6	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		204	${ m mg/Kg}$	1	150	136	32.9 - 167

Sample: 125212 - NWALL, 3'

Analysis: TPH GRO QC Batch: 37507 Prep Batch: 32524 Analytical Method S 8015B
Date Analyzed: 2007-05-24
Sample Preparation: 2007-05-24

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

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		2.69	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.764	mg/Kg	1	1.00	76	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	1	1.00	112	67.5 - 140.3

Sample: 125213 - EWALL, 3'

Analysis: TPH DRO QC Batch: 37504 Prep Batch: 32522 Analytical Method: Mod. 8015B
Date Analyzed: 2007-05-24
Sample Preparation: 2007-05-24

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

RL

		· RL		
Parameter	Flag	Result	Units	Dilution
		= 0.0	/	

DRO	DRO		<50.0	mg/K	<u></u>	1	50.0	
					Cuiles	Parcent	D	
C	T731	Danult	Timito	Dibatian	Spike	rercent	Recovery	

Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		213	mg/Kg	1	150	142	32.9 - 167

Sample: 125213 - EWALL, 3'

Analysis: TPH GRO QC Batch: 37507 Prep Batch: 32524 Analytical Method S 8015B
Date Analyzed: 2007-05-24
Sample Preparation: 2007-05-24

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

Chloride

Work Order: 7052410 Apache Elliot Federal Page Number: 5 of 14 5 miles NE of Eunice, N.M

1.00

10

			RL					
Parameter	Fla	g	Result		Units		Dilution]
GRO			<1.00		mg/Kg		1	1
			•			Spike	Percent	Recover
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		0.762	mg/Kg	1	1.00	76	52.4 - 12
4-Bromofluoi	robenzene (4-BFE	3)	1.05	mg/Kg	1	1.00	105	67.5 - 14
Sample: 12	25214 - WWAL	L, 3'						
Analysis:	TPH DRO		Analytica	l Method:	Mod. 8015	В	Prep l	Method: N
QC Batch	37504		Date Ana		2007-05-24			zed By: A
Prep Batch:	32522			reparation:	2007-05-24			red By: A
			RL					
Parameter	Fla	g	Result		Units		Dilution	
DRO			< 50.0		mg/Kg		1	5
						Spike	Percent	Recove
Surrogate			Ti:4-	D-1	ition	Amount	Recovery	Limit
	Flag	Result	Units					
n-Triacontan		211	mg/Kg		1	150	141	32.9 -
n-Triacontan Sample: 12 Analysis: QC Batch:	te 2 5214 - WWALI TPH GRO 37507	211	mg/Kg Analytica Date Ana	l Method: lyzed:	S 8015B 2007-05-24		141 Prep Me Analyze	32.9 - 1 ethod: S 50 d By: AG
n-Triacontan Sample: 12 Analysis: QC Batch:	e 25214 - WWALI TPH GRO	211	mg/Kg Analytica Date Ana Sample P	l Method:	S 8015B 2007-05-24		141 Prep Me	32.9 - 1 ethod: S 50 d By: AG
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch	TPH GRO 37507 32524	211	mg/Kg Analytica Date Ana	l Method: lyzed:	S 8015B 2007-05-24		141 Prep Me Analyze Prepare	32.9 - 1 ethod: S 50 d By: AG d By: AG
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch	te 2 5214 - WWALI TPH GRO 37507	211	mg/Kg Analytica Date Ana Sample P	l Method: lyzed:	S 8015B 2007-05-24 2007-05-24		141 Prep Me Analyze	32.9 - 1 ethod: S 50 d By: AG
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO	TPH GRO 37507 32524	211 , 3'	mg/Kg Analytica Date Ana Sample P RL Result	l Method: lyzed:	S 8015B 2007-05-24 2007-05-24 Units		Prep Me Analyze Prepare Dilution	32.9 - 1 ethod: S 50 d By: AG d By: AG
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate	TPH GRO 37507 32524	211	Analytica Date Ana Sample P RL Result <1.00	l Method: lyzed: reparation:	S 8015B 2007-05-24 2007-05-24 Units mg/Kg	150 Spike	Prep Me Analyze Prepare Dilution	32.9 - 1 ethod: S 50 d By: AG d By: AG
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate Trifluorotolu	TPH GRO 37507 32524	211 C., 3'	Analytica Date Ana Sample P RL Result <1.00	l Method: lyzed: reparation: Units	S 8015B 2007-05-24 2007-05-24 Units mg/Kg	Spike Amount	Prep Me Analyze Prepare Dilution 1 Percent Recovery	32.9 - 1 ethod: S 50 d By: AG d By: AG Recover
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate Triffuorotolu 4-Bromofluor	re 25214 - WWALI TPH GRO 37507 32524 Fla Fla Tene (TFT) robenzene (4-BFE	211 2., 3' Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.758 1.04	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution	Spike Amount 1.00	Prep Me Analyze Prepare Dilution 1 Percent Recovery 76 104	32.9 - 1 ethod: S 50 d By: AG d By: AG Recover Limits 52.4 - 12 67.5 - 14
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate Trifluorotolu 4-Bromofluor Sample: 12 Analysis:	re 25214 - WWALI TPH GRO 37507 32524 Fla ene (TFT) robenzene (4-BFE) 25219 - SWFLR Chloride (IC)	211 2., 3' Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.758 1.04	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution	Spike Amount 1.00 1.00	Prep Me Analyze Prepare Dilution 1 Percent Recovery 76 104	32.9 - 1 ethod: S 50 d By: AG d By: AG Recover Limits 52.4 - 12 67.5 - 14
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate Trifluorotolu 4-Bromofluon	re 25214 - WWALI TPH GRO 37507 32524 Fla Fla Tene (TFT) robenzene (4-BFE	211 2., 3' Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.758 1.04 Analytica Analytica Analytica	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution 1 1	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 76 104 Prep 1 Analy	32.9 - 1 ethod: S 50 d By: AG d By: AG Recover Limits 52.4 - 12 67.5 - 14
Sample: 12 Analysis: QC Batch: Prep Batch Parameter GRO Surrogate Triffuorotolu 4-Bromofluor Sample: 12 Analysis: QC Batch	re ES214 - WWALL TPH GRO 37507 32524 Fla Fla ene (TFT) robenzene (4-BFE) ES219 - SWFLR Chloride (IC) 37508	211 2., 3' Flag Flag 7)	Analytica Date Ana Sample P RL Result <1.00 Result 0.758 1.04 Analytica Analytica Analytica	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution 1 1	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 76 104 Prep 1 Analy	32.9 - 1 ethod: S 50 d By: AG d By: AG Recove: Limits 52.4 - 12 67.5 - 14

442

mg/Kg

Work Order: 7052410 Apache Elliot Federal

Page Number: 6 of 14 5 miles NE of Eunice, N.M.

Sample: 125219 - SWFLR, 10'

Analysis. QC Batch: Prep Batch:

TPH DRO 37504 32522

Analytical Method. Date Analyzed:

Sample Preparation

Mod. 8015B 2007-05-24 2007-05-24

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

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		226	m mg/Kg	1	150	151	32.9 - 167

Sample: 125219 - SWFLR, 10'

Analysis: QC Batch: Prep Batch:

TPH GRO 37507 32524

Analytical Method. Date Analyzed:

S 8015B 2007-05-24 Sample Preparation: 2007-05-24 Prep Method: S 5035 Analyzed By: AGPrepared By AG

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.764	mg/Kg	1	1.00	76	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	67.5 - 140.3

Sample: 125221 - NEFLR, 10'

TPH DRO Analysis. 37504 QC Batch: Prep Batch 32522

Analytical Method: Mod. 8015B Date Analyzed: 2007-05-24 Sample Preparation. 2007-05-24

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

RLParameter Flag Result Units Dilution RLDRO 6780 mg/Kg 50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	I	313	${ m mg/Kg}$	5	150	209	32.9 - 167

Sample: 125221 - NEFLR, 10'

Analysis: TPH GRO QC Batch: 37507 Prep Batch: 32524

Analytical Method: S 8015B Date Analyzed 2007-05-24 Sample Preparation: 2007-05-24

Prep Method: S 5035 Analyzed By: AGPrepared By:

¹High surrogate recovery due to peak interference

Work Order: 7052410 Apache Elliot Federal

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				RL						
Parameter		Flag		Result		Units		Dilution		RI
GRO				<1.00		mg/Kg	· · · · · · · · · · · · · · · · · · ·	1		1.00
							Spike	Percent	Reco	verv
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Lin	
Trifluorotolue	ene (TFT)			0.774	mg/Kg	1	1.00	77	52.4 -	123.
4-Bromofluor	robenzene (4-B	FB)		1.04	mg/Kg	1	1.00	104	67.5 -	140.
Sample: 12	:5223 - SEFL	R, 10'								
Analysis:	TPH DRO	,		Analytica	al Method:	Mod. 8015I	3	Prep I	Method:	N/A
QC Batch:	37504			Date Ana		2007-05-24			zed By:	AG
Prep Batch:	32522			Sample P	reparation:	2007-05-24		•	red By:	AG
_				RL						
Parameter]	Flag		Result		Units		Dilution		RJ
DRO	········			5190		mg/Kg		5		50.
_	****		7 0 1.	** **	7 .0		Spike	Percent		overy
Surrogate			RACILIT	Units	[]1]1	ution	Amount	Recovery	Lii	mits
	Fiag e ²		Result 261	mg/Kg		ō	150	174	32.9	
n-Triacontan						5	150	174	32.9	
n-Triacontan	ne 2			mg/Kg		5 S 8015B	150	174 Prep Me		- 16
n-Triacontan Sample: 12 Analysis:	ie ² 25223 - SEFL			mg/Kg Analytica Date Ana	al Method:		150		ethod S	- 16
n-Triacontan Sample: 12 Analysis: QC Batch	e ² 2 5223 - SEFL TPH GRO 37507			mg/Kg Analytica Date Ana	g al Method:	S 8015B	150	Prep Me	ethod S	- 16 5 503
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch:	re 2 25223 - SEFL TPH GRO 37507 32524	R, 10'		mg/Kg Analytica Date Ana Sample P	al Method:	S 8015B 2007-05-24 2007-05-24	150	Prep Me Analyze Prepare	ethod S	- 16 5 503 AG AG
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch:	re 2 25223 - SEFL TPH GRO 37507 32524			mg/Kg Analytica Date Ana Sample P RL Result	al Method:	S 8015B 2007-05-24 2007-05-24 Units	150	Prep Me Analyze Prepare Dilution	ethod S	- 16 3 503 AG AG R.
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch:	re 2 25223 - SEFL TPH GRO 37507 32524	R, 10'		mg/Kg Analytica Date Ana Sample P	al Method:	S 8015B 2007-05-24 2007-05-24	150	Prep Me Analyze Prepare	ethod S	- 16 3 503 AG AG R.
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch: Parameter GRO	re 2 25223 - SEFL TPH GRO 37507 32524	R, 10'	261	Analytica Date Ana Sample P RL Result <1.00	d Method: alyzed reparation:	S 8015B 2007-05-24 2007-05-24 Units mg/Kg	Spike	Prep Me Analyze Prepare Dilution 1	ethod S d By: A d By: A	- 16 S 503 AG AG R1 1.0
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch: Parameter GRO Surrogate	re 2 25223 - SEFL TPH GRO 37507 32524	R, 10'		Analytica Date Ana Sample P RL Result <1.00	d Method: alyzed reparation: Units	S 8015B 2007-05-24 2007-05-24 Units mg/Kg	Spike Amount	Prep Me Analyze Prepare Dilution 1 Percent Recovery	ethod S d By: A d By: A Reco	- 16 S 503 AG AG 1.0 overy
n-Triacontan Sample: 12 Analysis: QC Batch Prep Batch: Parameter GRO Surrogate Trifluorotolu	re 2 25223 - SEFL TPH GRO 37507 32524	R, 10'	261	Analytica Date Ana Sample P RL Result <1.00 Result 0.768	Method: alyzed reparation: Units mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution	Spike Amount 1.00	Prep Me Analyze Prepare Dilution 1 Percent Recovery	ethod S d By: A d By: A Recc Lin 52.4	- 16 3 503 AG AG 1.0 overy
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolud 4-Bromofluor	2 2 2 2 3 - SEFL TPH GRO 37507 32524 Sene (TFT) robenzene (4-B	R, 10' Flag	Flag	Analytica Date Ana Sample P RL Result <1.00	d Method: alyzed reparation: Units	S 8015B 2007-05-24 2007-05-24 Units mg/Kg	Spike Amount	Prep Me Analyze Prepare Dilution 1 Percent Recovery	ethod S d By: A d By: A Reco	- 16 3 503 AG AG 1.0 overy
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolue 4-Bromofluor Sample: 12	rene (TFT) robenzene (4-B	R, 10' Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.768 1.03	Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 77 103	Recc Lin 52.4 -	- 16 3 503 AG AG R. 1.0 Devery nits 123. 140.
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolue 4-Bromofluor Sample: 12 Analysis:	25223 - SEFL TPH GRO 37507 32524 Dene (TFT) robenzene (4-B) 25225 - NWF TPH DRO	R, 10' Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.768 1.03	Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution 1	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 77 103	Reco Lin 52.4 - 67.5 -	- 16 3 503 AG AG R. 1.0 20 20 21 123 140 N/
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolue 4-Bromofluor Sample: 12 Analysis: QC Batch:	rene (TFT) robenzene (4-B	R, 10' Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.768 1.03 Analytica Date Ana	Units mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 77 103	Recc Lin 52.4 -	- 16 3 503 AG AG 1.0 Devery nits 123 140
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Triffuorotolue 4-Bromofluor Sample: 12 Analysis: QC Batch: Prep Batch:	2 2 2 2 3 - SEFL TPH GRO 37507 32524 Sene (TFT) robenzene (4-B) 25225 - NWF TPH DRO 37504 32522	R, 10' Flag FRB) LR, 10	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.768 1.03 Analytica Date Ana Sample P	Units mg/Kg mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution 1 1 Mod. 8015I 2007-05-24	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 77 103	Reco Lim 52.4 - 67.5 -	- 16 3 503 AG AG 1.0 overy
n-Triacontan Sample: 12 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolue 4-Bromofluor Sample: 12 Analysis: QC Batch:	2 2 2 2 3 - SEFL TPH GRO 37507 32524 Sene (TFT) robenzene (4-B) 25225 - NWF TPH DRO 37504 32522	R, 10' Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 0.768 1.03 Analytica Date Ana Sample P	Units mg/Kg mg/Kg mg/Kg	S 8015B 2007-05-24 2007-05-24 Units mg/Kg Dilution 1 1 Mod. 8015I 2007-05-24	Spike Amount 1.00 1.00	Prep Me Analyze Prepared Dilution 1 Percent Recovery 77 103	Reco Lim 52.4 - 67.5 -	- 16 3 503 AG AG 1.0 123 140 N/AG

²High surrogate recovery due to peak interference.

