1R- 386

REPORTS

DATE:

July 2009

Hansen, Edward J., EMNRD

From:

Ron Rounsaville [rrounsaville@novatraining.cc]

Sent:

Tuesday, August 11, 2009 10:32 AM

To:

Hansen, Edward J., EMNRD

Cc:

Jason Henry

Subject: Attachments: Junction 34 to Lea Final C-141 Jct 34 to Lea Final C-141.pdf

Mr. Hansen,

Attached is a C-141 form for the Plains site known as Junction 34 to Lea Station, NMOCD reference # 1R-0386. The form is identified as "Final", but was never submitted for approval and included with the Soil Closure Request dated July 2009 documenting the soil remediation activities conducted from March until June 2009.

Plains is requesting your review and approval of the C-141 form for inclusion in the report.

Thank You,

Ronald K. Rounsaville Project Manager NOVA Safety & Environmental 2057 Commerce Midland, Texas 79703

PH: 432-520-7720 FX: 432-520-7701 Cell: 432-894-7166

This inbound email has been scanned by the MessageLabs Email Security System.

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District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003 Submit 2 Copies to appropriate

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

Release Notification and Corrective Action 1R-0386

					1R	-0386						
						OPERA	TOR		☐ Init	ial Report	X F	Final Report
Name of Co	mpany	Plains Pipe	line, LP		(Contact	Jason Henr	у				
Address				er City, Tx 7932.	3 7	Telephone N	₹o. (575) 441-1	099				
Facility Nar	ne	JCT 34 Lin	e to Lea		F	acility Typ	e 10 Inch Stee	el Pipel	ine			
Surface Ow	ner Deck	Estate		Mineral C)wner				Lease N	No.		
				LOCA	ATION	OF REI	LEASE					
Unit Letter L	Section 21	Township 20S	Range 37E	Feet from the	North/S	South Line	Feet from the	East/W	est Line	County Lea		
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By Whom?						Date and E						
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If a Watercon	urse was Im	pacted, Descri	ibe Fully.	*		l						
		•										
N/A				-								
	use of Prob	em and Reme	dial Actio	n Taken.*								
Pipe repair	clamp inst	alled.										
Describe Are	escribe Area Affected and Cleanup Action Taken.*											
Please see th	Describe Area Affected and Cleanup Action Taken.* Please see the attached Nova Safety and Environmental Soil Closure Request report for details of the remedial activities conducted for site closure.											
I hereby cert	ify that the	information gi	iven above	e is true and comp	lete to th	e best of my	knowledge and u	ınderstan	d that pur	suant to NM	OCD rul	es and
regulations a	di operators	are required t	o report ai	nd/or file certain	release no	otifications a	nd perform correc	ctive acti	ons for rel	eases which	may end	anger
public health	or the envi	ironment. The	acceptan	ce of a C-141 rep investigate and i	ort by the	: NMOCD m	arked as "Final R	eport" d	oes not rel	ieve the oper	ator of l	iability on bealth
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Title: Reme						Approval Da	te:	1	Expiration	Date:		
									1	T		
E-mail Addr	ress: jhenry	@paalp.com			(Conditions o	f Approval:			Attached		
Date: 07	/31/3	2009	Phone	: (575) 441-1099							_	
* Attach Add		ets If Necess										



SOIL CLOSURE REQUEST

RECEIVED

2009 JUL 16 PM 1 14

JUNCTION 34 TO LEA STATION

NW 1/4, SW 1/4, SECTION 21, TOWNSHIP 20 SOUTH, RANGE 37 EAST MONUMENT, NEW MEXICO PLAINS SRS NUMBER: 2002-10286 NMOCD REF 1R-0386

Prepared for:

PLAINS PIPELINE, L.P.

333 Clay Street, Suite 1600 Houston, Texas 77002



Prepared by:

NOVA Safety and Environmental

2057 Commerce Midland, Texas 79703

July 2009

Ronald K. Rounsaville

Senior Project Manager

Brittan K. Byerly, P.G.

President

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1.0 INTRODUCTION

On behalf of Plains Pipeline, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Soil Closure Request to the New Mexico Oil Conservation Division (NMOCD). The Junction 34 to Lea (2002-10286) Release Site is located approximately 10 miles northwest of Eunice in Lea County, New Mexico. The site is located in the NW 1/4 SW 1/4, Section 21, Township 20 South, Range 37 East. A Site Location Map is presented as Figure 1. The Release Notification and Corrective Action (Form C-141) submitted by EOTT reported approximately 300 barrels of crude oil released with 190 barrels recovered. The release is reported to have been due to internal corrosion of the pipeline. The release impacted approximately 10,769 square feet of pipeline right-of-way, caliche road and land owned by the Deck Estate. Upon discovery of the release on November 6, 2002, a contractor and EOTT personnel mobilized to the site, exposed the pipeline and installed a pipe repair clamp. Hydrocarbon impacted soil excavated during the emergency response activities was transported to an NMOCD approved land farm. In February 2003, hydrocarbon impacted soil, previously identified by the advancement of nine soil borings, was excavated to a depth of approximately twenty five (25) below ground surface (bgs) which was approximately 3 to 4 feet below the groundwater table. The dimensions of the 2003 excavation area measured approximately 120 feet in length (north to south) by 220 feet in width (east to west) The excavated soil was stockpiled on site for future remediation. A Site Map depicting the site features is presented as Figure 2.

In July 2004, a groundwater sparging system consisting of perforated poly-vinyl chloride (PVC) piping attached to an air compressor was installed at the site. The perforated PVC piping was laid in the pools located in the base of the excavation and air was blown through the piping in order to aerate the water to promote hydrocarbon volatilization.

In June 2006, a Soil Remediation Work Plan (Work Plan) was submitted by Plains to the NMOCD. The Work Plan detailed proposed activities designed to progress the release site toward an NMOCD approved soil closure.

In February 2008, an Addendum to the Soil Closure Proposal was submitted by Plains to the NMOCD. Plains received approval from the NMOCD to commence the activities outlined in the Addendum Work Plan. This Soil Closure Request details the results of the NMOCD approved activities completed at the site.

Documentation previously submitted to the NMOCD regarding remedial activities at this site included a Soil and Groundwater Abatement Plan dated June 2003, Soil Closure Proposal dated June 2006, and an Addendum to the Soil Closure Proposal dated February 2008.

Currently, there are eleven groundwater monitor wells (MW-1 through MW-11) on site. Based on the current groundwater gauging data, no PSH has been observed in any of the on site monitor wells since August 2008.

2.0 NMOCD SITE CLASSIFICATION

The depth to groundwater at the site is less than 50 feet bgs. Based on the NMOCD soil classification system, 20 points would be assigned to the site as a result of this criterion.

The distance to the nearest water source exceeds 1,000 feet, resulting in zero points being assigned to the site on this ranking criterion. There is no surface water body located within 1,000 feet of the site, resulting in zero points being assigned on this ranking criterion. The NMOCD guidelines indicate that the site would have a Ranking Score of >19. The soil action levels for a site with a Ranking Score of >19 points are as follows:

- Benzene 10 ppm
- BTEX 50 ppm
- TPH 100 ppm

The approved Soil Remediation Work Plan contained the following:

- Additional excavation of the existing excavation sidewalls to concentration limits below NMOCD cleanup standards based upon analytical results of soil samples collected during May 2006, and from the existing excavation floor to slightly above groundwater level.
- The floor of the excavation would be backfilled with permeable material to six-inches above the groundwater level.
- A 20-mil synthetic liner would then be installed over the floor of the excavation area.
- Impacted soil from the excavation would be treated on-site by blending and aeration techniques to achieve target concentrations (or below) as stated in the Work Plan. Pursuant to the Work Plan, treated soil above the liner will be blended to less than 1000 mg/Kg TPH, less than 10 mg/Kg benzene and less than 50 mg/Kg total BTEX.

3.0 SUMMARY OF RECENT FIELD ACTIVITIES

3.1 Impacted Soil Removal

Pursuant to the Work Plan, approved by the NMOCD on February 19, 2008, NOVA personnel collected soil samples on November 12, 2008, from the sidewalls of the existing excavation at locations previously sampled in May 2006, to determine current soil concentrations. Excavation of the impacted soils in the area of the release point began on February 16, 2009. An excavator was utilized to remove impacted soil from the floor and sidewalls of the original excavation area. The excavated soil was stockpiled on-site and blended with the existing excavated soil stockpile. As excavation activities progressed, soil samples were collected from the north, south, east and west sidewalls of the excavation area. Confirmation soil samples collected along the east sidewall, identified as East Wall-1A and 2A, were collected below a Southern Union Gas (SUG) pipeline. Analytical results of sample East Wall-1A and 2A indicated TPH concentrations of 212 mg/Kg and 848.5 mg/Kg, respectively. Due to the instability of the soil underlying the SUG line, additional excavation immediately underneath the SUG line was not attempted, so as not to compromise the support of the SUG pipeline. Based on visual and olfactory observations and laboratory analytical results, the final dimensions of the excavation area were approximately 210 feet in length (north to south) by 280 feet in width (east to west) and averaged approximately 15 feet below ground surface (bgs). An estimated 22,500 cubic yards of soil was brought to surface and combined with the existing 9,000 cubic yard soil stockpile (excavated during the April 2003

excavation abatement activities) for onsite remediation by mixing, blending and aeration methods. Excavation and backfilling activities were completed on May 15, 2009. Figure 3 is a Soil Sample Location and Excavation Area Map displaying the pipeline, leak source, excavation area, confirmation soil sample locations and other site details.

3.2 Excavated Soil Remediation

Excavated soil was staged in a cleared area located south and west of the excavation. Non-impacted near-surface soil collected from within the cleared area was pushed up and used to blend with the impacted soil. Mixing and blending activities continued concurrently with excavation activities.

3.3 Confirmation Soil Sampling – Excavation Areas

Confirmation soil samples collected from the excavation areas were submitted for laboratory analysis for TPH by Method 8015M and BTEX by Method 8021B. Laboratory submitted samples were placed in a new sterile glass container, equipped with a Teflon-lined lid furnished by the laboratory. Samples were labeled, placed on ice, and chilled to a temperature of approximately 4° C. Appropriate chain-of-custody documentation and shipping protocols were followed. The laboratory analytical reports are provided in Appendix C. Table 1 displays the analytical results of confirmation soil samples.