37507

QC Batch:

Prep Batch: 32524

Method Blank (1)

4-Bromofluorobenzene (4-BFB)

QC Batch: 37507

Work Order: 7052410 Apache Elliot Federal Page Number: 8 of 14 5 miles NE of Eunice. N.M.

Analyzed By

Prepared By:

AG

AG

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	239	mg/Kg	1	150	159	32.9 - 167
Sample: 125	5225 - NWFLF	R, 10'					
Analysis:	TPH GRO		Analytical M	ethod: S 8015	В	Prep Me	thod: S 5035

2007-05-24

2007-05-24

Date Analyzed:

Sample Preparation:

Parameter	Flag		RL Result		Units		Dilution	RL
GRO			1.76		mg/Kg		1	1.00
Curromata		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate Trifluorotoluene (TFT)		riag	0.766	mg/Kg	1	1.00	77	52.4 - 123.7
4-Bromofluorobenzene (4-I	BFB)		1.07	mg/Kg	1	1.00	107	67.5 - 140.3

Method Blan	ık (1)	QC Batch: 37504						
~	37504 32522		Date Analyzed: QC Preparation:	2007-05-24 2007-05-24			Analyzed By: Prepared By:	
			M	DL				
Parameter		Flag	Res	ult		Units		RL
DRO			2	9.5		mg/Kg		50
Surrogate	Fla	g Result	Units D	ilution	Spike Amount	Percent Recover		overy nits
n-Triacontane	<u></u>	174	mg/Kg	1	150	116	44.7 -	133.6

QC Batch 37507 Prep Batch 32524			Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24			Analyzed By: Prepared By:		
			MI	DL				
Parameter	Flag		Rest	ılt	Un	its	RL	
GRO			< 0.7	39	mg/	Kg	1	
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits	
Trifluorotoluene (TF	$\Gamma)$	0.851	mg/Kg	1	1.00	85	52.4 - 123.7	

mg/Kg

1.00

89

67.5 - 140.3

0.894

Work Order: 7052410 Apache Elliot Federal Page Number: 9 of 14 5 miles NE of Eunice, N.M.

Matrix Blank (1)

QC Batch: 37508

QC Batch: 37508 Prep Batch: 32525 Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AR Prepared By: AR

MDL

Parameter	Flag	Result	Units	RL
Chloride		3.25	mg/Kg	1

Method Blank (1) QC Batch: 37641

QC Batch: 37641 Prep Batch: 32617

Date Analyzed: 2007-05-29 QC Preparation: 2007-05-29 Analyzed By: AG Prepared By: AG

MDL

		1111717		
Parameter	Flag	\mathbf{Result}	${ m Units}$	RL
Benzene		< 0.00110	mg/Kg	0.01
Toluene		< 0.00150	mg/Kg	0.01
Ethylbenzene		< 0.00160	m mg/Kg	0.01
Xylene		< 0.00410	mg/Kg	0.01

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.940	${ m mg/Kg}$	1	1.00	94	53.9 - 125.1

Laboratory Control Spike (LCS-1)

QC Batch: 37504 Prep Batch: 32522 Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AG Prepared By: MS

	LCS			Spike	Matrix		Rec
Param	Result	Units	Dil	Amount	Result	Rec.	Limit
DRO	263	mg/Kg	1	250	<14.6	105	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	251	mg/Kg	1	250	<14.6	100	47.5 - 144.1	5	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.	\mathbf{Amount}	Rec.	Rec.	Limit
n-Triacontane	177	170	m mg/Kg	1	150	118	113	57.3 - 131.6

Laboratory Control Spike (LCS-1)

 QC Batch
 37507
 Date Analyzed:
 2007-05-24

 Prep Batch:
 32524
 QC Preparation:
 2007-05-24

Analyzed By: AG Prepared By: AG

Work Order. 7052410 Apache Elhot Federal Page Number: 10 of 14 5 miles NE of Eunice, N.M.

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec	Limit
GRO	7.94	mg/Kg	1	10.0	< 0.739	79	57.7 - 102.5

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	8.78	mg/Kg	1	10.0	< 0.739	88	57.7 - 102.5	10	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)	1.10	1.05	mg/Kg	1	1.00	110	105	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.979	1.04	$_{ m mg/Kg}$	1	1.00	98	104	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 37508 Prep Batch: 32525 Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AR Prepared By: AR

	LCS			Spike	Matrix		Rec
Param	Result	Units	Dil	Amount	Result	Rec.	$_{ m Limit}$
Chloride	15.2	m mg/Kg	1	12.5	2.1044	105	90 - 110

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	15.2	mg/Kg	1	12.5	2.1044	104	90 - 110	0	

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: 37641 Prep Batch: 32617 Date Analyzed: 2007-05-29 QC Preparation: 2007-05-29 Analyzed By: AG Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.03	mg/Kg	1	1.00	< 0.00110	103	68.6 - 123.4
Toluene	1.03	mg/Kg	1	1.00	< 0.00150	103	74.6 - 119.3
Ethylbenzene	1.02	mg/Kg	1	1.00	< 0.00160	102	72.3 - 126.2
Xvlene	3.08	${ m mg/Kg}$	1	3.00	< 0.00410	103	76.5 - 121.6

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
Benzene	1.06	mg/Kg	1	1.00	< 0.00110	106	68.6 - 123.4	3	20
Toluene	1.06	${ m mg/Kg}$	1	1.00	< 0.00150	106	74.6 - 119.3	3	20
Ethylbenzene	1.05	mg/Kg	1	1.00	< 0.00160	105	72.3 - 126.2	3	20
Xylene	3.15	${ m mg/Kg}$	1	3.00	< 0.00410	105	76.5 - 121.6	2	20

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

Work Order: 7052410 Apache Elliot Federal Page Number: 11 of 14 5 miles NE of Eunice, N.M

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.930	0.956	mg/Kg	1	1.00	93	96	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	1.02	1.01	${ m mg/Kg}$	1	1.00	102	101	68.7 - 125.8

Matrix Spike (MS-1) Spiked Sample: 125245

QC Batch: 37504 Prep Batch: 32522 Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AG Prepared By: MS

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec	Limit
DRO	290	${ m mg/Kg}$	1	250	<14.6	116	11.7 - 152.3

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
DRO	284	mg/Kg	1	250	<14.6	114	11.7 - 152.3	2	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
n-Triacontane	222	216	mg/Kg	1	150	148	144	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 125212

QC Batch. 37507 Prep Batch: 32524 Date Analyzed 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		Rec
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.60	mg/Kg	1	10.0	2.69	49	10 - 141.5

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
GRO	9.25	mg/Kg	1	10.0	2.69	66	10 - 141.5	20	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)	0.651	0.623	mg/Kg	1	1	65	62	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.18	1.11	${ m mg/Kg}$	1	1	118	111	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 125219

QC Batch: 37508 Prep Batch: 32525 Date Analyzed: 2007-05-24 QC Preparation: 2007-05-24 Analyzed By: AR
Prepared By: AR

Work Order: 7052410 Apache Elliot Federal Page Number: 12 of 14 5 miles NE of Eunice, N.M.

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil	Amount	Result	Rec.	Limit
Chloride	580	mg/Kg	10	125	442.398	110	90 - 110

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	561	mg/Kg	10	125	442.398	95	90 - 110	3	

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

Matrix Spike (MS-1) Spiked Sample: 125212

QC Batch: 37641 Prep Batch: 32617 Date Analyzed: 2007-05-29 QC Preparation: 2007-05-29 Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil	${f Amount}$	Result	Rec.	Limit
Benzene	1.06	mg/Kg	1	1.00	< 0.00110	106	64.4 - 115.7
Toluene	1.07	${ m mg/Kg}$	1	1.00	< 0.00150	107	57.8 - 124.4
Ethylbenzene	1.10	${ m mg/Kg}$	1	1.00	< 0.00160	110	64.8 - 125.8
Xylene	3.32	mg/Kg	1	3.00	0.0341	110	65.2 - 121.8

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
Benzene	1.02	mg/Kg	1	1.00	< 0.00110	102	64.4 - 115.7	4	20
Toluene	1.05	${ m mg/Kg}$	1	1.00	< 0.00150	105	57.8 - 124.4	2	20
Ethylbenzene	1.10	mg/Kg	1	1.00	< 0.00160	110	64.8 - 125.8	0	20
Xylene	3.30	${ m mg/Kg}$	1	3.00	0.0341	109	65.2 - 121.8	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	$\mathrm{Rec}.$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.952	0.933	mg/Kg	1	1	95	93	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	1.06	1.07	${ m mg/Kg}$	1	1	106	107	66.7 - 131.9

Standard (ICV-1)

QC Batch: 37504

Date Analyzed: 2007-05-24

Analyzed By: AG

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	\mathbf{Date}
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	266	106	85 - 115	2007-05-24

Standard (CCV-1)

QC Batch: 37504

Date Analyzed: 2007-05-24

Analyzed By: AG

Work Order: 7052410 Apache Elliot Federal Page Number: 13 of 14 5 miles NE of Eunice. N.M

Apache Ell	iot Federal		Apaci	ne Elliot Federa	.1	o miles NE	of Eunice, N.M.
Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	253	101	85 - 115	2007-05-24
Standard	(ICV-1)						
QC Batch:	37507		Date Anal	lyzed: 2007-05	-24	Anal	yzed By: AG
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.920	92	85 - 115 ·	2007-05-24
Standard	(CCV-1)						
QC Batch	•		Daté Anal	lyzed· 2007-05	-24	Anal	yzed By: AG
&C Daten	01007			2001 00	4 F	7111(11	yzed Dy. Ac
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc. 1.00	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2007-05-24
Standard	(ICV-1)						
QC Batch:	37508		Date Anal	yzed: 2007-05	-24	Anal	yzed By: AR
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	12.5	12.6	101	90 - 110	2007-05-24
Standard	(CCV-1)						
QC Batch:	37508		Date Anal	yzed: 2007-05	-24	Anal	yzed By· AR
			CCVs	CCVs	CCVs	Percent	
_			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc	Conc.	Recovery	Limits	Analyzed
Chloride	·····	mg/Kg	12.5	12.4	99	90 - 110	2007-05-24
Standard	(ICV-1)						
QC Batch:	37641		Date Anal	yzed. 2007-05	-29	Anal	yzed By AG
			ICVs	ICVs	ICVs	Percent	

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analvzed
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2007-05-29
Toluene		${ m mg/Kg}$	0.100	0.102	102	85 - 115	2007-05-29
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2007-05-29
							contamued

 $continued \dots$

Apache Elliot	May 31, 2007 Federal		Work Orde Apache Ell	er: 7052410 iot Federal	Page Number: 14 of 14 5 miles NE of Eunice, N.M.		
standard conti	$nued \dots$						
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	$_{ m Date}$
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Xylene		mg/Kg	0.300	0.312	104	85 - 115	2007-05-29
Standard (C	CV-1)						
Standard (C			Date Analyzed:	2007-05-29		Analy	vzed By: AG
Standard (C	CV-1)		Date Analyzed:	2007-05-29 CCVs	CCVs	Analy Percent	vzed By: AG
Standard (C	CV-1)		·		CCVs Percent	·	vzed By: AG Date
Standard (C QC Batch: 3	CV-1)	Units	CCVs	CCVs		Percent	
Standard (C QC Batch: 3' Param	CV-1) 7641	Units mg/Kg	CCVs True	CCVs Found	Percent	Percent Recovery	Date
Standard (C QC Batch: 3 Param Benzene	CV-1) 7641		CCVs True Conc.	CCVs Found Conc	Percent Recovery	Percent Recovery Limits	Date Analyzed
Standard (C	CV-1) 7641	mg/Kg	CCVs True Conc.	CCVs Found Conc	Percent Recovery	Percent Recovery Limits 85 - 115	Date Analyzed 2007-05-29

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191 Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1-888-588-3443

CHAIN-OF-CUSTODY and ANALYSIS REQUEST
Lab Order ID#: 1052410

Contacti Stip BACA	Phone: (432) 42	25-8329		Project #:			
Company Name: NOVA ENY	Fax #: (432) 5	20-7701		Project Name: APACAE	Elliott Feder	10-	
Address: 2057 Com herce Dr Michael TX	Email:			Project Location	NE H Eur	ice. N.	Mex
Invoice to:	Sampler:		σ .	Sampler Signatu	re: U		
	Ship	BAC4		Sarpha	rca		
Turnsround Time (Business Days): Normal 24 Hour 2 Days 3 Days Off	ner		g Limits: Normal MDL	MQL PQL	Special	O.	
Lab ID (Lab Use Only)	Containers HC1 HWG3 H2504	None Search	ETEL 8021B TA1005 ← → → TPH 418.1 PAH 82700	Total (Ag. As. 28.73) Total (Cr. Pb. Ss. Hg) TCLP (Ag. As. 38.34) TCLP (Cr. Pb. Ss. Hg) TCLP Volatiles TCLP Semi-Vols TCLP Pesticides	RCI GCMS Volatiles 82608 GCMS Semi-Vols 8270C PCB PCB	300, 755, 74 Chlanteler 520,000 000 000 000 000 000 000 000 000 0	P
Field Code Matrix Date/	l'ime #	N N N N	RIE TY HAI		RCM GCMS PCB PcBt		Hold
	4:05	<u>x</u>					
OB SWFLR.1	4:10 1	- (-+>
10 WSWFLR-1	419 1		1				
11 Swall, 3' Soil	\$1:55pl	_)				x	
12 NWAII, 3'	2:1501					$\frac{ X }{ X }$	
3 EWAI1,3'	2:35/1	7				X X	
14 WW411.3'	2:23pl	1				X	
5 SWFLR, 6'	1:00p	2					X
LO NWFLG6'	2:080	5					X
NEFZRIG) (Z:41p						X_
18 SEFURIU	2:49p						
Rollinguished by: Date: Time: Received by: Date Breen 4 40,30 Total To	Date: Time:	LAB ON	USE LY	BTEX of (8021B) of	n high (aro.	
Rolinquished by: Dato: Timo: Received by:	Date: Time:	Y		(8021B) 0	n FLKS	ample_	
Volkus 24 KM AKOM	, 5:24·U] las	Intact:	1	. il test -	molant	,	
Relinquished by: Date: Time: Received at Lab by:	Date: Time:	Temp:			,		g.
		Login Review:				Page 1	af 2
Submittal of samples constitutes agreement to Terms and Co	nditions on this COC.	Carrier #:					12

6701 Abordeon Avo, Sto. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1-800-378-1296

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155 McCuteneon, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1-888-588-3443

CHAIN-OF-CUSTODY and ANALYSIS REQUEST Lab Order ID#: 1052410

The state of the s									
Contact: Stip BACA	Phono:	F (432) 425	8329	Project #:					
Company Name: NOVA ENV.	Fax #: (432) 5		•	Project Name: Elli	off Federal				
Address: 2057 Commerce	Email:			Project Name: Apache Elliott Federal Project Location: 5 miles NE of Eurice, N. Mex Sampler Signature:					
Invoice to:	Sampler:			Sampler Signature:	Sampler Signature:				
	Slcip F	SACA		Sleys F	Jeca				
Turnaround Time (Business Days): Normal 24 Hour 2 Days 3 Days 0	7-	Reporting I		- /	Special				
			TITIT						
Lab ID	1 1	ervatives	TX1006	TULP (Ag. As, Ba, Cd.) TULP (Ag. As, Hg.) TULP Volatiles TULP Semi-Vols TULP Pesticides RCI	Voluntias Sibous Semi-Vols Signification Sig				
(Lab Use Only)	Container:	Nault Ice None MTRE 80218	TX1005 SX TRH 418.1 PAB 82700 Total (4g,46,5a,	TULP (4g,As,Bs,As,Bs,AtULP) (4g,As,Bs,As,B	Chidride Soni-Vols PCB BOD, TSS, PH GEO DEO Chidride Bols Bod				
Field Code Matrix Date, 2529 SwFLR, 10' Soil 323	**************************************			(3 8 2 2 A A				
125219 SwflR, 10' Soil \$23	3:20 (->	-		X				
20 SWFLR, 14'	3:30	_(- <i> </i>						
22 NEFLR, 14'	3:42								
23 SEFUR.10	3: 48		1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
2A SEFLR, 14	3: 50	_/			T X				
25 NWFLR.10	4:00								
25 NWFLK, 10 ZLD NWFLK, 14	4:03				X				
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Relinquished by: Date: Time: Received by:	Date: Time:	LAB U	$\mathbf{Y} = \begin{bmatrix} \mathbf{RE} \\ \mathbf{Q} \end{bmatrix}$	MARKS: TEX on the	highest GRO				
Relinquished by: Date: Time: Received by:	Date: Time: 5.24:07 1015	Intact:	(8021B) on	FLR sample				
Relinquished by: Date: Time: Received at Lab by		Headspace:	a	N- Heat le	highest GRO FLR sample udland page 2 of 2				
		Login Review:			1000				
Submittal of samples constitutes agreement to Terms and C	onditions on this COC.	Carrier #:							

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CHAIN-OF-CUSTODY and ANALYSIS REQUEST
Lab Order ID#: 1052410

(806) 794-1298 HaceAllary 515, 111

Contact: Stip BACA	Phone: (432) 425-832	9	Project #:	
Company Name: NOVA ENY	Fax #: (432) 520-7701		Project Name: Apache Elliott Feder Project Location: 5 wiles NE of Eur Sampler Signature:	12
Address: 2057 Com Merce Dr Michael TX	Email:		Project Location: DE of Eur	ice. N. Mer
Invoice to:	Sampler:	σ	Sampler Signature:	
	Ship BACA		Sarp Baca	
Turnaround Time (Business Days): Normal 24 Hour 2 Days 3 Days Other	1 -	orting Limits: Normal MDL	MQL PQL Special	
Lab ID	Containers Containers Containers Containers Containers Containers	MYBE 8021B BY 1006 (2.7.) TX1006 (2.7.) FAH 418.1 FAH 8270C Total (4g, 4s, Ba, Cd) Total (Cr. Pb, Se, Hg)	TCLP (Ag, As, Ba, Cd) TCLP (Cr, Pb, Se, Hg) TCLP Volatiles TCLP Semi-Vols TCLP Pesticides RCI GCMS Volatiles 8260B GCMS Semi-Vols 8270C PCB PCB Pesticides 8081	Chlorides Chlorides 520 DRO 8017
Only		HTBE 8021B BTEX 8021B TX1005 (\$\frac{2}{3}\) TPH 418.1 PAH 8270C Total (\$\frac{2}{3}\) Total (\$\frac{2}{3}\)	TCLP (4 TCLP (7 TCLP SeTCLP VG TCLP Pe GCMS VG GCMS VG GCMS Se	CLARA CLARA GERO Hold
1257207 NWFLR-1 Soil 5/23 4	1:05 X			
	4:10 /			X
	4:15 1			X
10 \$5WFLR-1	4:19			$\lambda h X$
11 SWAIL, 3' Soil	1:5501	^		X.
12 NWAII, 3'	2:1501	X		X-
	2:3501			·X·
	2:2301			·X•
	1:00p			X
NWFLR.6'	2:080			X
17 NEFLRIG	2:40			X
18 SEFULL	2:460			X
Relinquished by: Date: Time: Received by: Sup Breat 4 19.38 Todd Ich	Date: Time: LA	B USE REA	TEX on high (SOZIB) ON FLR SA	aro
Relinquished by: Date: Time: Received by: Received by: Received by:	Date: Time: 5.24.01 [05] Intact: Headspace:	, / / / / / / / / / / / / / / / / / / /	SUCID) ON FLK S	emple
Relinquished by: Date: Time: Received at Lab by:	Date: Time: Temp: Login Revie	W: Ad	A BIEX 125212 pr BL Todd	Page 142
submittal of samples constitutes agreement to Terms and Cond	itions on this COC. Carrier #:		pa BL Todd	12

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CHAIN-OF-CUSTODY and ANALYSIS REQUEST
Lab Order ID#: 1052410

Z=Z A SwflR, 10'																										
Company Manace Continued	Contact: Sk	Cip BACA			Phone	4		40	(32)	425	- 8:	329			1											
Turnaround Time (Business Days): Normal 24 Hour 2 Days 3 Days Other		•	•		Fax #										Pr	oject N	he	E	//io	#	Fe	der	al			
Turnaround Time (Business Days): Normal 24 Hour 2 Days 3 Days Other	Address: Z							·		•					Pr	Project Location: 5 miles NE of Eurice, W. Mex										
Turnaround Time (Business Days): Normal 24 Hour 2 Days 3 Days Other					Sample	er:		· · · · · · · · · · · · · · · · · · ·							Sa	mpler	Signa	ture:	t) =						
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Clab Use Only Field Code Matrix Date/Time Date Time Date Time Construction Date Time Date Time Construction Date Time Date Date Time Date Da	Norma	l 24 Hour 2 Days	3 Day	. Ц	Other					✓ N	ormal	Ц	MD	<u> </u>	МС	L L	PQ	L L	j s	pecia	d —		Z		1 	
20 SWFLR, 14' 21 NE FIR, 10' 3:30 22 NEFIR, 14' 3:42 23 SEFIR, 10 3:48 24 SEFIR, 16 4:50 21 NWFLR, 14 4:50 22 NEFIR, 14 4:50 23 NEFIR, 10 4:50 24 NWFLR, 14 4:50 25 NWFLR, 14 4:50 26 NWFLR, 14 4:50 27 NWFLR, 14 4:50 28 NWFLR, 14 4:50 CNLY 1 Intact: 1 Headspace: 1 New 1 New 2 STAN 1 NWFLR 1 New 2 STAN 1 NWFLR 1	(Lab Use Only	Field Code	Matrix	Date	e/Time	# Containers				MTBE 8021B	1X1005 5 X	TPH 418.1	PAH 8270C	Total (Ag, As, Ba, Cd) Total (Cr, Pb, Se, Hg)	TCLP (Ag, As, Ba, Cd)	TCLP (Cr,Pb,Se,Hg) TCLP Volatiles	TCLP Semi-Vols	TCLP Pesticides	Volatiles	Semi-Vols	PCB	Pesticides 8081 BOD, TSS, pH	8	Chlaride		Hold
20 SWFLR, 14' 21 NE FIR, 10' 3:30 22 NEFIR, 14' 3:42 23 SEFIR, 10 3:48 24 SEFIR, 16 4:50 21 NWFLR, 14 4:50 22 NEFIR, 14 4:50 23 NEFIR, 10 4:50 24 NWFLR, 14 4:50 25 NWFLR, 14 4:50 26 NWFLR, 14 4:50 27 NWFLR, 14 4:50 28 NWFLR, 14 4:50 CNLY 1 Intact: 1 Headspace: 1 New 1 New 2 STAN 1 NWFLR 1 New 2 STAN 1 NWFLR 1	125219	SWFLR, 10'	Soil	5/23	3:10			X														6	$\langle X \cdot \rangle$	X_		
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Relinquished by: Date: Time: Received by: Date: Time: Stample Relinquished by: Date: Time: Received by: Date: Time: ONLY Relinquished by: Date: Time: Received by: Date: Time: Headspace: All Temp: All Stample Relinquished by: Date: Time: Received at Lab by: Date: Time: Headspace: All Temp: All Login Review: Login Review: Page 2 states Page 2 states Relinquished by: Date: Time: Received at Lab by: Date: Time: Headspace: All Temp: All Login Review: Login Rev	21	NE FLR. 10')		1			7							~~~				•	X .			1
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Summary Report

Julie Koonce

Nova Safety & Environmental

2057 Commerce St. Midland, TX, 79703 Report Date: June 11, 2007

Work Order: 7052506

Project Location: 5 miles NE of Eunice, N.M.
Project Name: Apache Elliot Federal Lease

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
125466	AS-1, 3'	soil	2007-05-24	10:25	2007-05-25
125467	AS-4, 1'	soil	2007-05-24	11:13	2007-05-25
125468	AS-5, 15'	soil	2007-05-24	12:45	2007-05-25
125469	AS-6, 8'	soil	2007-05-24	12:50	2007-05-25

		I	BTEX		MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
125466 - AS-1, 3'						< 50.0	1.60
125467 - AS-4, 1'						< 50.0	1.02
125468 - AS-5, 15'						1190	51.7
125469 - AS-6, 8'	< 0.100	< 0 100	0.557	1.01	Ì	2680	213

Sample: 125466 - AS-1, 3'

Param	Flag	\mathbf{Result}	\mathbf{Units}	RL
Chloride		16.5	mg/Kg	1.00

Sample: 125467 - AS-4, 1'

Param	Flag	Result	Units	$^{-}$ RL
Chloride		15.0	mg/Kg	1.00

Sample: 125468 - AS-5, 15'

Param	Flag	Result	${f Units}$	RL
Chloride		86.0	mg/Kg	1.00

Sample: 125469 - AS-6, 8'

Report Date: June 11, 2007

Work Order: 7052506 Apache Elliot Federal Lease Page Number: 2 of 2 5 miles NE of Eunice, N.M.

Param	Flag	Result	Units	RL
Chloride		13.0	mg/Kg	1.00



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El Papo, Texas 73922 Midland Joseph 79709 0015 hartis Parkway Suite 110 Ft. Worth Texas 751 30

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FAX 915*585*4944

617*731*5260

TAX 432 * 089 * 6313

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Analytical and Quality Control Report

Julie Koonce Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date:

June 11, 2007

Work Order:

7052506

Project Location: 5 miles NE of Eunice, N.M. Project Name: Apache Elliot Federal Lease Apache Elliot Federal Project Number:

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
$\overline{125466}$	AS-1, 3'	soil	2007-05-24	10:25	2007-05-25
125467	AS-4, 1'	soil	2007-05-24	11:13	2007-05-25
125468	AS-5, 15'	soil	2007 - 05 - 24	12:45	2007-05-25
125469	AS-6, 8'	soil	2007-05-24	12:50	2007-05-25

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

Dr. Blair Leftwich, Director

Michael ale

Standard Flags

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

Case Narrative

Samples for project Apache Elliot Federal Lease were received by TraceAnalysis, Inc. on 2007-05-25 and assigned to work order 7052506. Samples for work order 7052506 were received intact at a temperature of 3 deg C.

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

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 7052506 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.

Work Order: 7052506 Apache Elliot Federal Lease

Page Number: 3 of 13 5 miles NE of Eunice, N.M.

Analytical Report

Sample: 125466 - AS-1, 3'

Analysis: Chloride (IC) QC Batch:

Date Analyzed: 37702 Sample Preparation: Prep Batch: 32673

Analytical Method: E 300.0 2007-05-31

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

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride	В	16.5	mg/Kg	5	1.00

Sample: 125466 - AS-1, 3'

TPH DRO Analysis: QC Batch: 37599 Prep Batch: 32582

Analytical Method: Mod. 8015B 2007-05-25 Date Analyzed: 2007-05-25 Sample Preparation:

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

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		130	mg/Kg	1	150	87	32.9 - 167

Sample: 125466 - AS-1, 3'

TPH GRO Analysis: QC Batch: 37642 32617 Prep Batch:

Analytical Method: S 8015B Date Analyzed: 2007-05-29 Sample Preparation: 2007-05-29

Prep Method: S 5035 Analyzed By: AGPrepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		1.60	mg/Kg	1	1.00

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	Flag	Result	${f Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.786	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.02	$_{ m mg/Kg}$	1	1.00	102	67.5 - 140.3

Sample: 125467 - AS-4, 1'

Analysis: Chloride (IC) QC Batch: 37702 Prep Batch: 32673

Analytical Method: E 300.02007-05-31 Date Analyzed: Sample Preparation:

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

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride	В	15.0	mg/Kg	5	1.00

Work Order: 7052506 Report Date: June 11, 2007 Apache Elliot Federal Lease 5 miles NE of Eunice, N.M. Apache Elliot Federal Sample: 125467 - AS-4, 1' Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: 37600 Date Analyzed: 2007-05-25 Sample Preparation: 2007-05-25 Prep Batch: 32582RLParameter Flag Result Units Dilution DRO < 50.0 mg/Kg Spike Percent Flag Dilution Surrogate Result Units Amount Recovery 139 150 n-Triacontane mg/Kg 1 Sample: 125467 - AS-4, 1' Analysis: TPH GRO Analytical Method: S 8015B QC Batch: 37642 2007-05-29 Date Analyzed: 2007-05-29 Prep Batch: 32617 Sample Preparation: RLUnits Parameter Flag Result Dilution \overline{GRO} 1.02 mg/Kg

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotoluene (TFT)		0.788	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.990	mg/Kg	1	1.00	99	67.5 - 140.3

Page Number: 4 of 13

Prep Method: N/A

Prep Method: S 5035

Analyzed By:

Prepared By:

AG

AG

RL

50.0

Recovery

Limits

32.9 - 167

AG

RL

1.00

Analyzed By:

Prepared By:

1

93

1

Sample: 125468 - AS-5, 15'

Analytical Method: Analysis: Chloride (IC) E 300.0 Prep Method: N/A QC Batch: Date Analyzed: 2007-05-31 37702 Analyzed By: AR Prep Batch: 32673 Sample Preparation: Prepared By: AR RLFlag Result Dilution Parameter Units RL86.0 Chloride mg/Kg 5 1.00

Sample: 125468 - AS-5, 15'

TPH DRO Analysis: Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 37600 2007-05-25 Date Analyzed: Analyzed By: AGPrep Batch: 32582 Sample Preparation: 2007-05-25 Prepared By: AG RLParameter Flag Result Units Dilution RLDRO 1190 mg/Kg 1 50.0 Report Date: June 11, 2007

Prep Batch: 32673

Flag

Parameter

Chloride

Work Order: 7052506

Page Number: 5 of 13 5 miles NE of Eunice, N.M.