On March 10, 2009, confirmation soil samples were collected from the north, south and west sidewalls of the excavation area. The analytical results of these soil samples indicated TPH and BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg and 50 mg/Kg, respectively.

On March 19, 2009, confirmation soil samples were collected from the south and east sidewalls of the excavation area. The analytical results of soil samples identified as South Wall SW-3 and East Wall EW-3 indicated TPH and BTEX concentrations were below the NMOCD regulatory standards of 100 mg/Kg and 50 mg/Kg, respectively. Analytical results on the three remaining samples collected from the east sidewall, identified as East Wall EW-1, EW-2 and EW-4, indicated that TPH concentrations of 310 mg/Kg, 1,072 mg/Kg and 260 mg/Kg, respectively.

On March 31, 2009, the east sidewall area surrounding soil samples East Wall EW-1, EW-2 and EW-4 was excavated further east approximately 10 feet. Confirmation soil samples East Wall 1A, 2A and 4A were collected from the excavation sidewall areas and submitted for laboratory analysis. The analytical results for soil samples East Wall 1A and 2A indicated TPH concentrations of 212 mg/Kg and 848 mg/Kg, respectively. The analytical results for soil sample East Wall 4A indicated a TPH concentration of 102 mg/Kg. In addition, a test trench was excavated to a depth of approximately 15 feet bgs to the east of the SUG line. Based on visual and olfactory observations of the soil within the trench, the soil appeared to be non-impacted. On April 10, 2009, based on the sidewall resample analytical results, Plains requested and was granted approval by the NMOCD to leave the remaining soils beneath the Southern Union Gas line in place due to the support integrity issues.

3.4 Confirmation Soil Sampling – Blended Soil Piles

On November 12, 2008, five composite soil samples (SS-1 through SS-5) were collected from the top one foot of the soil stockpile generated during the 2003 excavation activities and submitted to the laboratory for analysis. The analytical results indicated that BTEX and TPH concentration were below the 1,000 mg/Kg threshold for blended soils. This upper one foot was removed from the existing stockpile and staged in a separate area pending backfilling of the excavation area. The remaining 2003 stockpile was blended with impacted soils from the 2009 excavation area.

From February 16 through March 13, 2009, the estimated 9,000 cubic yards of impacted soil from the 2003 excavation was combined with the 22,500 cubic yards stockpiled soils from the recent excavation activities and were staged in a cleared area to the south and west of the excavation. Non-impacted soil collected from a borrow area west of the stockpiled soil was used to mix with the impacted soil.

On March 12 and 13, 2009, 45 composite soil samples (SS-6 through SS-27D) were collected from the blended soil stockpiles and submitted to the laboratory for analysis. The analytical results indicated the TPH concentration of the stockpile soils ranged from <50 mg/Kg to 757 mg/Kg. Benzene concentrations were less than 0.005 mg/Kg and total BTEX concentrations were below 50 mg/Kg in all stockpile samples.

3.5 Synthetic Liner Placement

Upon receipt of laboratory analytical results indicating all of the identified areas of hydrocarbon impact were below the approved criteria set forth in the work plan for treated soils, preparation for the installation of the synthetic liner installation began as proposed in the workplan to the NMOCD dated June 2006. The exposed groundwater at the floor of the excavation was backfilled with stone material to above the groundwater level. A six-inch layer of non-impacted sand was placed over the entire excavation floor.

On April 8, 2009, the synthetic liner was installed at a depth of approximately 15 feet below ground surface in the excavation by a vendor trained in the proper installation of impermeable liners. Following the synthetic liner installation, an additional six-inch layer of non-impacted sand was placed on top of the liner to protect the liner during backfilling activities. Photographic documentation of the liner installation is provided as Appendix B.

3.6 Backfilling and Surface Restoration

Based on analytical results of laboratory analyzed confirmation soil samples obtained from the excavation areas and remediated soil piles, on April 15, 2009, the NMOCD approved the backfilling of the excavations with remediated soil. On April 16, 2009, upon completion of liner installation activities, backfilling of the excavation commenced. The blended soil stockpile was placed in the excavation in twelve-inch lifts and compacted. A water truck was used to add moisture to the soil to allow for proper compaction. Pursuant to Plains agreement with the Deck Estate, the upper-most three feet was backfilled with non-impacted soil.

On May 15, 2009, backfilling activities were completed and the disturbed area was contoured to reflect the surrounding topography.

4.0 SOIL CLOSURE REQUEST

Plains has completed the activities proposed in the NMOCD approved Addendum to the Soil Closure Proposal dated February 2008, and requests NMOCD approval for soil closure.

A complete (including groundwater) Site Closure Request will be submitted to the NMOCD after eight consecutive quarterly groundwater sampling events have demonstrated BTEX concentrations are below the NMOCD regulatory guidelines.

5.0 LIMITATIONS

NOVA has prepared this Soil Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA 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 has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA 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 Plains. The information contained in this report including all exhibits and attachments may not be used by any other party without the express written consent of NOVA and/or Plains.

6.0 DISTRIBUTION

Copy 1: Ed Hansen

New Mexico Oil Conservation Division

Environmental Bureau

1220 South St. Francis Drive Santa Fe, New Mexico 87505

Copy 2: Larry Johnson

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division District 1

1625 French Drive Hobbs, NM 88240

Copy 3: Jason Henry

Plains Marketing, L.P. 2530 State Highway 214 Denver City, TX 79323 jhenry@paalp.com

Copy 4: Jeff Dann

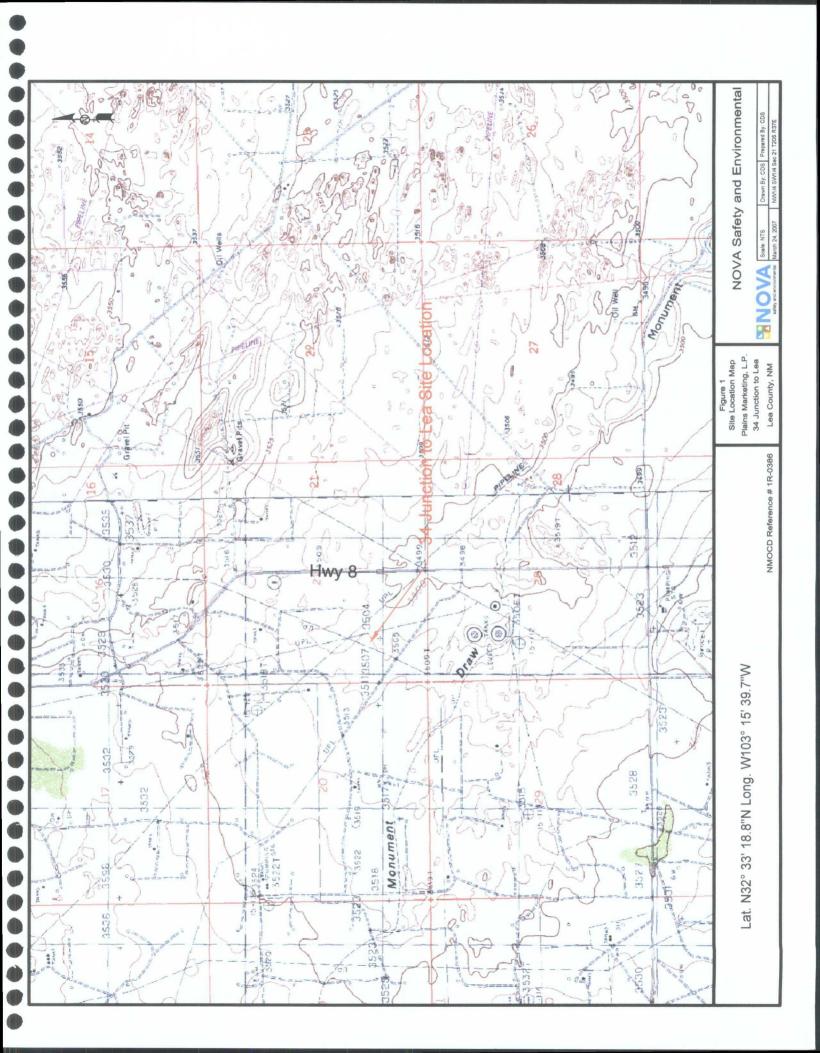
Plains Marketing, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002 jpdann@paalp.com

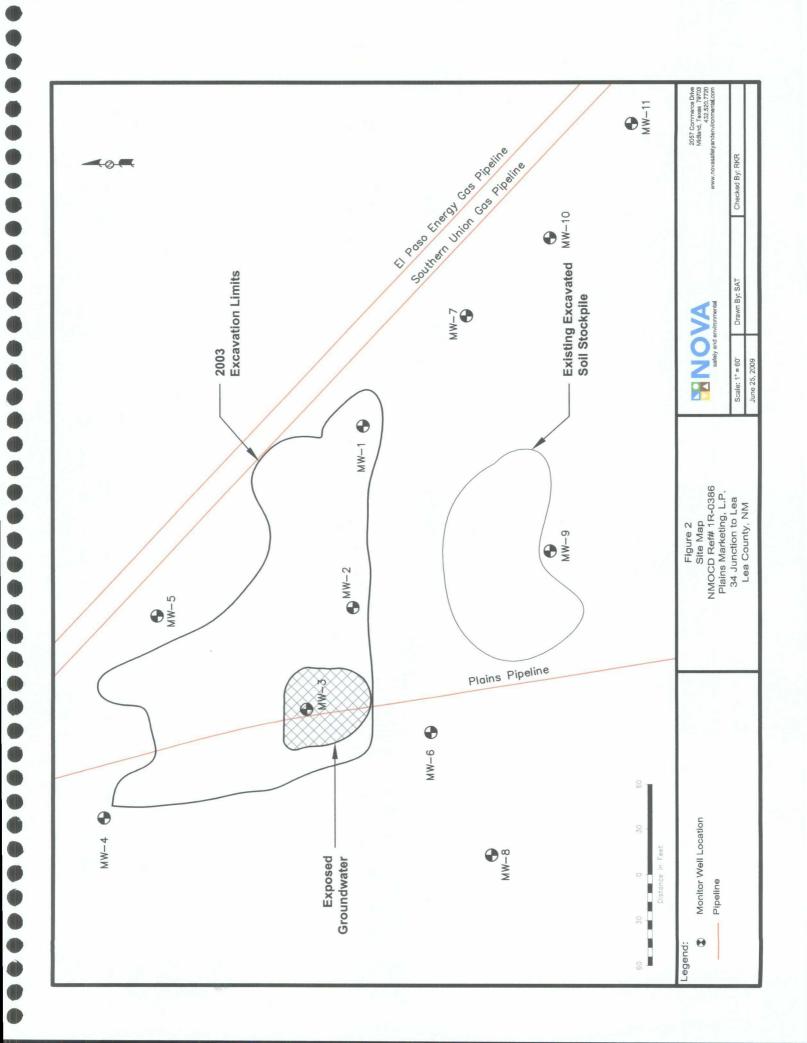
Copy 5: NOVA Safety and Environmental.