Prepared By:

Dilution

AR

RL

1.00

Apache Elliot Federal A		Apache	Elliot Fed	leral Lease		5 miles NE of Eunice, N.M.		
Surrogate	Flag	Result	Units		ilution	Spike Amount	Percent Recovery	Recover Limits
n-Triacontane		200	mg/Kg		1	150	133	32.9 - 16
G 1 10740		,						
Sample: 125468 Analysis: TP	S - AS-5, 15 H GRO	,	Analytica	l Method:	S 8015B		Prep Me	ethod: S 503
QC Batch: 376			Date Ana		2007-05-29		Analyze	
Prep Batch: 326	617		Sample P	reparation	: 2007-05-29		Prepare	d By: AG
			RL					
Parameter	Flag	5	Result		Units		Dilution	R
GRO			51.7		mg/Kg	······································	10	1.0
Surrogate		Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1145	7.93	mg/Kg	10	10.0	79	52.4 - 123
4-Bromofluorober)	11.4	mg/Kg	10	10.0	114	67.5 - 140
Analysis: BT QC Batch: 377 Prep Batch: 327			Analytical M Date Analyz Sample Prep	zed:	S 8021B 2007-05-31 2007-05-31		Prep Me Analyze Preparec	d By: AG
110p 2000 V-			RL				F	
Parameter	Fl	ag	Result		Units]	Dilution	R
Benzene			< 0.100		mg/Kg		10	0.010
Toluene			< 0.100		mg/Kg		10	0.010
Ethylbenzene Xylene			$0.557 \\ 1.01$		$_{ m mg/Kg}$		10 10	0.010 0.010
						C-11		
Surrogate		Flag	Result	\mathbf{Units}	Dilution	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene ((TFT)		10.6	mg/Kg	10	10.0	106	26 - 117.8
4-Bromofluorober	nzene (4-BFB)	11.8	mg/Kg	10	10.0	118	51.1 - 119
Sample: 125469	9 - AS-6, 8'							
Analysis: Ch	loride (IC)		Analyti	cal Metho	d: E 300.0		Prep I	Method: N/
QC Batch: 377				nalyzed:	2007-05-	31	•	zed By: AR
Drop Rotoh, 226	372		Sample	Droporati	on:		Drope	and Dan. AD

Sample Preparation:

 \mathbf{Units}

mg/Kg

RL Result

13.0

Work Order: 7052506 Apache Elliot Federal Lease Page Number: 6 of 13 5 miles NE of Eunice, N.M.

Sample: 125469 - AS-6, 8'

Analysis: TPH DRO QC Batch: 37600 Prep Batch: 32582 Analytical Method: Mod. 8015B Date Analyzed: 2007-05-25 Sample Preparation: 2007-05-25 Prep Method: N/A Analyzed By: AG Prepared By: AG

D	T21	RL Danielt	TT!4	D:1	DI
Parameter	Flag	Result	Units	Dilution	KL
DRO		2680	mg/Kg	1	50.0
		·····			

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	1	292	mg/Kg	1	150	195	32.9 - 167

Sample: 125469 - AS-6, 8'

Analysis: TPH GRO QC Batch: 37642 Prep Batch: 32617 Analytical Method: S 8015B Date Analyzed: 2007-05-29 Sample Preparation: 2007-05-29

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

		RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		213	m mg/Kg	20	1.00
			- 0, 8		

					\mathbf{Spike}	$\mathbf{Percent}$	$\operatorname{Recovery}$
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		17.4	mg/Kg	20	20.0	87	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		19.2	mg/Kg	20 .	20.0	96	67.5 - 140.3

Method Blank (1) QC Batch: 37599

QC Batch: 37599 Prep Batch: 32582 Date Analyzed: 2007-05-25 QC Preparation: 2007-05-25 Analyzed By: AG Prepared By: MS

		MDL		
Parameter	Flag	Result	Units	RL
DRO		<14.6	mg/Kg	50

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		176	$_{ m mg/Kg}$	1	150	117	44.7 - 133.6

Method Blank (1) QC Batch: 37600

QC Batch: 37600 Date Analyzed: 2007-05-25 Analyzed By: AG Prep Batch: 32582 QC Preparation: 2007-05-25 Prepared By: MS

¹High surrogate recovery due to peak interference.

Work Order: 7052506 Apache Elliot Federal Lease

Page Number: 7 of 13 5 miles NE of Eunice, N.M.

Parameter				$rac{ ext{MDL}}{ ext{Result}}$		Un	its		$_{ m RL}$
DRO				<14.6		mg/	Kg		50
Surrogate	Flag	Result	Units	Dilu	tion	Spike Amount	Percent Recovery	Reco Lin	
n-Triacontane		148	mg/Kg	1		150	99	44.7 -	133.6
Method Blank (1)	QC	Batch: 37642							
QC Batch: 37642 Prep Batch: 32617			Date An QC Prep	J	007-05-29 007-05-29		•	yzed By: ared By:	AG AG
Parameter		Flag		MDL Result		Un			RL
GRO				< 0.739		mg,	/Kg		1
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Reco Lin	nits
Trifluorotoluene (TF			0.893	mg/Kg	1	1.00	89		123.7
4-Bromofluorobenzer	ne (4-BFI	3)	0.812	mg/Kg	1	1.00	81	67.5 -	140.3
Matrix Blank (1) QC Batch: 37702 Prep Batch: 32673	V	Batch: 37702	Date An QC Prep	•	007-05-31 007-05-31			yzed By: ared By:	AR AR
_				MDL					
Parameter Chloride		Flag		Result 3.27		Un			RL 1
Cmoride				3.21		mg/	<u>ng</u>		Т
Method Blank (1)	QC	Batch: 37739					,		,
QC Batch: 37739 Prep Batch: 32700			Date An QC Prep		007-05-31 007-05-31			yzed By: ared By:	AG AG
Parameter		Flag		MI Resi	ılt		nits		RL
Benzene Toluene				<0.001 <0.001			/Kg /Kg		$0.01 \\ 0.01$
Ethylbenzene				< 0.001			/Kg		0.01
Xylene				< 0.004			/Kg		0.01
Surrogate		Flag	Result	Units	Dilution		Percent Recovery	Reco Lin	nits
Trifluorotoluene (TF		2)	1.06	mg/Kg	1	1.00	106		117.6
4-Bromofluorobenzer	ne (4-BFI	3)	0.967	mg/Kg	1	1.00	97	53.9 -	125.1

Work Order: 7052506 Apache Elliot Federal Lease

Page Number: 8 of 13 5 miles NE of Eunice, N.M.

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch: 32582

37599

Date Analyzed: 2007-05-25 QC Preparation: 2007-05-25

Analyzed By: AG Prepared By: MS

_	LCS		ъ.,	Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
DRO	236	mg/Kg	1	250	<14.6	94	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.	\mathbf{Limit}	RPD	Limit
DRO	260	mg/Kg	1	250	<14.6	104	47.5 - 144.1	10	20

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

	LCS	LCSD			\mathbf{Spike}	LCS	LCSD	Rec .
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	139	136	mg/Kg	1	150	93	91	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch:

37600 Prep Batch: 32582 Date Analyzed: 2007-05-25 QC Preparation: 2007-05-25

Analyzed By: AG Prepared By: MS

	LCS			\mathbf{Spike}	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	284	mg/Kg	1	250	<14.6	114	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		$\mathrm{Rec.}$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	239	mg/Kg	1	250	<14.6	96	47.5 - 144.1	17	20

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

	LCS	LCSD			\mathbf{Spike}	$_{ m LCS}$	$_{ m LCSD}$	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	150	136	mg/Kg	1	150	100	91	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch:

37642 Prep Batch: 32617 Date Analyzed: QC Preparation: 2007-05-29

2007-05-29

Analyzed By: AG Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$
GRO	8.16	mg/Kg	1	10.0	< 0.739	82	57.7 - 102.5

Work Order: 7052506 Apache Elliot Federal Lease Page Number: 9 of 13 5 miles NE of Eunice, N.M.

	LCSD			Spike	Matrix		Rec .		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	8.04	mg/Kg	1	10.0	< 0.739	80	57.7 - 102.5	2	20

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

	LCS	LCSD			$_{ m Spike}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	${f Limit}$
Trifluorotoluene (TFT)	1.14	1.14	mg/Kg	1	1.00	114	114	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.907	0.904	${ m mg/Kg}$	_ 1	1.00	91	90	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 37702 Prep Batch: 32673 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31

Analyzed By: AR Prepared By: AR

	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Chloride	15.4	mg/Kg	1	12.5	2.1604	106	90 - 110

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

	LCSD			$_{ m Spike}$	Matrix		Rec .		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	15.3	mg/Kg	1	12.5	2.1604	105	90 - 110	1	

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: 37739 Prep Batch: 32700 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AG Prepared By: AG

	LCS			Spike	Matrix		${ m Rec.}$
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	Limit
Benzene	1.06	mg/Kg	1	1.00	< 0.00110	106	68.6 - 123.4
Toluene	1.06	m mg/Kg	1	1.00	< 0.00150	106	74.6 - 119.3
Ethylbenzene	1.05	${ m mg/Kg}$	1	1.00	< 0.00160	105	72.3 - 126.2
Xylene	3.16	mg/Kg	1	3.00	< 0.00410	105	76.5 - 121.6

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	$_{ m Limit}$
Benzene	1.03	mg/Kg	1	1.00	< 0.00110	103	68.6 - 123.4	3	20
Toluene	1.02	${ m mg/Kg}$	1	1.00	< 0.00150	102	74.6 - 119.3	4	20
Ethylbenzene	1.02	${ m mg/Kg}$	1	1.00	< 0.00160	102	72.3 - 126.2	3	20
Xylene	3.06	mg/Kg	1	3.00	< 0.00410	102	76.5 - 121.6	3	20

Surrogata	$rac{ ext{LCS}}{ ext{Result}}$	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	$egin{array}{l} { m Rec.} \\ { m Limit} \end{array}$
Surrogate	nesun	nesun	Cinus	DII.	Amount	nec.	nec.	Limit
Trifluorotoluene (TFT)	$\overline{0.937}$	0.931	mg/Kg	1	1.00	94	93	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	1.03	1.03	${ m mg/Kg}$	1	1.00	103	103	68.7 - 125.8

Work Order: 7052506 Apache Elliot Federal Lease

Page Number: 10 of 13 5 miles NE of Eunice, N.M.

Matrix Spike (MS-1)

Spiked Sample: 125277

QC Batch:

37599

Date Analyzed:

2007-05-25

Analyzed By: AG Prepared By: MS

Prep Batch: 32582 QC Preparation: 2007-05-25

		MS			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$
Param		Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
DRO	2	503	mg/Kg	1	250	120	153	11.7 - 152.3

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
DRO	3	592	mg/Kg	1	250	120	189	11.7 - 152.3	16	20

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

	MS	MSD			\mathbf{Spike}	MS	MSD	Rec.
Surrogate	Result	Result	${f Units}$	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	116	130	mg/Kg	1	150	77	87	17 - 163.1

Matrix Spike (MS-1)

Spiked Sample: 125467

QC Batch: 37600 Date Analyzed:

2007-05-25

Analyzed By: AG Prepared By: MS

Prep Batch: 32582 QC Preparation: 2007-05-25

MS Spike Matrix Rec. Dil. Param Result Units Amount Result Rec. Limit 351 DRO $\overline{250}$ <14.6 14011.7 - 152.3 mg/Kg 1

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

		MSD			\mathbf{Spike}	Matrix		$\mathrm{Rec.}$		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$	RPD	Limit
DRO	4	277	mg/Kg	1	250	<14.6	111	11.7 - 152.3	24	20

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

	MS	MSD			\mathbf{Spike}	MS	MSD	${ m Rec.}$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	${f Limit}$
n-Triacontane	174	150	${ m mg/Kg}$	1	150	116	100	17 - 163.1

Matrix Spike (MS-1)

Spiked Sample: 125297

QC Batch: Prep Batch: 32617

37642

Date Analyzed:

2007-05-29 QC Preparation: 2007-05-29

Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
GRO	6.82	mg/Kg	1	10.0	1.4	54	10 - 141.5

²Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

³Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

⁴RPD is out of control limits due to extraction process. Use LCS/LCSD to demonstrate method is in control. •

Work Order: 7052506 Apache Elliot Federal Lease Page Number: 11 of 13 5 miles NE of Eunice, N.M.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec .	Limit	RPD	Limit
GRO	7.12	mg/Kg	1	10.0	1.4	57	10 - 141.5	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.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.667	0.671	mg/Kg	1	1	67	67	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.04	1.01	$_{ m mg/Kg}$	1	1	104	101	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 125512

QC Batch: 37702 Prep Batch: 32673 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AR Prepared By: AR

	MS			Spike	Matrix		Rec.
Param	Result	${ m Units}$	Dil.	Amount	Result	Rec.	$_{ m Limit}$
Chloride	3970	mg/Kg	100	1250	2591.31	110	90 - 110

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	$_{ m Limit}$
Chloride	ā	4070	mg/Kg	100	1250	2591.31	118	90 - 110	2	

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

Matrix Spike (MS-1) Spiked Sample: 125791

QC Batch: 37739 Prep Batch: 32700 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AG Prepared By: AG

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	\mathbf{Limit}
Benzene	1.04	mg/Kg	1	1.00	< 0.00110	104	64.4 - 115.7
Toluene	1.05	mg/Kg	1	1.00	< 0.00150	105	57.8 - 124.4
Ethylbenzene	1.06	mg/Kg	1	1.00	< 0.00160	106	64.8 - 125.8
Xylene	3.17	mg/Kg	1	3.00	< 0.00410	106	65.2 - 121.8

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
Benzene	1.07	mg/Kg	1	1.00	< 0.00110	107	64.4 - 115.7	3	20
Toluene	1.09	mg/Kg	1	1.00	< 0.00150	109	57.8 - 124.4	4	20
Ethylbenzene	1.10	mg/Kg	1	1.00	< 0.00160	110	64.8 - 125.8	4	20
Xylene	3.32	mg/Kg	1	3.00	< 0.00410	111	65.2 - 121.8	5	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.	${f Limit}$
Trifluorotoluene (TFT)	0.936	0.947	m mg/Kg	1	1	94	95	52.8 - 121.7

continued ...