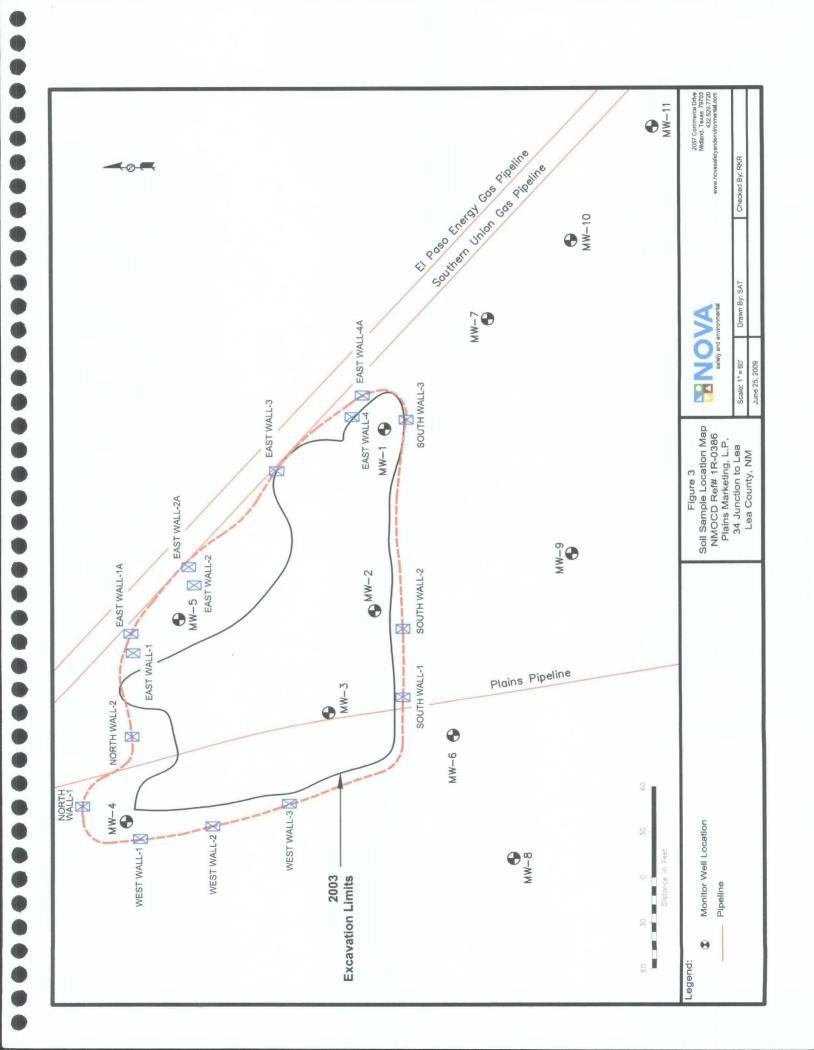
2057 Commerce Drive Midland, Texas 79703

rrounsaville@novatraining.cc

FIGURES







TABLES

Concentrations of BTEX and TPH in Soil 34 JUNCTION to LEA STATION NMOCD Reference #1R-0386 Lea County, New Mexico Plains Pipeline, LP

Sample Location	Sample Date	Sample Depth	Soil Status	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX	GRO C ₆ -C ₁₂ (mg/Kg)	DRO >C ₁₂ -C ₃₅ (mg/Kg)	Total TPH
NMOCD REGULATORY STANDARD	ANDARD			10	,	-	-	•	50			100
SEJCT3448033BH1A-8 (MW-1)	03/08/03	8.	In-Situ	<0.020	0.0384	3.37	6.92	2	10.33	1,040	2,010	3,050
SEJCT3448033BH1A-13 (MW-1)	03/08/03	13'	niS-uI	<0.020	<0.020	1.88	3,33	3	5.21	469	1,000	1,469
SEJCT3448033BH1A-18 (MW-1)	03/08/03	18,	In-Situ	0.0206	4.03	4.57	2.45	5	0.575	383	827	1,210
SEJCT3448033BH2A-8 (MW-2)	03/08/03	ŏ	In-Situ	<0.020	0.127	2.22	4.68	œ	7.03	411	1,450	1,860
SEJCT3448033BH2A-13 (MW-2)	03/08/03	13'	In-Situ	0.095	0.180	14.5	22.40	0.	37.2	732	1,280	2,012
SEJCT3448033BH2A-18 (MW-2)	03/08/03	18'	In-Situ	0.146	2.080	14.7	23.70	0.	40.6	772	1,480	2,250
SEJCT3448033BH3A-8 (MW-3)	03/08/03	∞	In-Situ	0.827	22.70	26.0	39.40	0.	88.1	909	2,060	2,970
SEJCT3448033BH3A-13 (MW-3)	03/08/03	13,	In-Situ	<0.020	0.143	9.33	11.60	0,	21.1	513	626	1,490
SEJCT3448033BH3A-18 (MW-3)	03/08/03	18'	Γ	0.022	0.0530	1.33	1.34	+	2.75	122	230	352
大学 大	The State of the State of	1	1 10	明 一		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1 . A	10 10 10 10 10	A. 12. 16. 16.	Salar Carried Salar	" 一年 第二年 第二年
SEJCT34061003SP1 (Soil Pile 1)	06/10/03	1	Excavated	0.025	0.043	0.105	868.0	8	1.070	79.8	240	320
SEJCT34061003SP2 (Soil Pile 2)	06/10/03		Excavated	0.029	<0.025	0.046	0.145	.5	0.220	95.6	816	912
SEJCT34061003SP3 (Soil Pile 3)	06/10/03	-	Excavated	0.041	0.125	0.148	3.560	0.	3.870	315	1,070	1,390
SEJCT34061003SP4 (Soil Pile 4)	06/10/03		Excavated	990:0	2.080	3.570	19.0	C	24.716	1,030	2,450	3,480
SEJCT34061003SP5 (Soil Pile 5)	06/10/03	-	Excavated	<0.025	<0.025	0.048	0.331		0.379	79.9	- 1	597
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LEJ34051304MW5(5')	05/13/04	5,	In-Situ	<0.025	9690.0	0.1120	0.4110	0.1740	0.7666	300	1,660	1,960
LEJ34051304MWS(10')	05/13/04	10'	In-Situ	0.0316	0.3020	2.150	3.120	1.7900	7.3936	851	3,990	4,841
LEJ34051304MW5(15)	05/13/04	15,	In-Situ	<0.025	0.141	0.630	996.0	0.548	2.285	467	2,980.0	3,447
LEJ34051404MW7(15)	05/14/04	15,		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10	35.4	35.4
· 「 「	日本の大学の あんり		() () () () () () () () () (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		かんかん かんないかん	不是 不不			· 李明 · · · · · · · · · · · · · · · · · ·		で 一大学 中で こう
LEJ34051704MW6(10')	05/17/04	10'	In-Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10	11.0	11.0
LEJ34051704MW6(15')	05/17/04	15'	In-Situ		<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10
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LEJ34052104MW4(5')	05/21/04	5'	In-Situ	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<5	202	202
LEJ34052104MW4(15')	05/21/04	15'	In-Situ	<0.020	<0.020	2.570	4.330	0.045	6.945	388	1,870	2,258
The second second	The same of the sa		The second of th	A	The state of the s	大学 一大学		三年	15. A.	おれてはいい	Carried Control	
MW-8, 5'-6'	03/16/06	5'-6'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-8, 10'-11'	90/91/60	10111	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-8, 15'-16'	03/16/06	15'-16'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-8, 20'-21'	03/16/06	20'-21'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-9, 5'-6'	90/91/60	5'-6'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	57.0	57.0
MW-9, 10'-11'	03/16/06	10-11'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-9, 15'-16'	03/16/06	15'-16'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-10, 5'-6'	03/16/06	5'-6'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	<10.0	<10.0
MW-10, 10-11	03/16/06	10'-11'	In-Situ	<0.001	<0.001	<0.001	<0.002	02	<0.005	<10.0	574	574
MW-10, 15'-16'	03/16/06	15'-16'	In-Situ	0.0595	0.247	1.35	1.37	7	3.03	31.9	118	150

0

Concentrations of BTEX and TPH in Soil
34 JUNCTION to LEA STATION
Lea County, New Mexico
Plains Pipeline, LP
NMOCD Reference #1R-0386

Sample Location	Sample Date	Sample	Soil Status	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	Total	GRO C ₆ -C ₁₂	DRO >C ₁₂ -C ₃₅	Total TPH
		Depm		(mg/ng)	(mg/ng)	(mg/ng)	(mg/ng)	(ga/gm)	DIEA	(mg/Kg)	(mg/Kg)	
NMOCD REGULATORY STANDARD	ANDARD			10	-	•	•	,	20	•	-	100
*Excavation Sidewall Samples	1000	10 10 10 10 10 10 10 10 10 10 10 10 10 1	時ではいい	THE REAL PROPERTY.	大学 からなる 一大				State of the state	を と こと こと と と と と と と と と と と と と と と と	STEP STATE	THE STATE OF THE S
SW-1	02/03/06	10,	In-Situ	<0.025	<0.025	<0.025	050.0>	50	<0.125	19	1,160	1,179
SW-3	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	7.23	1,038	1,045
SW-6	02/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	18.5	1,160	1,178
SW-8	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	29.1	1,640	1,669
SW-10	02/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	<10.0	<10.0	<10.0
SW-12	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	7.45	2,330	2,337
SW-14	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	050:0>	50	<0.125	33.8	2,580	2,610
SW-16	02/03/06	10,	In-Situ	<0.025	<0.025	<0.025	050'0>	50	<0.125	160	2,780	2,940
SW-19	05/03/06	10,	In-Situ	<0.025	<0.025	0.112	0.619	6	0.757	799	7,660	8,460
SW-20	05/03/06	10'	In-Situ	<0.025	<0.025	0.0204	0.0346	16	0.0346	207	2,990	3,197
SW-22	02/03/06	10,	In-Situ	<0.025	0.0196	0.0875	0.442	.2	0.529	1150	7,550	8,700
SW-26	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	050'0>	50	<0.125	<10.0	66.2	66.2
SW-29	90/60/50	10,	In-Situ	<0.025	<0.025	<0.025	050.0>	50	<0.125	<10.0	232	232
SW-31	05/03/06	10,	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	<10.0	<10.0	<10.0
SW-34	05/03/06	10'	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	<10.0	50.9	50.9
SW-36	05/03/06	10'	In-Situ	<0.025	<0.025	<0.025	050:0>	50	<0.125	13.5	914	928
SW-38	05/03/06	10'	In-Situ	<0.025	<0.025	<0.025	<0.050	50	<0.125	42	2,740	2,782
SW-39	02/03/06	10,	In-Situ	<0.025	<0.025	<0.025	050.0>	50	<0.125	<10.0	<10.0	<10.0
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SW-1A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<51.0
SW-3A 10'	11/12/08	10'	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	2,410	2,410
SW-6A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	571	571
SW-8A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	92.4	92.4
SW-12A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	251	251
SW-14A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	<50.0	<51.0
SW-16A 10'	11/12/08	10,	In-Situ	<0.020	<0.020	<0.020	<0.020	20	<0.020	3.37	4,710	4713.37
SW-19A 10'	11/12/08	10,	In-Situ	<0.020	<0.020	<0.020	<0.020	50	<0.020	3.4	5,050	5053.4
SW-22A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	1.08	107	108.08
SW-29A 10'	11/12/08	10'	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	<50.0	<51.0
SW-38A 10'	11/12/08	10'	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	991	991
SW-36A 10'	11/12/08	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	<50.0	<51.0
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Concentrations of BTEX and TPH in Soil 34 JUNCTION to LEA STATION
Lea County, New Mexico
Plains Pipeline, LP
NMOCD Reference #1R-0386

Sample Location	Sample Date	Sample Depth	Soil Status	benzene (mg/Kg)	i oluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX	C ₆ -C ₁₂ (mg/Kg)	>C ₁₂ -C ₃₅ (mg/Kg)	Total TPH
NMOCD REGULATORY STANDARD	TANDARD			10	•	•		•	50	,	•	100
West Wall-1, 10'	03/10/00	10'	In-Situ	<0.010	<0.010	0.127	0.34		0.467	<1.00	<50.0	<50.0
West Wall-2, 12'	03/10/09	12'	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<\$0.0	<50.0
West Wall-3, 10'	03/10/09	10'	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<50.0
North Wall-1, 10'	03/10/09	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<50.0
North Wall-2, 10'	03/10/09	10,	In-Situ	<0.010	0.124	<0.010	0.373	3	0.497	<1.00	<50.0	<50.0
South Wall-1, 12'	03/10/09	12'	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<50.0
South Wall-2, 12'	03/10/09	12'	In-Situ	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	<50.0	<50.0
The second secon	100		· · · · · · · · · · · · · · · · · · ·	中 等 等 不 等 等 等	· · · · · · · · · · · · · · · · · · ·		小震災の影響			大きなのでは、	一年 一年 五年	
South Wall SW-3	03/19/09		In-Situ	<0.010	0.0773	<0.010	0.186	9	0.2633	<1.00	103	103
East Wall EW-1	03/19/09	11,	In-Situ	<0.020	<0.020	<0.020	070'0>	06	<0.020	<2.00	310	310
East Wall EW-2	03/19/09	12'	In-Situ	<0.010	<0.010	0.224	0.418	8	0.642	32.6	1040	1072.6
East Wall EW-3	03/19/09	10,	In-Situ	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<50.0
East Wall EW-4	03/19/09	10,	In-Situ	<0.010	<0.010	<0.010	010'0>	01	<0.010	1.85	258	259.85
	TO WE SHALL SHEET THE	大学 一种 一种	· · · · · · · · · · · · · · · · · · ·					The state of the s		· · · · · · · · · · · · · · · · · · ·	ST. 25.33.35	· 教学行为方言
East Wall 1A, 12'	03/31/09	12'	Excavated	<0.010	<0.010	<0.010	010:0>	01	<0.010	1.62	211	212.62
East Wall 2A, 12'	03/31/09	12,	Excavated	<0.010	<0.010	<0.010	0.239	6	0.239	32.5	816	848.5
East Wall 4A, 10'	03/31/09	10,	Excavated		<0.010	<0.010	010:0>		<0.010		98.8	102.06
🎏 Soil Stockpile Samples 👙		The second second	A STATE OF THE STA	SEE SEE SEE	で を ない ない	かい はままれる	10000000000000000000000000000000000000	The state of the s	OWN STATE	🎨 🎨 NMOCD Regulatory S	Standard 🔭 🐔	. ₹.1,000′. ₹.3
SS-1	11/12/08		Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	398	398
SS-2	11/12/08		Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	118	118
SS-3	11/12/08		Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	639	639
SS-4	11/12/08	-	Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	620	620
SS-5	11/12/08	1	Blended	<0.010	<0.010	<0.010	010'0>	01	<0.010	1.54	296	298
から 一大学		The state of the s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	San		· · · · · · · · · · · · · · · · · · ·	一種 小される	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· 经银行的	
9-SS	03/12/09		Blended	<0.050	<0.050	<0.050	1.81		1.81	13.7	711	724.7
SS-7A	03/12/09		Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	6.62	366	372.6
SS-7B	03/12/09		Blended	<0.020	<0.020	<0.020	0.709	6	0.709	12.2	297	309.2
SS-7C	03/12/09	**	Blended	<0.010	< 0.010	<0.010	0.336	9	0.336	1.5	201	202.5
SS-7D	03/12/09	1	Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	3.72	368	371.7
SS-7E	03/12/09	ı	Blended	<0.010	<0.010	<0.010	988.0	9	0.336	5.63	172	177.6
SS-8	03/12/09	;	Blended	<0.0500	<0.0500	0.671	1.78		2.451	31.1	726	757.1
6-SS	03/12/09	1	Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	69.5	69.5
SS-10A	03/12/09		Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	149	149.0
SS-10B	03/12/09		Blended	<0.010	<0.010	<0.010	0.373	3	0.373	6.87	399	405.8
SS-11	03/12/09		Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	2.54	82.5	85.04
C1 20	00/11/00		D11-1-1	0100	01007	<0.010	1120	1	775 0	,,,,	0 0 0	7171

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Concentrations of BTEX and TPH in Soil 34 JUNCTION to LEA STATION Lea County, New Mexico Plains Pipeline, LP NMOCD Reference #1R-0386

Sample Location	Sample Date	Sample Depth	Soil Status	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	m,p-Xylenes (mg/Kg)	o-Xylene (mg/Kg)	Total BTEX	GRO C ₆ -C ₁₂ (mg/Kg)	DRO >C ₁₂ -C ₃₅ (mg/Kg)	Total TPH
NMOCD REGULATORY STANDARD	ANDARD			10	-	•	1	•	90	•	1	100
SS-13	03/12/09	-	Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	2.33	156	158.3
SS-14A	03/12/09	**	Blended	<0.010	<0.010	0.138	0.374	4	0.512	28.5	463	491.5
SS-14B	03/12/09		Blended	<0.010	<0.010	<0.010	0.0383	33	0.0383	35.8	352	387.8
SS-15A	03/12/09		Blended	<0.010	<0.010	0.128	0.365	5	0.493	31.2	380	411.2
SS-15B	03/12/09	***	Blended	<0.010	<0.010	<0.010	0.374	4	0.374	24.5	366	390.5
SS-16A	03/12/09		Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	8	242	250.0
SS-16B	03/12/09	-	Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	28.7	319	347.7
SS-17A	03/12/09	*-	Blended	<0.010	<0.010	<0.010	0.346	9	0.346	11.8	224	235.8
SS-17B	03/12/09		Blended	<0.010	<0.010	<0.010	0.364	4	0.364	25.1	271	296.1
SS-18A	03/12/09	**	Blended	<0.010	<0.010	<0.010	0.445	5	0.445	41.5	474	515.5
SS-18B	03/12/09		Blended	<0.010	<0.010	0.22	0.569	6	0.789	75.6	424	499.6
SS-19A	03/12/09		Blended	<0.010	<0.010	<0.010	0.361	1	0.361	35.4	401	436.4
SS-19B	03/12/09		Blended	<0.010	<0.010	<0.010	<0.010	10	<0.010	10.9	214	224.9
SS-20A	03/12/09		Blended	<0.010	<0.010	<0.010	0.35	4	0.35	13.2	292	305.2
SS-20B	03/12/09		Blended	<0.010	<0.010	<0.010	0.426	9	0.426	45.4	335	380.4
SS-21A	03/12/09		Blended	<0.010	<0.010	<0.010	<0.0100	00	<0.010	2.16	186	188.2
SS-21B	03/12/09	-	Blended	<0.010	<0.010	<0.010	0.372	2	0.372	9.92	129	138.9
SS-22A	03/12/09	1	Blended	<0.010	<0.010	<0.010	<0.010	10	<0.010	<1.00	70.6	70.6
SS-22B	03/12/09	-	Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	82.2	82.2
SS-23A	03/12/09	-	Blended	<0.010	<0.010	0.13	0.416	9	0.546	4.1	166	170.1
SS-23B	03/12/09	1	Blended	<0.010	<0.010	<0.010	0.344	4	0.344	3.44	190	193.4
SS-23C	03/12/09	1	Blended	<0.010	<0.010	<0.010	<0.010	0]	<0.010	<1.00	69.2	69.2
SS-23D	03/12/09	1	Blended	<0.010	0.123	0.124	0.382	2	0.629	15.5	245	260.5
SS-24A	03/12/09	1	Blended	<0.010	0.12	<0.010	<0.010	01	0.12	1.37	216	217.4
	03/12/09	•	Blended	<0.010	<0.010	<0.010		01	<0.010	2.65		164.7
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SS-26A	03/13/09	1	Blended	<0.010	0.172	0.237	0.79		1.199	12.4	156	168.4
SS-26B	03/13/09	}	Blended	<0.010	0.132	0.172	0.626	9	0.93	9.92	199	208.9
SS-26C	03/13/09	1	Blended	<0.010	<0.010	0.129	0.389	6	0.518	<1.00	9/1	176.0
SS-26D	03/13/09	1	Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	1.41	270	271.4
SS-27A	03/13/09	1	Blended	<0.010	<0.010	<0.010	<0.010	01	<0.010	<1.00	<50.0	<50.0
SS-27B	03/13/09	1	Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	<50.0	<50.0
SS-27C	03/13/09	1	Blended	<0.010	<0.010	<0.010	<0.010	0	<0.010	<1.00	55.5	55.5
SS-27D	03/13/09		Blended	<0.010	<0.010	<0.010	0.33	8	0.338	<1.00	62.4	62.4