⁵Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Work Order: 7052506 Page Number: 12 of 13 Report Date: June 11, 2007 Apache Elliot Federal Lease 5 miles NE of Eunice, N.M. Apache Elliot Federal matrix spikes continued ... MSMSD MS MSD Spike Rec. Result Result Units Dil. Limit Surrogate Amount Rec. Rec. 4-Bromofluorobenzene (4-BFB) 1.05 1.04 mg/Kg 1 105 104 66.7 - 131.9 Standard (CCV-2) QC Batch: 37599 Date Analyzed: 2007-05-25 Analyzed By: AG CCVsCCVsCCVsPercent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 272 109 85 - 115 2007-05-25 Standard (CCV-3) QC Batch: 37599 Date Analyzed: 2007-05-25 Analyzed By: AG **CCVs** CCVsCCVsPercent True Found Percent Recovery Date Units Conc. Param Flag Conc. Recovery Limits Analyzed 85 - 115 DRO mg/Kg 250 260 104 2007-05-25 Standard (ICV-1) QC Batch: 37600 Date Analyzed: 2007-05-25 Analyzed By: AG ICVs**ICVs** ${\rm ICVs}$ Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed $\overline{\mathrm{DRO}}$ mg/Kg 250 253 101 85 - 115 2007-05-25 Standard (CCV-1) QC Batch: 37600 Date Analyzed: 2007-05-25 Analyzed By: AG CCVsCCVsCCVsPercent True Found Percent Recovery Date Flag Units Conc. Param Conc. Recovery Limits Analyzed DRO mg/Kg 250 271 108 85 - 115 2007-05-25

Standard (ICV-1)

QC Batch: 37642

Date Analyzed: 2007-05-29

Analyzed By: AG

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.910	91	85 - 115	2007-05-29

Work Order: 7052506 Apache Elliot Federal Lease Page Number: 13 of 13 5 miles NE of Eunice, N.M.

Standard (CCV-1)

QC Batch: 37642

Date Analyzed: 2007-05-29

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	\mathbf{Date}
Param	Flag	${ m Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.14	114	85 - 115	2007-05-29

Standard (ICV-1)

QC Batch: 37702

Date Analyzed: 2007-05-31

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	$\mathbf{Analyzed}$
Chloride		${ m mg/Kg}$	12.5	12.6	101	90 - 110	2007-05-31

Standard (CCV-1)

QC Batch: 37702

Date Analyzed: 2007-05-31

Analyzed By: AR

			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs} \ { m Found}$	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		${ m mg/Kg}$	12.5	12.6	101	90 - 110	2007-05-31

Standard (ICV-1)

QC Batch: 37739

 $Date\ Analyzed:\ \ 2007\text{-}05\text{-}31$

Analyzed By: AG

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2007-05-31
Toluene		$_{ m mg/Kg}$	0.100	0.102	102	85 - 115	2007-05-31
Ethylbenzene		${ m mg/Kg}$	0.100	0.101	101	85 - 115	2007-05-31
Xylene		mg/Kg	0.300	0.304	101	85 - 115	2007-05-31

Standard (CCV-1)

QC Batch: 37739

Date Analyzed: 2007-05-31

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.107	107	85 - 115	2007-05-31
Toluene		mg/Kg	0.100	0.106	106	85 - 115	2007-05-31
Ethylbenzene		mg/Kg	0.100	0.103	103	85 - 115	2007-05-31
Xylene	·····	mg/Kg	0.300	0.309	103	85 - 115	2007-05-31

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LAB Order ID# 7052506

Page	/ of	
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TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296 5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313 200 East Sunset Rd , Suite E El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443 6015 Harris Pkwy , Suite 110 Ft. Worth, Texas 76132 Tel (817) 201-5260

Company Name: NOVA EnviRonmenta Address: (Street, City, Zlp)	l	520	one #: -77 20 0		ANALYSIS REQUEST (Circle or Specify Method No.)
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LAB # FIELD CODE ZEE	Volume / Amount	GE GE			MTBE 8021B / 60 BTEX 8021B / 60 TPH 418.1 / TX10 TPH 418.1 / TX10 TPH 8015 GRO / PAH 8270C7 (625 Total Metals Ag & TCLP Volatiles TCLP Volatiles TCLP Pesticides TCLP Pesticid
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Page Number: 1 of 1 5 miles NE of Eunice, N.M.

Summary Report

Ron Rounsaville Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: June 5, 2007

Work Order: 7053117

Project Location: 5 miles NE of Eunice, N.M.
Project Name: Apache Elliot Federal Lease

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
$\overline{125991}$	N. Wall, 14'	soil	2007-05-25	13:55	2007-05-31
125992	W. Wall, 13'	soil	2007-05-25	13:52	2007-05-31
125993	S. Wall, 12'	soil	2007-05-25	13:59	2007-05-31

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
125991 - N. Wall, 14'	556	1.12
125992 - W. Wall, 13'	< 50.0	1.11
125993 - S. Wall, 12'	< 50.0	<1.00



G/01 Aberdesh Avenual Suite 9 709 East Sonset Road, Suite E britz Basin Street, Suite Alt

Littlectix Texas 79474 El Pasu, Texas 73922 Michaed Joseph 79709 3015 harris Parkway Seite 110 Ft. Worth Texas 76132

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817*731*5260

Analytical and Quality Control Report

Ron Rounsaville Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: June 5, 2007

Work Order: 7053117

Project Location: 5 miles NE of Eunice, N.M. Project Name: Apache Elliot Federal Lease Project Number: Apache Elliot Federal

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
125991	N. Wall, 14'	soil	2007-05-25	13:55	2007-05-31
125992	W. Wall, 13'	soil	2007-05-25	13:52	2007-05-31
125993	S. Wall, 12'	soil	2007-05-25	13:59	2007-05-31

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Apache Elliot Federal Lease were received by TraceAnalysis, Inc. on 2007-05-31 and assigned to work order 7053117. Samples for work order 7053117 were received intact at a temperature of 4 deg C.

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

Test	Method
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 7053117 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.

Work Order: 7053117 Apache Elliot Federal Lease Page Number: 3 of 9 5 miles NE of Eunice, N.M.

Analytical Report

Sample: 125991 - N. Wall, 14'

Analysis: TPH DRO QC Batch: 37769 Prep Batch: 32725 Analytical Method: Mod. 8015B Date Analyzed: 2007-06-01 Sample Preparation: 2007-06-01 Prep Method: N/A Analyzed By: AG Prepared By: AG

Parameter	Fla	g	$ m RL \ Result$	Uni	its	Dilution	m RL
DRO			556	mg/I	Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} \text{Spike} \\ \text{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane	0	125	mg/Kg	1	150	83	32.9 - 167

Sample: 125991 - N. Wall, 14'

Analysis: TPH GRO QC Batch: 37777 Prep Batch: 32707 Analytical Method: S 8015B Date Analyzed: 2007-06-01 Sample Preparation: 2007-06-01

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

Parameter	Flag	Result	Units		Dilution	RL
GRO		1.12	mg/Kg		1	1.00
				Spike	Percent	Recovery

ъr

Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.789	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.944	mg/Kg	1	1.00	94	67.5 - 140.3

Sample: 125992 - W. Wall, 13'

Analysis: TPH DRO QC Batch: 37759 Prep Batch: 32716 Analytical Method: Mod. 8015B Date Analyzed: 2007-05-31 Sample Preparation: 2007-05-31

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

Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	m mg/Kg	1	50.0
			0.11	D	<u> </u>

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		147	mg/Kg	1	150	98	61.7 - 143.2

Sample: 125992 - W. Wall, 13'

Analysis: TPH GRO QC Batch: 37777 Prep Batch: 32707 Analytical Method: S 8015B
Date Analyzed: 2007-06-01
Sample Preparation: 2007-06-01

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

n-Triacontane

112

mg/Kg

1

150

75

61.7 - 143.2

Work Order: 7053117 Apache Elliot Federal Lease

Page Number: 4 of 9 5 miles NE of Eunice, N.M.

					·			
Parameter	Fla	ø	$ m RL \ Result$		Units		Dilution	F
GRO		0	1.11		mg/Kg		1	1.0
		Fl	D. II	TT		Spike	Percent	Recovery
Surrogate	(75,575)	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT) obenzene (4-BFE	.)	0.797 0.946	mg/Kg	1 1	1.00 1.00	80 95	52.4 - 123 67.5 - 140
4-Dromonuor	obenzene (4-br	•)	0.940	mg/Kg	<u> </u>	1.00	99	07.5 - 140
Sample: 12	5993 - S. Wall,	12'						
Analysis:	TPH DRO		Analytica	l Method:	Mod. 8015	5B	Prep l	Method: N/
QC Batch:	37759		Date Ana	lyzed:	2007-05-31	L	Analy	zed By: AC
Prep Batch:	32716		Sample P	reparation:	2007-05-31	l	Prepa	red By: AC
Parameter	Fla	σ	$ m RL \ Result$		Units		Dilution	F
DRO	110	5	<50.0		mg/Kg	·	1	50
					01-0	C :1	D 4	
C	Flag	Result	Units	Dilu	tion	Spike Amount	Percent Recovery	Recover: Limits
Surrogate n-Triacontan		135	mg/Kg			150	90	61.7 - 143
Analysis: QC Batch: Prep Batch:	TPH GRO 37777 32707		Date Ana	l Method: lyzed: reparation:	2007-06-01 2007-06-01		Prep Me Analyze Prepare	d By: AG
гер Васси.	02101		RL	roparacion.	2001 00 01	-	Toparo	<i>a Dy. 1</i> 10
Parameter	Fla	ø	Result		Units		Dilution	F
GRO		0	<1.00		mg/Kg		1	1.
~			.			Spike	Percent	Recover
Surrogate	(DEC)	Flag	Result	Units	Dilution	Amount 1.00	Recovery	Limits
Trifluorotolu 4-Bromofluor	ene (1111) obenzene (4-BFI	3)	0.795 0.928	$_{ m mg/Kg}$	1 1	1.00 1.00	80 93	52.4 - 123 67.5 - 140
			\					
Method Bla	ank (1) QC	Batch: 37759)					
QC Batch: Prep Batch:	37759 32716		Date An QC Prep	v	007-05-31 007-05-31			yzed By: Acared By: M
•			•	MDL				V
Parameter		Flag		Result		U	nits	F
DRO				<13.4		mg	J/Kg	Ę
C	D1	Dag::14	T7	D:1	tion	Spike	Percent	Recover
Surrogate	Flag	Result	Units	Dilu	GIOII A	Amount	Recovery	Limits

Work Order: 7053117 Apache Elliot Federal Lease Page Number: 5 of 9 5 miles NE of Eunice, N.M.

Method Blank (1)

QC Batch: 37769

QC Batch: 37769 Prep Batch: 32725 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: MS

MDL

Parameter	Flag	Result	Units	RL
DRO		<14.6	mg/Kg	50

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	${ m Units}$	Dilution	Amount	Recovery	Limits
n-Triacontane		112	mg/Kg	, 1	150	75	44.7 - 133.6

Method Blank (1)

QC Batch: 37777

QC Batch: 37777
Prep Batch: 32707

Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: AG

MDL

Parameter	Flag	Result	Units	RL
GRO		0.752	mg/Kg	1

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.886	mg/Kg	1	1.00	89	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.810	${ m mg/Kg}$	1	1.00	81	67.5 - 140.3

Laboratory Control Spike (LCS-1)

QC Batch: 37759 Prep Batch: 32716 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AG Prepared By: MS

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	237	${ m mg/Kg}$	1	25 0	<13.4	95	62.5 - 135.4

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.	\mathbf{Limit}	RPD	Limit
DRO	195	mg/Kg	1	250	<13.4	78	62.5 - 135.4	19	20

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

	LCS	LCSD			\mathbf{Spike}	LCS	LCSD	${ m Rec.}$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	105	102	mg/Kg	1	150	70	68	66.6 - 140.9

Laboratory Control Spike (LCS-1)

QC Batch: 37769 Prep Batch: 32725 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01

Analyzed By: AG Prepared By: MS

Work Order: 7053117 Apache Elliot Federal Lease

Page Number: 6 of 9 5 miles NE of Eunice, N.M.

		LCS	5			Spike	Ma	trix		F	Rec.
Para <u>m</u>		Resu		Units	Dil.	Amount	Res	sult	Rec.	<u>L</u>	imit
DRO		289	r	ng/Kg	1	250	<1	4.6	116	47.5	- 144.1
Percent recovery is based	on the s	pike result.	RPD is	based o	on the spike	and spike	duplicate	e resul	t.		
		LCSD			Spike	Matrix		F	Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	\mathbf{L}	imit	RPD	Limit
DRO		277	mg/Kg	1	250	<14.6	111	47.5	- 144.1	4	20
Percent recovery is based	on the s	pike result.	RPD is	based o	on the spike	and spike	duplicate	e resul	t.		
	LCS	LCSD				Spike	LC	S	LCSD	F	Rec.
Surrogate	Result	Result	U	Inits	Dil.	Amount	Rec	; .	Rec.		imit
n-Triacontane	116	110	m	g/Kg	1	150	77		73	57.3	- 131.6
QC Batch: 37777 Prep Batch: 32707				.nalyzed eparatio		=				yzed By ared By:	
		LCS	3			Spike	Ma	trix		F	Rec.
Param		Resu		Units	Dil.	Amount		sult	Rec.		imit
GRO		8.18		ng/Kg	1	10.0		739	82	57.7	- 102.
Percent recovery is based	on the s	pike result.	RPD is	based o	on the spike	and spike	duplicate	e resul	t.		
		LCSD			Spike	Matrix		F	Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	L	imit	RPD	Limi
GRO		7.90	mg/Kg	1	10.0	< 0.739	79	57.7	- 102.5	4	20
Percent recovery is based	on the s	pike result.	RPD is	based o	on the spike	and spike	duplicate	e resul	t.		
		LCS	LC	CSD		Sp	ike	LCS	LCSD	F	Rec.
Surrogate		Resul	t Re	sult			ount	Rec.	Rec.	\mathbf{L}	imit
Trifluorotoluene (TFT)		1.15			mg/Kg		.00	115	114	36.8	- 152.
4-Bromofluorobenzene (4	-BFB)	0.907	7 0.9	904	mg/Kg	1 1.	.00	91	90	70	- 130
Matrix Spike (MS-1) QC Batch: 37759	Spiked	l Sample: 12	Date A	.nalyzed eparatio		-				yzed By ared By:	
Prep Batch: 32716											
Prep Batch: 32716		MS				Spike	Ma	trix		F	}ec.
Prep Batch: 32/16 Param		MS Resu		Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Ma Res		Rec.		Rec. imit

mg/KgPercent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Units

Dil.