APPENDICES

APPENDIX A:
Laboratory Analytical Reports and Chain of
Custody Records



200 East Sunset Road, Suite E ... El Paso, Texas 79922. 5002 Basin Street, Suite A1 Midland, Texas 79703 6015 Harris Parkway Suite 110 Ft: Worth, Texas 76132

Midland, Texas 79703

888 • 588 • 3443

915 • 585 • 3443 432 • 689 • 6301

FAX 915 • 585 • 4944 FAX 432 • 689 • 6313

817 • 201 • 5260

Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

El Paso: T104704221-08-TX

Midland: T104704392-08-TX

LELAP-02003

LELAP-02002

Kansas E-10317

Analytical and Quality Control Report

Ron Rounsaville

Nova Safety & Environmental

2057 Commerce St. Midland, TX, 79703

Report Date: November 19, 2008

Work Order:

Project Location: New Mexico

Project Name: 34 Junction to Lea Station

Project Number: 2002-10286

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

			Date	${f Time}$	Date
Sample	Description	Matrix	Taken	Taken	Received
179159	SW-1A 10'	soil	2008-11-12	13:49	2008-11-13
179160	SW-3A 10'	soil	2008-11-12	13:55	2008-11-13
179161	SW-6A 10'	soil	2008-11-12	14:01	2008-11-13
179162	SW-8A 10'	soil	2008-11-12	14:05	2008-11-13
179163	SW-12A 10'	soil	2008-11-12	14:10	2008-11-13
179164	SW-14A 10'	soil	2008-11-12	14:14	2008-11-13
179165	SW-16A 10'	soil	2008-11-12	14:20	2008-11-13
179166	SW-19A 10'	soil	2008-11-12	14:23	2008-11-13
179167	SW-22A 10'	soil	2008-11-12	14:32	2008-11-13
179168	SW-29A 10'	soil	2008-11-12	14:36	2008-11-13

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
179169	SW-38A 10'	soil	2008-11-12	14:40	2008-11-13
179170	SW-36A 10'	soil	2008-11-12	14:45	2008-11-13
179171	SS-1	soil	2008-11-12	12:41	2008-11-13
179172	SS-2	soil	2008-11-12	12:48	2008-11-13
179173	SS-3	soil	2008-11-12	12:55	2008-11-13
179174	SS-4	soil	2008-11-12	13:04	2008-11-13
179175	SS-5	soil	2008-11-12	13:12	2008-11-13

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 34 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 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2008-11-13 and assigned to work order 8111329. Samples for work order 8111329 were received intact at a temperature of 3.0 deg. C.

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

Test	Method
BTEX	S 8021B
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 8111329 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Report Date: November 19, 2008 2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 4 of 34

New Mexico

Analytical Report

Sample: 179159 - SW-1A 10'

Laboratory: Midland

Analysis: **BTEX** QC Batch: 54242 Prep Batch: 46406

Analytical Method: Date Analyzed:

S 8021B2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035 Analyzed By:

 \mathbf{AG} Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylb <i>e</i> nzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

			,		Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.815	mg/Kg	1	1.00	82	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.800	mg/Kg	1	1.00	80	45.2 - 144.3

Sample: 179159 - SW-1A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2008-11-18 2008-11-18

Prep Method: N/A Analyzed By:

MNPrepared By: MN

RL

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

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		152	mg/Kg	1	100	152	49.5 - 185

Sample: 179159 - SW-1A 10'

Laboratory: Midland

TPH GRO Analysis: QC Batch: 54243 Prep Batch: 46406

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2008-11-13 2008-11-13 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

continued ...

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Work Order: 8111329 34 Junction to Lea Station Page Number: 5 of 34 New Mexico

sample 179159 continued ...

Parameter	Flag		$rac{ ext{RL}}{ ext{Result}}$		Units	T	ilution	\mathbf{RL}
Farameter	I lag		rtesurt		Units	L	intrion	nl.
			RL					
Parameter	Flag		Result		Units	D	ilution	m RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (T	FT)		1.05	mg/Kg	1	1.00	105	75 - 117.2
4-Bromofluorobenz	ene (4-BFB)		0.795	mg/Kg	1	1.00	80	66 - 142.8

Sample: 179160 - SW-3A 10'

Laboratory: Midland

Analysis: BTEX QC Batch: 54242 Prep Batch: 46406 Analytical Method: S 8021B Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

		RL			
Parameter	Flag	Result	${f Units}$	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.788	mg/Kg	1	1.00	79	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.810	mg/Kg	1	1.00	81	<u>45.2</u> - 144.3

Sample: 179160 - SW-3A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514 Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

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

		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO		2410	mg/Kg	10	50.0

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Work Order: 8111329 34 Junction to Lea Station Page Number: 6 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{aligned} \mathbf{Spike} \\ \mathbf{Amount} \end{aligned}$	Percent Recovery	Recovery Limits
n-Triacontane	1	764	mg/Kg	10	100	764	49.5 - 185

Sample: 179160 - SW-3A 10'

Laboratory: Midland

Analysis: TPH GRO 54243 QC Batch: 46406 Prep Batch:

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B

2008-11-13 2008-11-13 Prep Method: S 5035 Analyzed By:

AG Prepared By: AG

RL

Result Dilution Parameter Flag Units RLGRO <1.00 mg/Kg 1.00

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	${f Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.820	mg/Kg	1	1.00	82	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.804	mg/Kg	1	1.00	80	66 - 142.8

Sample: 179161 - SW-6A 10'

Laboratory: Midland

BTEX Analysis: 54242 QC Batch: Prep Batch: 46406

Analytical Method: Date Analyzed:

S 8021B 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035

Analyzed By: AG Prepared By: AG

RL

		* ****			
Parameter	Flag	Result	\mathbf{Units}	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

				Spike	Percent	Recovery
Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
	0.816	mg/Kg	1	1.00	82	49 - 129.7
	0.814	mg/Kg	1	1.00	81	45.2 - 144.3
	Flag	0.816	0.816 mg/Kg	0.816 mg/Kg 1	Flag Result Units Dilution Amount 0.816 mg/Kg 1 1.00	0.816 mg/Kg 1 1.00 82

Sample: 179161 - SW-6A 10'

Laboratory: Lubbock

TPH DRO Analysis: QC Batch: 54375 46514 Prep Batch:

Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

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

¹High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 7 of 34

New Mexico

Parameter	Fla	ı g	$rac{ ext{RL}}{ ext{Result}}$	Uni	its	Dilution	$_{ m RL}$	
DRO			571	mg/Kg		1	50.0	
Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits	
n-Triacontane	2	455	mg/Kg	1	100	455	49.5 - 185	

Sample: 179161 - SW-6A 10'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54243 Prep Batch: 46406 Analytical Method: S 8015B Date Analyzed: 2008-11-1

Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035

Analyzed By: AG Prepared By: AG

		m 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)		1.03	mg/Kg	1	1.00	103	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.799	mg/Kg	1	1.00	80	66 - 142.8

Sample: 179162 - SW-8A 10'

Laboratory: Midland

Analysis: BTEX QC Batch: 54242 Prep Batch: 46406 Analytical Method: S 8021B Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

		${f RL}$			
Parameter	Flag	Result	\mathbf{Units}	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	· · · · ·	0.888	mg/Kg	1	1.00	89	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.837	mg/Kg	1	1.00	84	45.2 - 144.3

²High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 8 of 34

New Mexico

Sample: 179162 - SW-8A 10'

Laboratory: Lubbock

TPH DRO

Analysis: QC Batch: 54375 Prep Batch: 46514

Analytical Method: Date Analyzed:

Mod. 8015B 2008-11-18

Sample Preparation: 2008-11-18 Prep Method: N/A Analyzed By: MN Prepared By: MN

RL

Parameter Flag Result Units Dilution RL $\overline{\text{DRO}}$ 92.4 mg/Kg 50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		153	mg/Kg	1	100	153	49.5 - 185

Sample: 179162 - SW-8A 10'

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 54243 Prep Batch: 46406

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2008-11-13 2008-11-13 Prep Method: S 5035 Analyzed By: \mathbf{AG} Prepared By: \mathbf{AG}

RLResult Parameter Flag Units Dilution RLmg/Kg GRO <1.00 1.00

Surrogate	Flag	Result	\mathbf{Units}	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.994	mg/Kg	1	1.00	99	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.809	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179163 - SW-12A 10'

Laboratory: Midland

BTEX Analysis: QC Batch: 54242 Prep Batch: 46406

Analytical Method: Date Analyzed:

S 8021B 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035 Analyzed By: \mathbf{AG}

 \mathbf{AG}

Prepared By:

RL

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

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Work Order: 8111329 34 Junction to Lea Station Page Number: 9 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.828	mg/Kg	1	1.00	83	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.808	mg/Kg	1	1.00	81	45.2 - 144.3

Sample: 179163 - SW-12A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2008-11-18

2008-11-18

Prep Method: N/A

Analyzed By: MN Prepared By: MN

RL.

Parameter	Flag	Result	Units	Dilution _	RL
DRO		251	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	3	288	mg/Kg	1	100	288	49.5 - 185

Sample: 179163 - SW-12A 10'

Laboratory: Midland

TPH GRO Analysis: 54243 QC Batch: Prep Batch: 46406

Analytical Method: Date Analyzed:

S 8015B 2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035

Analyzed By: AG Prepared By: AG

RL

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

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.804	mg/Kg	11	1.00	80	66 - 142.8

Sample: 179164 - SW-14A 10'

Laboratory: Midland

Analysis: **BTEX** QC Batch: 54242 Prep Batch: 46406

Analytical Method: S 8021B Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13

Prep Method: S 5035 Analyzed By: \mathbf{AG} Prepared By: \mathbf{AG}

³High surrogate recovery due to peak interference.

Report Date: November 19, 2008 2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 10 of 34

New Mexico

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

					\mathbf{Spike}	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.798	mg/Kg	1	1.00	80	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.833	mg/Kg	1	1.00	83	45.2 - 144.3

Sample: 179164 - SW-14A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514

Analytical Method: Mod. 8015B Date Analyzed:

2008-11-18 Sample Preparation: 2008-11-18

Prep Method: N/A Analyzed By: MN

Prepared By: MN

	•	m 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		127	mg/Kg	1	100	127	49.5 - 185

Sample: 179164 - SW-14A 10'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54243 Prep Batch: 46406

Analytical Method: S 8015B Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13

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

		m RL			
Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

				Spike	Percent	Recovery
Surrogate Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	1.08	mg/Kg	1	1.00	108	75 - 117.2
4-Bromofluorobenzene (4-BFB)	0.809	mg/Kg	1	1.00	81	66 - 142.8

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Work Order: 8111329 34 Junction to Lea Station Page Number: 11 of 34

New Mexico

Sample: 179165 - SW-16A 10'

Laboratory: Midland

Analysis: QC Batch:

BTEX 54290 Prep Batch: 46447

Analytical Method: Date Analyzed:

S 8021B

2008-11-14

Prep Method: S 5035 Analyzed By:

AG

Sample Preparation:

2008-11-14

Prepared By: \mathbf{AG}

RL

Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0200	mg/Kg	2	0.0100
Toluene		< 0.0200	mg/Kg	2	0.0100
Ethylbenzene		< 0.0200	mg/Kg	2	0.0100
Xylene		< 0.0200	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.57	mg/Kg	2	2.00	78	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.65	mg/Kg	2	2.00	82	45.2 - 144.3

Sample: 179165 - SW-16A 10'

Laboratory: Lubbock

Analysis: QC Batch:

TPH DRO 54375

Prep Batch: 46514 Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2008-11-18

2008-11-18

Prep Method: N/A Analyzed By: MN MN

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	m RL
DRO		4710	mg/Kg	10	50.0

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	4	797	mg/Kg	10	100	797	49.5 - 185

Sample: 179165 - SW-16A 10'

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447

Analytical Method: Date Analyzed:

S 8015B 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	$_{-}$ RL
GRO		3.37	mg/Kg	2	1.00

⁴High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 12 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.66	mg/Kg	2	2.00	83	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.65	mg/Kg	2	2.00	82	66 - 142.8

Sample: 179166 - SW-19A 10'

Laboratory: Midland

Analysis: BTEX QC Batch: 54290 Prep Batch: 46447 Analytical Method: S 8021B Date Analyzed: 2008-11-14 Sample Preparation: 2008-11-14

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

RLParameter Flag Result Units Dilution RLBenzene < 0.0200 mg/Kg 2 0.0100 Toluene < 0.0200 mg/Kg 2 0.0100 Ethylbenzene < 0.0200 mg/Kg 2 0.0100 2 Xylene < 0.0200 mg/Kg 0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.55	mg/Kg	2	2.00	78	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.64	mg/Kg	2	2.00	82	45.2 - 144.3

Sample: 179166 - SW-19A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514 Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

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

G	171 a	D14	TT:	Dibution	Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	5	1080	mg/Kg	20	100	1080	49.5 - 185

Sample: 179166 - SW-19A 10'

Laboratory: Midland

Prep Method: S 5035 Analysis: TPH GRO Analytical Method: S 8015B QC Batch: 54291 Date Analyzed: 2008-11-14 Analyzed By: AG Prep Batch: 46447 Sample Preparation: 2008-11-14 Prepared By: AG

⁵High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 13 of 34

New Mexico

Parameter	Flag		$rac{ ext{RL}}{ ext{Result}}$		Units	Γ	ilution	RL
GRO			3.40	mg/Kg		2	1.00	
C make	Tol	1	Doguelt	TT-:-	D11 41 -	Spike	Percent	Recovery
Surrogate	r.	lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.66	mg/Kg	2	2.00	83	75 - 117.2
4-Bromofluorobenzene (4-B	FB)		1.64	mg/Kg	2	2.00	82	66 - 142.8

Sample: 179167 - SW-22A 10'

Laboratory:

Prep Batch:

Midland

Analysis: QC Batch: BTEX

54242 46406

Analytical Method:

S 8021B

2008-11-13

Prep Method:

S 5035 \mathbf{AG}

Date Analyzed: Sample Preparation:

2008-11-13

Analyzed By: Prepared By: AG

RLFlag Result Parameter Units Dilution RLBenzene < 0.0100 mg/Kg 1 0.0100 Toluene < 0.0100 1 0.0100 mg/Kg < 0.0100 Ethylbenzene mg/Kg 1 0.0100< 0.0100 Xylene mg/Kg 1 0.0100

~		.	··		Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.847	mg/Kg	1	1.00	85	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.894	mg/Kg	1	1.00	89	45.2 - 144.3

Sample: 179167 - SW-22A 10'

Laboratory:

Lubbock

Analysis: QC Batch:

Prep Batch:

TPH DRO

54375 46514

Analytical Method: Date Analyzed:

Mod. 8015B

2008-11-18 Sample Preparation: 2008-11-18 Prep Method: N/A Analyzed By: MN

Prepared By: MN

RLResult Parameter Flag Units Dilution RL107 DRO mg/Kg 50.0

				•	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		159	mg/Kg	1	100	159	49.5 - 185

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Work Order: 8111329 34 Junction to Lea Station Page Number: 14 of 34

New Mexico

Sample: 179167 - SW-22A 10'

Laboratory: Midland

Analysis: QC Batch:

TPH GRO

54243 Prep Batch: 46406

Analytical Method:

S 8015B

Date Analyzed:

2008-11-13

Prep Method: S 5035 Analyzed By:

AG

Sample Preparation:

2008-11-13

Prepared By:

AG

RL

Parameter Flag Result Units Dilution RL \overline{GRO} 1.08 mg/Kg 1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<u> </u>	0.997	mg/Kg	1	1.00	100	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.811	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179168 - SW-29A 10'

Midland Laboratory:

Analysis: **BTEX** QC Batch: 54242 Prep Batch: 46406

Analytical Method: S 8021B Date Analyzed: 2008-11-13 Sample Preparation: 2008-11-13

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

RL

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

•					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.797	mg/Kg	1	1.00	80	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.837	mg/Kg	1	1.00	84	45.2 - 144.3

Sample: 179168 - SW-29A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54375 Prep Batch: 46514

Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

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

RL

Result Units Dilution Parameter Flag RLmg/Kg DRO <50.0 50.0

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Work Order: 8111329 34 Junction to Lea Station Page Number: 15 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} \text{Spike} \\ \text{Amount} \end{array}$	Percent Recovery	Recovery Limits
	1145			Direction			
n-Triacontane		142	m mg/Kg	1	100	142	49.5 - 185

Sample: 179168 - SW-29A 10'

Laboratory: Midland

Analysis:

TPH GRO

QC Batch: 54243 46406 Prep Batch:

Analytical Method:

S 8015B

2008-11-13

Prep Method: S 5035 Analyzed By: AG

Date Analyzed: Sample Preparation: 2008-11-13

Prepared By:

 \mathbf{AG}

Parameter	Flag	RL Result	Units	I	Dilution	RL
GRO		<1.00	mg/Kg		1	1.00
		•		Spike	Percent	Recovery

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.806	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179169 - SW-38A 10'

Laboratory: Midland

Analysis: BTEX

QC Batch: 54242 Prep Batch: 46406 Analytical Method: Date Analyzed:

S 8021B 2008-11-13 Prep Method: S 5035

Analyzed By: AG Prepared By: AG

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

Sample Preparation: 2008-11-13

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.784	mg/Kg	1	1.00	78	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.811	mg/Kg	1	1.00	81	45.2 - 144.3

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Work Order: 8111329 34 Junction to Lea Station Page Number: 16 of 34

New Mexico

Sample: 179169 - SW-38A 10'

Laboratory: Lubbock

Analysis: QC Batch:

TPH DRO 54376 Prep Batch: 46515

Analytical Method: Date Analyzed:

Mod. 8015B

2008-11-18

Prep Method: N/A Analyzed By: MN

Sample Preparation: 2008-11-18

Prepared By: MN

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		991	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	6	439	mg/Kg	1	100	439	49.5 - 185

Sample: 179169 - SW-38A 10'

Laboratory: Midland

Analysis: TPH GRO 54243 QC Batch: Prep Batch: 46406

Analytical Method: Date Analyzed:

S 8015B2008-11-13 Sample Preparation: 2008-11-13 Prep Method: S 5035 Analyzed By: \mathbf{AG}

Prepared By: AG

RL

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

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.812	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179170 - SW-36A 10'