1

Spike

Amount

250

Matrix

Result

<13.4

Rec.

Rec.

Limit

29.7 - 168.6

RPD

Limit

20

RPD

38

MSD

Result

240

Param

 $\overline{\mathrm{DRO}}$

¹RPD is out of control limits. Use LCS/LCSD to demonstrate analysis is under control. •

Work Order: 7053117 Apache Elliot Federal Lease Page Number: 7 of 9 5 miles NE of Eunice, N.M.

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	\mathbf{Result}	Result	Units	Dil.	Amount	Rec.	${ m Rec.}$	${f Limit}$
n-Triacontane	122	128	$_{ m mg/Kg}$	1	150	81	85	43.4 - 193.9

Matrix Spike (MS-1) Spiked Sample: 126052

QC Batch: 37769 Prep Batch: 32725 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: MS

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	${f Limit}$
DRO	332	mg/Kg	1	250	<14.6	133	11.7 - 152.3

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
DRO	342	mg/Kg	1	250	<14.6	137	11.7 - 152.3	3	20

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

	MS	MSD			\mathbf{Spike}	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
n-Triacontane	112	112	mg/Kg	1	150	75	75	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 125955

QC Batch: 37777 Prep Batch: 32707 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01

Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		${ m Rec.}$
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	Limit
GRO	6.37	${ m mg/Kg}$	1	10.0	0.993	54	10 - 141.5

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	5.98	mg/Kg	1	10.0	0.993	50	10 - 141.5	6	20

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

	MS	MSD			\mathbf{Spike}	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.700	0.708	mg/Kg	1	1	70	71	40 - 125.3
4-Bromofluorobenzene (4-BFB)	0.992	0.979	${ m mg/Kg}$	1	1	99	98	86.7 - 144.5

Standard (ICV-1)

QC Batch: 37759

 $Date\ Analyzed:\ \ 2007\text{-}05\text{-}31$

Analyzed By: AG

Param

 $\overline{\text{GRO}}$

Flag

Units

mg/Kg

Conc.

1.00

Conc.

1.05

Recovery

105

Limits

85 - 115

Work Order: 7053117 Apache Elliot Federal Lease Page Number: 8 of 9 5 miles NE of Eunice, N.M.

Analyzed 2007-06-01

Apache Ell	liot Federal		Apache	Elliot Federal I	⊿ease	5 miles NE	of Eunice, N.M.
Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	104	85 - 115	2007-05-31
Standard	(CCV-1)						
QC Batch:	37759		Date Ana	alyzed: 2007-0	5-31	Anal	lyzed By: AG
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		${ m mg/Kg}$	250	230	92	85 - 115	2007-05-31
Standard	(CCV-2)						
QC Batch:	37759		Date Ana	alyzed: 2007-0	5-31	Anal	lyzed By: AG
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		${ m mg/Kg}$	250	260	104	85 - 115	2007-05-31
Standard	(CCV-1)						
QC Batch:	37769		Date Ana	alyzed: 2007-0	6-01	Anal	yzed By: AG
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	269	108	85 - 115	2007-06-01
Standard	(CCV-2)						
QC Batch:	37769		Date Ana	alyzed: 2007-0	6-01	Anal	lyzed By: AG
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	254	102	85 - 115	2007-06-01
Standard	(ICV-1)						
QC Batch:	37777		Date Ana	alyzed: 2007-0	6-01	Anal	lyzed By: AG
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Damana	Elem	TIm:4a	Cone	Cono	Doggreen	T::4a	A1 1

Work Order: 7053117 Apache Elliot Federal Lease Page Number: 9 of 9 5 miles NE of Eunice, N.M.

Standard (CCV-1)

QC Batch: 37777

Date Analyzed: 2007-06-01

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	${ m Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.01	101	85 - 115	2007-06-01

ноп 6015 Harris Pkwy, Suite 110 Ft. Worth, Texas 76132 Tel (817) 201-5260 Turn Around Time if different from standard ਰ é Circle or Specify Method ahlo sidu Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required Moisture Content **ANALYSIS REQUEST** 200 East Sunsel Rd., Suite E El Paso, Texas 79922 Tel (915) 565-3443 Fax (915) 565-944 1 (888) 568-3443 BOD, TSS, pH Pesticides 8081A / 608 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS CC/W2 API 8560B / 654 **BCI** TCLP Pesticides ş TCLP Semi Volatiles TCLP Volatiles 5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313 TCLP Metals Ag As Ba Cd Cr Pb Se Hg LAB USE Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 XINO ONLX 05311 PAH 8270C / 625 Log-In-Review TPH 8015 GRO / DRO TVHC TPH 418 1 / TX1005 / TX1005 Ext(C35) Carrier # BIEX 8021B / 602 / 8260B / 624 8021B / 602 / 8260B / 624 **BATM** 6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tet (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298 SAMPLING **TIME** U 70°. rrounsaille enoutreining **DATE** S/(3/107 FEDERAR NONE PRESERVATIVE Submittal of samples constitutes agreement to Term's and Conditions listed on reverse side of C. O. C. METHOD ICE 7720 er Signature: NaOH Date: ⁵OS^ZH Project Name 520-^EONH ELIVOT Phone #: HCI E-mail: Fax #: SCUDGE MATRIX 40kh ЯIА TraceAnalysis, Inc. TIOS \succ **MATER** email: lab@traceanalysis.com Received by Received by Call t 1 Volume / Amount ۲ # CONTAINERS Contact Person: Row Rouns Aville Fime: NovA SAETY (Street, City, Zip) Ewnice FIELD CODE Project Location (including state) 25981 11 Wal (If different from above) SEATING DA Relinquished by Company Name: Relinguished miles 70 2,5,43 LAB USE ONLY Invoice to: Project #: LAB# Address

OPIGINAL COPY

Work Order: 7053107 Apache Elliot Federal Lease Page Number: 1 of 1 5 miles NE of Eunice, N.M.

Summary Report

Julie Koonce Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: June 5, 2007

Work Order: 7053107

Project Location: 5 miles NE of Eunice, N.M.
Project Name: Apache Elliot Federal Lease

			\mathbf{Date}	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
$\overline{125955}$	NE FLR-12'	soil	2007-05-30	16:40	2007-05-31
125957	SE FLR-12'	soil	2007-05-30	16:37	2007-05-31

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
125955 - NE FLR-12'	< 50.0	<1.00
125957 - SE FLR-12'	< 50.0	< 1.00

Sample: 125955 - NE FLR-12'

Param	Flag	Result	Units	RL
Chloride		59.3	mg/Kg	2.00

Sample: 125957 - SE FLR-12'

Param	Flag	Result	Units	RL
Chloride		84.0	mg/Kg	2.00



3791 At arcent Avenue, Suite 9 200 Euri Simpet Road Suite E biful/ Sasir Staret, Suite A 3015 hards Parkway State 110 Ft. Worth Texas 75132

Lubbuck, Texas 79474 El Past, Texas 73922 Midlant Jouan 797.08

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817*331*5286

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Analytical and Quality Control Report

Julie Koonce Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: June 5, 2007

Work Order: 7053107

Project Location: 5 miles NE of Eunice, N.M. Apache Elliot Federal Lease Project Name: Apache Elliot Federal Project Number:

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
125955	NE FLR-12'	soil	2007-05-30	16:40	2007-05-31
125957	SE FLR-12'	soil	2007-05-30	16:37	2007-05-31

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Apache Elliot Federal Lease were received by TraceAnalysis, Inc. on 2007-05-31 and assigned to work order 7053107. Samples for work order 7053107 were received intact at a temperature of 4 deg C.

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

Test	Method
Chloride (Titration)	SM 4500-Cl B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 7053107 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.

Work Order: 7053107 Apache Elliot Federal Lease

Page Number: 3 of 8 5 miles NE of Eunice, N.M.

Analytical Report

Sample: 125955 - NE FLR-12'

Analysis:

Chloride (Titration)

QC Batch: 37817 Prep Batch: 32758 Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B

2007-06-05

Prep Method: N/AAnalyzed By: ARPrepared By: AR

RL

Flag Result Parameter Units Dilution RL59.3 mg/Kg 25 2.00 Chloride

Sample: 125955 - NE FLR-12'

Analysis: QC Batch: Prep Batch:

TPH DRO 37759 32716

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2007-05-31 2007-05-31

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

Prepared By: AG

RL

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

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits n-Triacontane 104 mg/Kg 1 150 69 61.7 - 143.2

Sample: 125955 - NE FLR-12'

Analysis: QC Batch: Prep Batch: TPH GRO 37777 32707

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2007-06-01 2007-06-01

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

RLParameter Flag Result Units Dilution RL $\overline{\text{GRO}}$ <1.00 mg/Kg 1.00

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits 0.774 Trifluorotoluene (TFT) mg/Kg 1 1.00 77 52.4 - 123.7 4-Bromofluorobenzene (4-BFB) 0.942mg/Kg 1 1.00 9467.5 - 140.3

Sample: 125957 - SE FLR-12'

Analysis: QC Batch: Chloride (Titration)

37817 Prep Batch: 32758

Analytical Method: Date Analyzed: Sample Preparation: SM 4500-Cl B 2007-06-05

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

RL

Parameter Flag Result Units Dilution RLChloride 84.0 mg/Kg 25 2.00

Work Order: 7053107 Apache Elliot Federal Lease Page Number: 4 of 8 5 miles NE of Eunice, N.M.

Sample: 125957 - SE FLR-12'

Analysis: TPH DRO QC Batch: 37759 Prep Batch: 32716 Analytical Method: Mod. 8015B Date Analyzed: 2007-05-31 Sample Preparation: 2007-05-31 Prep Method: N/A Analyzed By: AG Prepared By: AG

RL rameter Flag Result

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits n-Triacontane 61.7 - 143.2 104 mg/Kg 1 150 69

Sample: 125957 - SE FLR-12'

Analysis: TPH GRO QC Batch: 37777 Prep Batch: 32707 $\begin{array}{lll} \mbox{Analytical Method:} & \mbox{S 8015B} \\ \mbox{Date Analyzed:} & 2007\text{-}06\text{-}01 \\ \mbox{Sample Preparation:} & 2007\text{-}06\text{-}01 \end{array}$

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

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits Trifluorotoluene (TFT) 0.772 mg/Kg $\overline{1}$ 1.00 77 52.4 - 123.7 4-Bromofluorobenzene (4-BFB) 0.938mg/Kg 1 1.00 9467.5 - 140.3

Method Blank (1) QC Batch: 37759

QC Batch: 37759 Prep Batch: 32716 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AG Prepared By: MS

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits n-Triacontane 112 mg/Kg 1 150 75 61.7 - 143.2

Method Blank (1) QC Batch: 37777

QC Batch: 37777 Prep Batch: 32707 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: AG

Work Order: 7053107 Apache Elliot Federal Lease Page Number: 5 of 8 5 miles NE of Eunice, N.M.

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.886	mg/Kg	1	1.00	89	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.810	m mg/Kg	1	1.00	81	67.5 - 140.3

Method Blank (1)

QC Batch: 37817

QC Batch: 37817 Prep Batch: 32758 Date Analyzed: 2007-06-05

Analyzed By: AR

QC Preparation: 2007-06-05

Prepared By: AR

		MDL		
Parameter	Flag	Result	${f Units}$	RL
Chloride		< 0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch: 37759 Prep Batch: 32716 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31

Analyzed By: AG Prepared By: MS

	LCS			\mathbf{Spike}	Matrix		${ m Rec.}$
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	$_{ m Limit}$
DRO	237	mg/Kg	1	250	<13.4	95	62.5 - 135.4

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.	\mathbf{Limit}	RPD	Limit
DRO	195	mg/Kg	1	250	<13.4	78	62.5 - 135.4	19	20

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

	LCS	LCSD			\mathbf{Spike}	LCS	LCSD	${ m Rec.}$
Surrogate	Result	Result	$_{ m Units}$	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
n-Triacontane	105	102	mg/Kg	1	150	70	68	66.6 - 140.9

Laboratory Control Spike (LCS-1)

QC Batch: 37777 Prep Batch: 32707 Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$
GRO	8.18	mg/Kg	1	10.0	< 0.739	82	57.7 - 102.5

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	7.90	mg/Kg	1	10.0	< 0.739	79	57.7 - 102.5	4	20

Work Order: 7053107 Apache Elliot Federal Lease Page Number: 6 of 8 5 miles NE of Eunice, N.M.

Surrogate	$rac{ ext{LCS}}{ ext{Result}}$	$\begin{array}{c} \text{LCSD} \\ \text{Result} \end{array}$	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.15	1.14	mg/Kg	1	1.00	115	114	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.907	0.904	mg/Kg	1	1.00	91	90	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 37817 Prep Batch: 32758 Date Analyzed: 2007-06-05 QC Preparation: 2007-06-05 Analyzed By: AR Prepared By: AR

	LCS			Spike	Matrix		Rec.
Param	Result	${f Units}$	Dil.	Amount	Result	Rec.	Limit
Chloride	102	mg/Kg	1	100	< 0.500	102	85 - 115

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

	LCSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	103	mg/Kg	1	100	< 0.500	103	85 - 115	1	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: 125955

QC Batch: 37759 Prep Batch: 32716 Date Analyzed: 2007-05-31 QC Preparation: 2007-05-31 Analyzed By: AG Prepared By: MS

	MS			Spike	Matrix		Rec.
Param	Result	${ m Units}$	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	352	mg/Kg	1	250	<13.4	141	29.7 - 168.6

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

		MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	1	240	mg/Kg	1	250	<13.4	96	29.7 - 168.6	38	20

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

	MS	MSD			$_{ m Spike}$	MS	MSD	Rec.
Surrogate	Result	Result	$_{ m Units}$	Dil.	Amount	Rec.	$\mathrm{Rec}.$	Limit
n-Triacontane	122	128	mg/Kg	1	150	81	85	43.4 - 193.9

Matrix Spike (MS-1) Spiked Sample: 125955

QC Batch: 37777 Prep Batch: 32707 Date Analyzed:

Date Analyzed: 2007-06-01 QC Preparation: 2007-06-01 Analyzed By: AG Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
GRO	6.37	mg/Kg	1	10.0	0.993	54	10 - 141.5

¹RPD is out of control limits. Use LCS/LCSD to demonstrate analysis is under control •

Work Order: 7053107 Apache Elliot Federal Lease

Page Number: 7 of 8 5 miles NE of Eunice, N.M.