Laboratory: Midland

Analysis: BTEX QC Batch: 54290 Prep Batch: 46447

Analytical Method: Date Analyzed:

S 8021B 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

RL

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

⁶High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 17 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.813	mg/Kg	1	1.00	81	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.828	mg/Kg	11	1.00	83	45.2 - 144.3

Sample: 179170 - SW-36A 10'

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54376 Prep Batch: 46515

Analytical Method:

Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

Prep Method: N/A Analyzed By: MN

Prepared By: MN

RL

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

				•	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		107	mg/Kg	1	100	107	49.5 - 185

Sample: 179170 - SW-36A 10'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447

Analytical Method: Date Analyzed:

S 8015B 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035

Analyzed By: AG Prepared By: AG

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

					\mathbf{Spike}	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.921	mg/Kg	1	1.00	92	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.816	mg/Kg	11	1.00	82	66 - 142.8
		•					

Sample: 179171 - SS-1

Laboratory: Midland

Analysis: BTEX QC Batch: 54290 Prep Batch: 46447

Analytical Method: S 8021B Date Analyzed: 2008-11-14 Sample Preparation: 2008-11-14

Prep Method: S 5035 Analyzed By: AGPrepared By: \mathbf{AG}

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Work Order: 8111329 34 Junction to Lea Station Page Number: 18 of 34

New Mexico

45.2 - 144.3

		\mathbf{R}	L				
Parameter	Flag	Resul	lt	Units		Dilution	m RL
Benzene		< 0.010	0	mg/Kg		1	0.0100
Toluene		< 0.010	0	mg/Kg		1	0.0100
Ethylbenzene		< 0.010	0	mg/Kg		1	0.0100
Xylene		< 0.010	0	mg/Kg		1	0.0100
					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.801	mg/Kg	1	1.00	80	49 - 129.7

mg/Kg

Sample: 179171 - SS-1

4-Bromofluorobenzene (4-BFB)

Laboratory:

Lubbock Analysis: TPH DRO QC Batch: 54376 Prep Batch: 46515

Analytical Method:

Date Analyzed:

0.840

Mod. 8015B 2008-11-18

1

1.00

84

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

RLParameter Flag Result Units Dilution RLDRO 398 mg/Kg 50.0

Sample Preparation: 2008-11-18

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	${f Amount}$	Recovery	Limits
n-Triacontane	7	230	mg/Kg	1	100	230	49.5 - 185

Sample: 179171 - SS-1

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447

Analytical Method: S 8015B Date Analyzed: Sample Preparation: 2008-11-14

Prep Method: S 5035 2008-11-14 Analyzed By: AGPrepared By: AG

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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.812	mg/Kg	1	1.00	81	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.815	mg/Kg	1	1.00	82	66 - 142.8

⁷High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 19 of 34

New Mexico

Sample: 179172 - SS-2

Laboratory: Midland

Analysis: BTEX QC Batch: 54290 Prep Batch: 46447 Analytical Method: S 8021B
Date Analyzed: 2008-11-14
Sample Preparation: 2008-11-14

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

RL

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

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.858	mg/Kg	1	1.00	86	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.824	mg/Kg	1	1.00	82	45.2 - 144.3

Sample: 179172 - SS-2

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54376 Prep Batch: 46515 Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18 Prep Method: N/A Analyzed By: MN Prepared By: MN

RL

Parameter	Flag	Result	Units	Dilution	m RL
DRO		118	m mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		139	mg/Kg	1	100	139	49.5 - 185

Sample: 179172 - SS-2

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447 Analytical Method: S 8015B
Date Analyzed: 2008-11-14
Sample Preparation: 2008-11-14

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

RL

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

Report Date: November 19, 2008 2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 20 of 34

New I	Mexico
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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.937	mg/Kg	1	1.00	94	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.810	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179173 - SS-3

Laboratory: Midland

Analysis: **BTEX** QC Batch: 54290 Prep Batch: 46447

Analytical Method: S 8021B Date Analyzed: 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.802	mg/Kg	1	1.00	80	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.832	mg/Kg	1	1.00	83	45.2 - 144.3

Sample: 179173 - SS-3

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54376 Prep Batch: 46515

Analytical Method: Mod. 8015B Date Analyzed: 2008-11-18 Sample Preparation: 2008-11-18

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

RL

Dilution Parameter Flag Result Units RL639 $\overline{\mathrm{DRO}}$ mg/Kg 50.0 1

						\mathbf{Spike}	$\mathbf{Percent}$	$\operatorname{Recovery}$
n-Triacontane 8 300 mg/Kg 1 100 300 49.5 - 10	Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
	n-Triacontane	8	300	mg/Kg	1	100	300	49.5 - 185

Sample: 179173 - SS-3

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 Date Analyzed: 2008-11-14 Analyzed By: AGQC Batch: 54291 Sample Preparation: 2008-11-14 Prepared By: Prep Batch: 46447 \mathbf{AG}

⁸High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 21 of 34

New Mexico

Parameter	Flag		$rac{ ext{RL}}{ ext{Result}}$		Units	r	Oilution	m RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.01	mg/Kg	1	1.00	101	75 - 117.2
4-Bromofluorobenzene (4-B	FB)		0.806	mg/Kg	1	1.00	81	66 - 142.8

Sample: 179174 - SS-4

Laboratory: Midland

Analysis:

BTEX

54290

Analytical Method:

S 8021B

2008-11-14

Prep Method:

S 5035 AG

QC Batch: Prep Batch: 46447

Date Analyzed: Sample Preparation: 2008-11-14

Analyzed By: Prepared By:

AG

		m RL			
Parameter	Flag	Result	Units	Dilution	$_{ m RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	${ m Spike} \ { m Amount}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.821	mg/Kg	1	1.00	82	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.828	mg/Kg	1	1.00	83	45.2 - 144.3

Sample: 179174 - SS-4

Laboratory: Lubbock

Analysis: TPH DRO QC Batch:

54376 Prep Batch: 46515 Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2008-11-18

2008-11-18

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

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		620	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	9	310	${ m mg/Kg}$	1	100	310	49.5 - 185

⁹High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 22 of 34

New Mexico

Sample: 179174 - SS-4

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447

Analytical Method: Date Analyzed:

S 8015B 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035 Analyzed By: AG Prepared 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)		0.939	mg/Kg	1	1.00	94	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.808	mg/Kg	11	1.00	81	66 - 142.8

Sample: 179175 - SS-5

Laboratory: Midland

Analysis: BTEX QC Batch: 54290 Prep Batch: 46447

Analytical Method: S 8021B Date Analyzed: 2008-11-14 Sample Preparation: 2008-11-14 Prep Method: S 5035 Analyzed By: AG Prepared By: AG

RLDilution RLParameter Result Units Flag Benzene < 0.0100 mg/Kg 1 0.0100 Toluene mg/Kg 1 < 0.0100 0.0100 Ethylbenzene mg/Kg 1 < 0.0100 0.0100 < 0.0100 mg/Kg 1 0.0100 Xylene

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.786	mg/Kg	1	1.00	79	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.808	mg/Kg	1	1.00	81	45.2 - 144.3

Sample: 179175 - SS-5

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 54376 Prep Batch: 46515

Analytical Method: Mod. 8015B 2008-11-18 Date Analyzed: Sample Preparation: 2008-11-18

Prep Method: N/A Analyzed By: MNPrepared By: MN

Parameter	Flag	Result	Units	Dilution	RL
DRO		296	mg/Kg	_1	50.0

RL.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 23 of 34

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane	10	234	mg/Kg	1	100	234	49.5 - 185

Sample: 179175 - SS-5

Laboratory: Midland

Analysis: TPH GRO QC Batch: 54291 Prep Batch: 46447

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2008-11-14

Prep Method: S 5035 Analyzed By: AG 2008-11-14 Prepared By: AG

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		1.54	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	1	1.00	100	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.797	mg/Kg	1	1.00	80	66 - 142.8

Method Blank (1)

QC Batch: 54242

QC Batch: 54242 Prep Batch: 46406 Date Analyzed: 2008-11-13 QC Preparation: 2008-11-13

Analyzed By: AG Prepared By: AG

MDI

		MDL		
Parameter	Flag	\mathbf{Result}	Units	\mathtt{RL}
Benzene		< 0.00800	mg/Kg	0.01
Toluene		< 0.00800	mg/Kg	0.01
Ethylbenzene		< 0.00820	mg/Kg	0.01
Xylene		< 0.00960	m mg/Kg	0.01

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.790	mg/Kg	1	1.00	79	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.823	mg/Kg	1	1.00	82	51.9 - 128.1

Method Blank (1)

QC Batch: 54243

QC Batch: 54243 Prep Batch: 46406 Date Analyzed: 2008-11-13 QC Preparation: 2008-11-13

Analyzed By: AG Prepared By: AG

¹⁰High surrogate recovery due to peak interference.