	MSD			Spike	Matrix		${ m Rec.}$		RPD
Param	Result	${ m Units}$	Dil.	Amount	Result	Rec.	$_{ m Limit}$	RPD	Limit
GRO	5.98	mg/Kg	1	10.0	0.993	50	10 - 141.5	6	20

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

	MS	MSD			$_{ m Spike}$	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.700	0.708	mg/Kg	1	1	70	71	40 - 125.3
4-Bromofluorobenzene (4-BFB)	0.992	0.979	mg/Kg	1	1	99	98	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 125955

QC Batch: 37817 Prep Batch: 32758 Date Analyzed: 2007-06-05 QC Preparation: 2007-06-05 Analyzed By: AR Prepared By: AR

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
Chloride	2590	mg/Kg	25	2500	59.289	101	85 - 115

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

	MSD			Spike	Matrix		$\mathrm{Re}c.$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	$_{ m Limit}$
Chloride	2610	${ m mg/Kg}$	25	2500	59.289	102	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: 37759

Date Analyzed: 2007-05-31

Analyzed By: AG

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	${f Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	259	104	85 - 115	2007-05-31

Standard (CCV-1)

QC Batch: 37759

Date Analyzed: 2007-05-31

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	230	92	85 - 115	2007-05-31

Standard (ICV-1)

QC Batch: 37777

 $Date\ Analyzed:\ \ 2007\text{-}06\text{-}01$

Analyzed By: AG

Work Order: 7053107 Apache Elliot Federal Lease Page Number: 8 of 8 5 miles NE of Eunice, N.M.

Param	Flag	${ m Units}$	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.05	105	85 - 115	2007-06-01

Standard (CCV-1)

QC Batch: 37777

Date Analyzed: 2007-06-01

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	${f Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.01	101	85 - 115	2007-06-01

Standard (ICV-1)

QC Batch: 37817

Date Analyzed: 2007-06-05

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2007-06-05

Standard (CCV-1)

QC Batch: 37817

Date Analyzed: 2007-06-05

Analyzed By: AR

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	98.4	98	85 - 115	2007-06-05

LAB Order ID #___7053(07

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

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Page Number: 1 of 1 5 miles NE of Eunice, N.M.

Summary Report

Julie Koonce

Nova Safety & Environmental

2057 Commerce St. Midland, TX, 79703

Report Date: June 7, 2007

Work Order: 7060124

Project Name:

Project Location: 5 miles NE of Eunice, N.M. Apache Elliot Federal Lease

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
126130	East Wall, 14'	soil	2007-05-31	14:15	2007-06-01
126131	Backfill-1	soil	2007-05-31	18:20	2007-06-01
126132	Backfill-2	soil	2007-05-31	18:22	2007-06-01

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
126130 - East Wall, 14'	< 50.0	10.1
126131 - Backfill-1	<50.0	3.09
126132 - Backfill-2	< 50.0	1.82

Sample: 126130 - East Wall, 14'

Param	Flag	Result	Units	RL
Chloride		170	m mg/Kg	2.00

Sample: 126131 - Backfill-1

Param	Flag	Result	${ m Units}$	RL
Chloride		121	mg/Kg	2.00

Sample: 126132 - Backfill-2

Param	Flag	Result	${\bf Units}$	RL
Chloride		84.0	mg/Kg	2.00



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817*,131*5260

1AX 432*389*8913

Analytical and Quality Control Report

Julie Koonce Nova Safety & Environmental 2057 Commerce St. Midland, TX, 79703

Report Date: June 7, 2007

Work Order:

7060124

Project Location: 5 miles NE of Eunice, N.M. Project Name: Apache Elliot Federal Lease Project Number: Apache Elliot Federal

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
126130	East Wall, 14'	soil	2007-05-31	14:15	2007-06-01
126131	Backfill-1	soil	2007-05-31	18:20	2007-06-01
126132	Backfill-2	soil	2007-05-31	18:22	2007-06-01

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

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Apache Elliot Federal Lease were received by TraceAnalysis, Inc. on 2007-06-01 and assigned to work order 7060124. Samples for work order 7060124 were received intact at a temperature of 4 deg C.

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

Test	Method
Chloride (Titration)	SM 4500-Cl B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 7060124 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.

Work Order: 7060124 Apache Elliot Federal Lease

Page Number: 3 of 9 5 miles NE of Eunice, N.M.

Analytical Report

Sample: 126130 - East Wall, 14'

Analysis:

Chloride (Titration)

QC Batch: 37817 Prep Batch: 32758

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B

2007-06-05

Prep Method: Analyzed By: AR

Prepared By: AR

N/A

RL

Result Units Dilution RLParameter Flag Chloride 170 2.00 mg/Kg 25

Sample: 126130 - East Wall, 14'

Analysis: QC Batch: Prep Batch: TPH DRO 37769 32725

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2007-06-01 2007-06-01

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

AG AG

RL

Parameter Flag Result Units Dilution RLDRO <50.0 mg/Kg 50.0

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits 109 mg/Kg 15073 32.9 - 167 n-Triacontane 1

Sample: 126130 - East Wall, 14'

Analysis: QC Batch: Prep Batch: TPH GRO 37779 32707

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2007-06-02 2007-06-01

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

RL

Result Parameter Flag Units Dilution RL \overline{GRO} 10.1 mg/Kg 1.00

Spike Percent Recovery Flag Result Units Dilution Surrogate Amount Recovery Limits Trifluorot oluene (TFT) 0.629 mg/Kg 1 1.00 63 52.4 - 123.7 4-Bromofluorobenzene (4-BFB) 0.947mg/Kg 1 1.00 95 67.5 - 140.3

Sample: 126131 - Backfill-1

32758

Analysis: QC Batch: Prep Batch:

Parameter

Chloride

Chloride (Titration) 37817

Flag

Analytical Method: Date Analyzed:

SM 4500-Cl B 2007-06-05

Prep Method: N/A Analyzed By: ARAR

Sample Preparation:

Prepared By:

RLResult Units Dilution RL121 mg/Kg $\overline{25}$ 2.00

Work Order: 7060124 Apache Elliot Federal Lease Page Number: 4 of 9 5 miles NE of Eunice, N.M.

Sample: 126131 - Backfill-1

Analysis: TPH DRO QC Batch: 37769 Prep Batch: 32725 $\begin{array}{lll} \mbox{Analytical Method:} & \mbox{Mod. 8015B} \\ \mbox{Date Analyzed:} & 2007\text{-}06\text{-}01 \\ \mbox{Sample Preparation:} & 2007\text{-}06\text{-}01 \end{array}$

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

				m RL					
Parameter	Fl	ag		Result	Units		Dilution	RL	
DRO			<50.0 mg		mg/Kg		1	50.0	
	70	_	1.	TT 1.	Dil d	Spike	Percent	Recovery	

Surrogate	Flag	Result	${ m Units}$	Dilution	Amount	Recovery	Limits
n-Triacontane		112	mg/Kg	1	150	75	32.9 - 167

Sample: 126131 - Backfill-1

Analysis: TPH GRO QC Batch: 37779 Prep Batch: 32707 Analytical Method: S 8015B
Date Analyzed: 2007-06-02
Sample Preparation: 2007-06-01

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

Parameter	Flag	$rac{ ext{RL}}{ ext{Result}}$	Units		Dilution	m RL
GRO	В	3.09	mg/Kg		1	1.00
				Spike	Percent	Recovery

					Spike	$\operatorname{Percent}$	$\operatorname{Recovery}$
Surrogate	\mathbf{Flag}	Result	${f Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.774	mg/Kg	1	1.00	77	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.01	${ m mg/Kg}$	1	1.00	101	67.5 - 140.3

Sample: 126132 - Backfill-2

Analysis: Chloride (Titration)
QC Batch: 37817
Prep Batch: 32758

Analytical Method: SM 45
Date Analyzed: 2007-0
Sample Preparation:

		RL			
Parameter	${f Flag}$	Result	Units	Dilution	RL
Chloride		84.0	m mg/Kg	25	2.00

Sample: 126132 - Backfill-2

Analysis: TPH DRO QC Batch: 37769 Prep Batch: 32725 Analytical Method: Mod. 8015B Date Analyzed: 2007-06-01 Sample Preparation: 2007-06-01

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

		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0

Work Order: 7060124 Apache Elliot Federal Lease

Page Number: 5 of 9 5 miles NE of Eunice, N.M.

Surrogate	Flag	Result	Units	Dil	ution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	Tiag	118	mg/Kg		1	150	79	32.9 - 167
			<u> </u>					
Sample: 126132	- Backfill-	2						
Analysis: TPH	GRO		Analytica	l Method:	S 8015B		Prep Me	ethod: S 5035
QC Batch: 37779			Date Ana		2007-06-0	_	Analyze	
Prep Batch: 3270	7		Sample P	reparation:	2007-06-0	1	Prepare	d By: AG
Parameter	Fla	r.	$rac{ ext{RL}}{ ext{Result}}$		Units		Dilution	m RL
GRO	B	<u> </u>	1.82		mg/Kg		1	1.00
0110					0/0			
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (T	FT)	+ 1005	0.780	mg/Kg	1	1.00	78	52.4 - 123.7
4-Bromofluorobenz)	0.963	m mg/Kg	1	1.00	96	67.5 - 140.3
Prep Batch: 3272: Parameter		Flag		MDL Result		Ur	nits	ared By: MS RL
DRO				<14.6	3	mg	/Kg	50
Surrogate	Flag	Result	Units	Dilu	tion	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg		1	150	75	44.7 - 133.6
Method Blank (1 QC Batch: 3777	9	Batch: 37779	Date Ana QC Prep.	•	007-06-02 007-06-01		Analy Prepa	vzed By: AG
Prep Batch: 3270	7		•					ned by. AG
	7	Flag		MDL Result		Uı	nits	RL
Prep Batch: 3270	7	Flag		MDL	i		•	ū
Prep Batch: 3270 Parameter GRO	7			MDI Result 0.912	: !	mg Spike	nits /Kg Percent	RL 1
Prep Batch: 3270 Parameter		Flag Flag	Result 0.884	MDL Result	i	mg Spike	nits /Kg	RL 1

Work Order: 7060124 Apache Elliot Federal Lease

Page Number: 6 of 9 5 miles NE of Eunice, N.M.

Method Blank (1)

QC Batch: 37817

QC Batch: Prep Batch: 32758

37817

Date Analyzed:

2007-06-05

Analyzed By: AR

QC Preparation: 2007-06-05

Prepared By: AR

MDL

Parameter	Flag	Result	Units	RL
Chloride		< 0.500	mg/Kg	2

Laboratory Control Spike (LCS-1)

QC Batch:

37769

Date Analyzed:

2007-06-01

Analyzed By: AG

Prep Batch: 32725

QC Preparation: 2007-06-01

Prepared By: MS

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	289	mg/Kg	1	250	<14.6	116	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	277	${ m mg/Kg}$	1	250	<14.6	111	47.5 - 144.1	4	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.	${ m Rec.}$	Limit
n-Triacontane	116	110	mg/Kg	1	150	77	73	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch:

37779 Prep Batch: 32707 Date Analyzed:

2007-06-02 QC Preparation: 2007-06-01

Analyzed By: AG Prepared By: AG

	LCS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$
GRO	8.21	mg/Kg	i	10.0	< 0.739	82	57.7 - 102.5

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	9.51	mg/Kg	1	10.0	< 0.739	95	57.7 - 102.5	15	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)	1.15	1.13	mg/Kg	1	1.00	115	113	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.911	0.981	${ m mg/Kg}$	1	1.00	91	98	70 - 130

Work Order: 7060124 Apache Elliot Federal Lease

Page Number: 7 of 9 5 miles NE of Eunice, N.M.

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch: 32758

37817

Date Analyzed:

2007-06-05 QC Preparation: 2007-06-05

Analyzed By: AR Prepared By: AR

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Chloride 102 mg/Kg 100 < 0.500 102 85 - 115

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

	LCSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	Limit
Chloride	103	mg/Kg	1	100	< 0.500	103	85 - 115	1	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: 126052

QC Batch: Prep Batch:

37769 32725 Date Analyzed:

QC Preparation:

2007-06-01 2007-06-01 Analyzed By: AG

Prepared By: MS

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$
DRO	332	mg/Kg	1	250	<14.6	133	11.7 - 152.3

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	$_{ m Limit}$
DRO	342	mg/Kg	1	250	<14.6	137	11.7 - 152.3	3	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
n-Triacontane	112	112	mg/Kg	1	150	75	75	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 126051

OC Batch: Prep Batch:

37779 32707 Date Analyzed:

2007-06-02 QC Preparation: 2007-06-01 Analyzed By: AG

Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$
GRO	8.94	mg/Kg	1	10.0	4.53	44	10 - 141.5

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.	\mathbf{Limit}	RPD	Limit
GRO	7.63	mg/Kg	1	10.0	4.53	31	10 - 141.5	16	20

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

Work Order: 7060124 Apache Elliot Federal Lease Page Number: 8 of 9 5 miles NE of Eunice, N.M.

Surrogate	$rac{ ext{MS}}{ ext{Result}}$	$\begin{array}{c} \text{MSD} \\ \text{Result} \end{array}$	Units	Dil.	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.661	0.648	mg/Kg	1	1	66	65	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.07	1.07	${ m mg/Kg}$	1	1	107	107	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 125955

QC Batch: 37817 Prep Batch: 32758 Date Analyzed: 2007-06-05 QC Preparation: 2007-06-05 Analyzed By: AR Prepared By: AR

	MS			\mathbf{Spike}	Matrix		Rec .
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	2590	mg/Kg	25	2500	59.289	101	85 - 115

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

	MSD			Spike	Matrix		${ m Rec.}$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	2610	mg/Kg	25	2500	59.289	102	85 - 115	1	20

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

Standard (CCV-1)

QC Batch: 37769

Date Analyzed: 2007-06-01

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	\mathbf{Date}
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	269	108	85 - 115	2007-06-01

Standard (CCV-2)

QC Batch: 37769

Date Analyzed: 2007-06-01

Analyzed By: AG

			CCVs	CCVs	CCVs	$\mathbf{Percent}$	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	254	102	85 - 115	2007-06-01

Standard (ICV-1)

QC Batch: 37779

Date Analyzed: 2007-06-02

Analyzed By: AG

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.09	109	85 - 115	2007-06-02

Standard (CCV-1)

QC Batch: 37779

Date Analyzed: 2007-06-02

Analyzed By: AG

Work Order: 7060124 Apache Elliot Federal Lease Page Number: 9 of 9 5 miles NE of Eunice, N.M.

			CCVs True	$\begin{array}{c} { m CCVs} \\ { m Found} \end{array}$	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.928	93	85 - 115	2007-06-02

Standard (ICV-1)

QC Batch: 37817

Date Analyzed: 2007-06-05

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	$\mathbf{Analyzed}$
Chloride		mg/Kg	100	102	102	85 - 115	2007-06-05

Standard (CCV-1)

QC Batch: 37817

Date Analyzed: 2007-06-05

Analyzed By: AR

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	98.4	98	85 - 115	2007-06-05

PIOH 6015 Harris Pkwy., Suite 110 Ft. Worth, Texas 76132 Tel (817) 201-5260 Turn Around Time if different from standard ō Š Dry Weight Basis Required Check If Special Reporting Limits Are Needed or Specify Method Chlorides TRRP Report Required Moisture Content **ANALYSIS REQUEST** 200 East Sunset Rd , Suite E El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-34944 1 (888) 588-3443 Hq ,88T ,008 Pesticides 8081A / 608 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS GC/MS API 8260B / 624 RCI TCLP Pesticides TCLP Semi Volatiles 0 TCLP Volatiles Circ 5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313 TCLP Metals Ag As Ba Cd Cr Pb Se Hg LAB USE Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 og-n-Review 7060124 TPH 8015 GRO / DRO /TVHC TPH 418 1 / TX1005 / TX1005 Ext(C35) Carrier # BTEX 8021B / 602 / 8260B / 624 8021B / 602 / 8260B / 624 MTBE 2/31/18/820 2681 FAIR 6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (860 7794-1296 Fax (805) 724-1298 1 (800) 378-1296 7131/04 141S SAMPLING TIME 8 ¥ 90. **3TA0** LAB Order ID # R N a novatraining Time ime: NONE PRESERVATIVE Ö -7720 × METHOD ICE #5.1.6 Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. Date: HOeN Date: OS2H 40,77 Project Name 025 Phone #: HCI rrounsaille Fax #: ORIGINAL COPY SUDDE MATRIX AIR TraceAnalysis, Inc. SOIL **MATER** Received by: Received by: NOUT ENVIRONMENTAL email: lab@traceanalysis.com 70% 402 Volume \ Amount # CONTAINERS 7201 Time: Time: EAST WALL , 14 FIELD CODE Project Location (including state): 2 3 If different from above) Relinguished by: Relinquished by: Contact Person: Emika Company Name 9 2 2 LAB USE) ر د ا nvoice to Project #: LAB# Address:

APPENDIX B: Site Photographs



Photographic Documentation

Client: Apache Corporation

Site Location: Lea County, New Mexico

Photograph Date: As Noted

Prepared by: NOVA

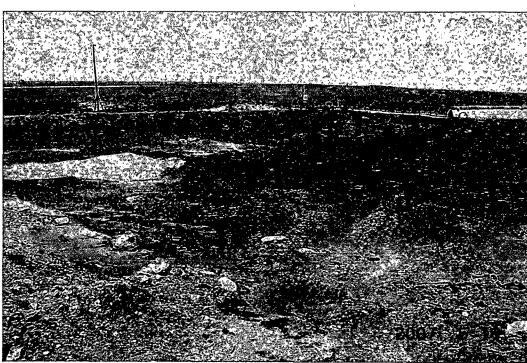
Photographer: Ron Rounsaville Project Name: Elliott Federal Lease

Photograph No. 1

Date: 05/10/07

Direction: Northwest

Description: View of tank battery after equipment removal and prior to excavation activities.

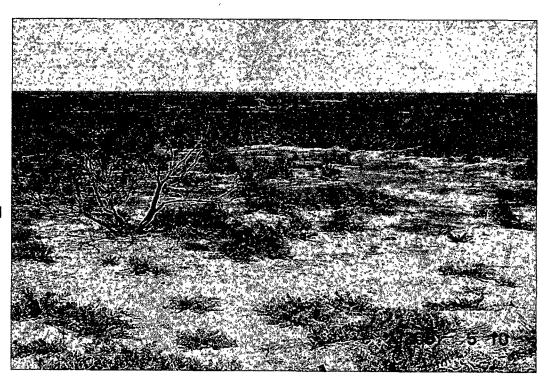


Photograph No. 2

Date: 05/10/07

Direction: West

Description: View of asphaltene impacted soil area located west of the former tank battery.





Photographic Documentation

Client: Apache Corporation
Site Location: Lea County, New Mexico Photograph Date: As Noted

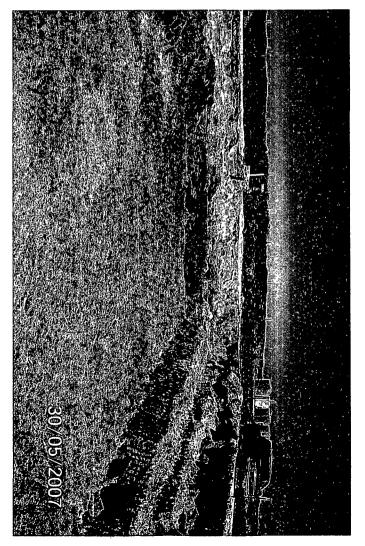
Prepared by: NOVA
Photographer: Ron Rounsaville Project Name: Elliott Federal Lease

Photograph No. 3

Direction: East

Date: 05/10/07

excavation area. former tank battery Description: View of

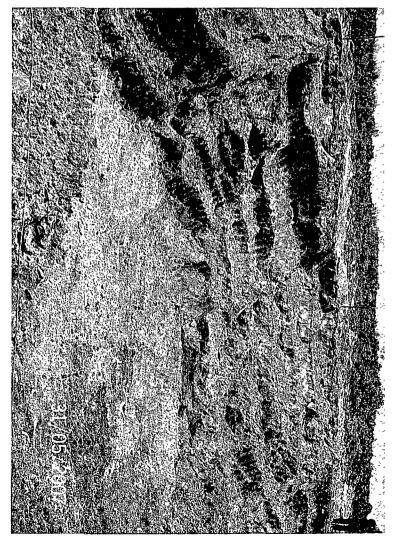


Photograph No. 4

Date: 05/10/07

Direction: Northwest.

area following removal asphaltene excavation Description: View of of impacted soil.





Photographic Documentation

Client: Apache Corporation

Site Location: Lea County, New Mexico

Photograph Date: As Noted

Prepared by: NOVA

Photographer: Ron Rounsaville Project Name: Elliott Federal Lease

Photograph No. 5

Date: 05/30/07

Direction: Northeast.

Description: View of tank battery excavation area following backfilling activities.



Photograph No. 6

Date: 05/24/07

Direction: West

Description: View of asphaltene excavation area following backfill placement.



APPENDIX C: Release Notification and Corrective Action, Form C-141 District III
1000 Rto Brazos Roze, Azese, VIA 87410
District IV
1000 Rto Brazos Roze, Azese, VIA 87410
District IV
1220 N. St. Francis Dr., Janua I.a, 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 I Copies to appropriate
District Office in secondance
with Rule 116 on back
side of form

Release Notification	a and Corrective Action									
	OPERATOR Initial Report Final Re	port								
	Contact Larry Johnson Hest Message									
	Telephone No. (505) 343-4440 Ext. 111									
Facility Name (1110 + Federal Gattery	Facility Type Oil, GAS, water									
Surface Owner FEDERAL Mineral Owner	Lease No. AM#AML(06 ST)	.5 <i>]</i> 9								
LOCATIO	N OF RELEASE									
Upic Letter Scinn Inwaship Range Feet from the North	/South Line Peet from the East/West Line County									
T 1 215 375	Lea									
Latitude	LatitudeLongitude									
NATURE	OF RELEASE									
Type of Release 1	Volume of Release 388 Volume Recovered 257									
Source of Release	Date and Hour of Occurrence Date and Hour of Discovery If YES, To Whom?									
Was Immediate Notice G win? Yes No Not Required		1								
By Whom? YAGEY Marting 2	Date and Hour									
Was a Watercour o Reached?	If YES, Volume Impacting the Watercourse.	-								
☐ Yes ☑ No	1 / /A									
If a Watercourse vis Impacted, Describe Pully.*		\neg								
- 11		Į								
n/A										
Describe Cause of Prehit m and Remedial Action Taken.* Hole	n Bottom of tank									
		1								
The colors Arms & factors and Cleanum Action Taken * Q	The Control of Control	-								
Describe uses y verses into ensure transmit Lat 2500	on Pad to Soak up smill amount of to Remodiate.									
1 011 50 the could kenous top soil	to kempalate.	1								
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 eye ators are required to report and/or file certain release	notifications and perform corrective actions for releases which may endanger the NMOCD marked as "Final Report" does not relieve the operator of liability	1								
I want to a large to the a failed to adaptively investigate and remedia	he comamination that dose a threat to brown: water, surface water, builded deri	th								
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 ocal la vs and/or regulations.	OIL CONSERVATION DIVISION									
n' molos										
Signature: 2.12 de Malan	Approved by District Supervisor:	1								
Printed Name: / Akier Martinez	Approved by District Supervisor:	į								
} ~	Approval Date: 4.5.07 Expiration Date: 8.5.07									
Title: Pumper										
E-mail Address	Conditions of Approval:									
Date: 1-5-07 Phone: (501)394-1503	Final C.141 KERD 34									
* Attach Additional Shac's If Necessary	~ 11									
31M TRICH BADZEAR HERZETDS	ITE & MONITORD CLEANUP QUITE	05								
with the control of the transfer of		12								
	140	ري								

District |

1625 N. French Dr., Hobbs, NM 88240

Energy Minerals and Natural Resources

State of New Mexico

Form C-141 Revised October 10, 2003

District II

1301 W. Grand Avenue, Artiesa, NM 88210

1000 Rio Brazos Road, Aztec, NM 87410

Oil Conservation Division

Submit 2 Copies to appropraite District Office in accordance

District IV					iouth St. Francis I				with R	lule 116 on back
1220 S. St. Fra	ancis Dr., Sant	a Fe, NM 8750	•	Sanf	ta Fe, NM 97505				***	side of form
			Relaes	e Notifica	ition and Corr	rectiv	e Action			
			•		OPERATOR		☐ Ir	nitial Report	V	Final Report
Name of Cor	npany	Ара	che Corpoi	ration	Contact			Guinn B	urks	
Address			x 728, Cran		Telephone No.			432-556-		
Facility Name	9	Ell	iot Federal		Facility Type			Tank Bat	ttery	
Surface Own	er	NM	State	Mineral Owne	ar	В	LM	AP(#	30-02	5-06332
				LOCAT	ION OF RELE	ASE				
Unit Letter	Section	Township	Range	Feet from the	North/South Li	ine	Feet from the	East/West	Line	County
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<u> </u>	<u> </u>	L		<u> </u>			L	1	***************************************	1
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				NATU	RE OF RELEA	\SE_				
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Source of Rela	***************************************			Daste/Hour of	Occurrence	1/5/	/2007	Date /Hour of Dis	scovery	1-5-07 800
Was Immediate Notice Given?				If Yes, To Who	.m?					
✓ Yes ☐ No ☐ Not Required						1	<u>Larry Johnso</u>			
By Whom?		Cavier Martin	ez	Date and Hour	*************************************			1/5/2007	***************************************	***************************************
Was a Watero	***************************************	£4		If YES, Volume	Impacting the Water	rcourse,				
	Yes		No .	<u> </u>				***************************************	······	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
If a Watercour	se was impaci	ied, describe r	ully*							
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1					2 %5°%					
Describe Cau	ee of Problem	and Remedial	Action Taken.	*	***************************************		4 -4-44			
Describe one	20 01 L. Jamier.	alle Home	Flaguer							
				Hole	In bottom of tank	₹.				
Describe Area	Affected and	Cleanup Actio	n Taken.*			·····				
Put sand or	n pad to sao	k up small a	mount of oil	so we could	remove top soil to	o reme	diate. This b	attery is sched	uled for a	sbandonment.
					e best of my knowled	ge and u	inderstand that	pursuant to NMO	CD rules a	nd regulations
all operators a	are required to	report and/or t	file certain rele	ase notifications	s and perform correc					
		·							~~~~~	***************************************
	- L	* *	Busho			<u>Oil</u>	<u>Conserva</u>	<u>ation Divisi</u>	<u>ion</u>	
Signature:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11/1/11	いわはんにか							

Signature:	<u> </u>	<u> </u>	icho	Oll Conservation Division Approved by the District Supervisor:				
Printed Name:		Guinn E	lurks					
Title:	Permian	Environme	ental Coordinator	Approval Date	Expiration Date:			
Email Address:	guinn.	burks@usa.a	pachecosp.com	Conditions of Approval:	Attached			
Date:	7/18/2007	Phone:	432-556-9143					

*Attach Additional Sheets if Necessary

District I				State	of New Mexico			1-A-T	-
1625 N. French	Or., Hobbs, N	M 88240	Er	rergy Minera	is and Natural Resource	æ\$	Form C-1	41	
District II							Revised Oc	tober 10, 2003	
1301 W. Grand	Avenue, Artic	38, NM 86210	•						
District III 1000 Rio Brazos	. Danel Arden	. NW# 87/1/3		Oil Cor	nservation Division			ies to appropraile Ice in accordance	
District IV	s. Process, Przesou	2, 17604 Q141W			outh St. Francis Dr.		•	Rule 118 on back	
1220 S. St. Fran	ick Dr., Santi	a Fe. NM 8750			a Fe, NM 97505		,	side of form	
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					OPERATOR	` <i>[</i>	itial Report	Final Report	
Name of Com	DRITY	BQA	che Corpoi	ation	Contact		Guinn Burks		
Address	2		(728, Crani		Telephone No.		432-556-9143		
Facility Name		티	lot Federal	Bttv	Facility Type		Tank Battery		
	***************************************			,					
Surface Owne	¥*	NM.	State	Mineral Owns	<u> </u>	<u>LW</u>	API# 30-0	25-06332	
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