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Work Order: 8111329 34 Junction to Lea Station Page Number: 24 of 34

New Mexico

Parameter	Flag		$rac{ ext{MDL}}{ ext{Result}}$		Units		RL	
GRO			0.791		mg/Kg		1	
					Spike	Percent	Recovery	
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)		0.840	mg/Kg	1	1.00	84	70 - 130	
4-Bromofluorobenzene (4-BFB)		0.831	mg/Kg	1	1.00	83	70 - 130	

Method Blank (1)

QC Batch: 54290

QC Batch: 54290 Prep Batch: 46447 Date Analyzed: 2008-11-14 QC Preparation: 2008-11-14 Analyzed By: AG Prepared By: AG

		MDL		
Parameter	Flag	Result	\mathbf{Units}	RL
Benzene		< 0.00800	mg/Kg	0.01
Toluene		< 0.00800	${ m mg/Kg}$	0.01
Ethylbenzene		< 0.00820	${ m mg/Kg}$	0.01
Xylene		< 0.00960	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.775	mg/Kg	1	1.00	78	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.816	${ m mg/Kg}$	1	1.00	82	51.9 - 128.1

Method Blank (1)

QC Batch: 54291

QC Batch: 54291 Prep Batch: 46447 Date Analyzed: 2008-11-14 QC Preparation: 2008-11-14 Analyzed By: AG Prepared By: AG

			Spike	Percent	Recovery
GRO		0.779	mg/Kg		1
Parameter Flag		Result	Units	RL_	
		\mathbf{MDL}			

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.827	mg/Kg	1	1.00	83	70 - 130
4-Bromofluorobenzene (4-BFB)		0.819	mg/Kg	1	1.00	82	70 - 130

Method Blank (1)

QC Batch: 54375

QC Batch: 54375 Prep Batch: 46514 Date Analyzed: 2008-11-18 QC Preparation: 2008-11-18

Analyzed By: MN Prepared By: MN

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 25 of 34

New Mexico

Parameter		Flag		$rac{ ext{MDL}}{ ext{Result}}$	τ	Jnits	RL
DRO				<6.77	m	g/Kg	50
C	T21	D14	Tinita	Dilution	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		104	mg/Kg	1	100	104	49.5 - 185

Method Blank (1)

QC Batch: 54376

QC Batch: 54376 Prep Batch: 46515 Date Analyzed: 2008-11-18 QC Preparation: 2008-11-18 Analyzed By: MN Prepared By: MN

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		114	mg/Kg	1	100	114	49.5 - 185

Laboratory Control Spike (LCS-1)

QC Batch: 54242 Prep Batch: 46406 Date Analyzed: 2008-11-13 QC Preparation: 2008-11-13 Analyzed By: AG Prepared By: AG

	LCS			\mathbf{Spike}	Matrix		Rec .
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	0.891	mg/Kg	1	1.00	< 0.00800	89	72.7 - 129.8
Toluene	0.900	mg/Kg	1	1.00	< 0.00800	90	71.6 - 129.6
Ethylbenzene	0.890	mg/Kg	1	1.00	< 0.00820	89	70.8 - 129.7
Xylene	2.63	mg/Kg	1	3.00	< 0.00960	88	70.9 - 129.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.915	mg/Kg	1	1.00	< 0.00800	92	72.7 - 129.8	3	20
Toluene	0.913	mg/Kg	1	1.00	< 0.00800	91	71.6 - 129.6	1	20
Ethylbenzene	0.911	mg/Kg	1	1.00	< 0.00820	91	70.8 - 129.7	2	20
Xylene	2.70	mg/Kg	1	3.00	< 0.00960	90	70.9 - 129.4	3	20

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Work Order: 8111329 34 Junction to Lea Station Page Number: 26 of 34

New Mexico

Surrogate	$rac{ ext{LCS}}{ ext{Result}}$	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.809	0.788	mg/Kg	1	1.00	81	79	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.834	0.836	mg/Kg	1	1.00	83	84	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

54243

Date Analyzed:

2008-11-13

Analyzed By: AG

Prep Batch:

46406

QC Preparation: 2008-11-13

Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.94	mg/Kg	1	10.0	< 0.171	79	70 - 130

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	Limit
GRO	8.34	mg/Kg	1	10.0	< 0.171	83	70 - 130	5	20

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

	LCS	$_{ m LCSD}$			Spike	LCS	$_{ m LCSD}$	${ m Rec.}$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.872	0.872	mg/Kg	1	1.00	87	87	70 - 130
4-Bromofluorobenzene (4-BFB)	0.855	0.853	${ m mg/Kg}$	1	1.00	86	85	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch:

54290

Date Analyzed:

2008-11-14

Analyzed By: AG

Prep Batch: 46447

QC Preparation: 2008-11-14

Prepared By: AG

	LCS			Spike	Matrix		Rec .
Param	\mathbf{Result}	\mathbf{Units}	Dil.	${f Amount}$	Result	Rec .	\mathbf{Limit}
Benzene	0.920	mg/Kg	1	1.00	< 0.00800	92	72.7 - 129.8
Toluene	0.914	mg/Kg	1	1.00	< 0.00800	91	71.6 - 129.6
Ethylbenzene	0.900	mg/Kg	1	1.00	< 0.00820	90	70.8 - 129.7
Xylene	2.67	mg/Kg	1	3.00	< 0.00960	89	70.9 - 129.4

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.	Limit	RPD	Limit
Benzene	0.897	mg/Kg	1	1.00	< 0.00800	90	72.7 - 129.8	2	20
Toluene	0.907	${ m mg/Kg}$	1	1.00	< 0.00800	91	71.6 - 129.6	1	20
Ethylbenzene	0.898	mg/Kg	1	1.00	< 0.00820	90	70.8 - 129.7	0	20
Xylene	2.66	mg/Kg	1	3.00	< 0.00960	89	70.9 - 129.4	0	20

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 27 of 34

New Mexico

Surrogate	$rac{ ext{LCS}}{ ext{Result}}$	$\begin{array}{c} \text{LCSD} \\ \text{Result} \end{array}$	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.818	0.790	mg/Kg	1	1.00	82	79	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.837	0.846	mg/Kg	1	1.00	84	85	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

54291

Date Analyzed:

2008-11-14

Analyzed By: AG

46447 Prep Batch:

QC Preparation: 2008-11-14

Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.92	mg/Kg	1	10.0	< 0.171	79	70 - 130

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	8.19	mg/Kg	1	10.0	< 0.171	82	70 - 130	3	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)	0.858	0.862	mg/Kg	1	1.00	86	86	70 - 130
4-Bromofluorobenzene (4-BFB)	0.851	0.838	$_{ m mg/Kg}$	1	1.00	85	84	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch:

54375

Prep Batch: 46514

Date Analyzed: QC Preparation:

2008-11-18 2008-11-18

Analyzed By: MN

Prepared By: MN

LCS Spike Matrix Rec. Dil. Result Limit Result Units Amount Param Rec. $\overline{\text{DRO}}$ 331 mg/Kg 250 <6.77 13273.9 - 138

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	11	352	mg/Kg	1	250	<6.77	141	73.9 - 138	6	20

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	105	112	m mg/Kg	1	100	105	112	49.5 - 185

¹¹LCSD analyte out of range. LCS/LCSD has a RPD within limits. Therfore, LCS shows extraction occured properly.

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 28 of 34

New Mexico

Laboratory Control Spike (LCS-1)

QC Batch:

54376

Date Analyzed:

2008-11-18

Analyzed By: MN

Prep Batch: 46515

QC Preparation: 2008-11-18 Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
DRO	328	mg/Kg	1	250	< 6.77	131	73.9 - 138

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	339	mg/Kg	1	250	< 6.77	136	73.9 - 138	3	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
n-Triacontane	111	110	mg/Kg	1	100	111	110	49.5 - 185

Matrix Spike (MS-1) Spiked Sample: 179160

QC Batch: 54242 Date Analyzed:

2008-11-13

Analyzed By: AG

Prep Batch: 46406

QC Preparation: 2008-11-13

Prepared By: AG

MS Spike Matrix Rec. Result Dil. Amount Limit Param Result Units Rec. 58.6 - 165.2 1.00 Benzene 0.938 mg/Kg 1 < 0.00800 94 mg/Kg 1.00 < 0.00800 64.2 - 153.8Toluene 0.9311 93 1.00 61.6 - 159.4 Ethylbenzene 0.959 mg/Kg 1 < 0.00820 96 64.4 - 155.3 2.85 mg/Kg 1 3.00 < 0.00960 95 Xylene

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
Benzene	0.886	mg/Kg	1	1.00	<0.00800	89	58.6 - 165.2	6	20
Toluene	0.883	mg/Kg	1	1.00	< 0.00800	88	64.2 - 153.8	5	20
Ethylbenzene	0.897	mg/Kg	1	1.00	< 0.00820	90	61.6 - 159.4	7	20
Xylene	2.65	mg/Kg	1	3.00	< 0.00960	88	64.4 - 155.3	7	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	\mathbf{Result}	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.821	0.792	mg/Kg	1	1	82	79	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.830	0.812	mg/Kg	1	1	83	81	72 - 127.8

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 29 of 34

New Mexico

Matrix Spike (MS-1)

Spiked Sample: 179169

QC Batch: Prep Batch:

54243 46406 Date Analyzed:

2008-11-13

Analyzed By: AG

QC Preparation: 2008-11-13 Prepared By: AG

MS Spike Matrix Rec. Result Dil. Limit Param Units Amount Result Rec. GRO 12.0 mg/Kg 10.0 < 0.171 120 22.3 - 134.6

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

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	\mathbf{Limit}
GRO	12.2	mg/Kg	1	10.0	< 0.171	122	22.3 - 134.6	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	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
Trifluorotoluene (TFT)	1.10	1.07	mg/Kg	1	1	110	107	68.4 - 113.1
4-Bromofluorobenzene (4-BFB)	0.839	0.836	mg/Kg	1	1	84	84	66.7 - 134.3

Matrix Spike (MS-1) Spiked Sample: 179175

QC Batch:

54290

Date Analyzed:

2008-11-14

Analyzed By: AG

Prep Batch: 46447

QC Preparation:

2008-11-14

Prepared By: AG

MS Spike Matrix Rec. Result Units Dil. Amount Result Rec. Limit Param Benzene 0.793 mg/Kg 1.00 < 0.00800 79 58.6 - 165.2 1 Toluene 0.813 1.00 < 0.00800 81 64.2 - 153.8 mg/Kg 1 0.827 Ethylbenzene mg/Kg 1 1.00 < 0.00820 83 61.6 - 159.4Xylene 2.44 mg/Kg 1 3.00 < 0.00960 81 64.4 - 155.3

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

	MSD			Spike	Matrix		Rec.		\mathtt{RPD}
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.850	mg/Kg	1	1.00	< 0.00800	85	58.6 - 165.2	7	20
Toluene	0.877	mg/Kg	1	1.00	< 0.00800	88	64.2 - 153.8	8	20
Ethylbenzene	0.887	mg/Kg	1	1.00	< 0.00820	89	61.6 - 159.4	7	20
Xylene	2.62	mg/Kg	_ 1	3.00	< 0.00960	87	64.4 - 155.3	7	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.806	0.776	mg/Kg	1	1	81	78	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.814	0.806	mg/Kg	1	1	81	81	72 - 127.8

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 30 of 34

New Mexico

Matrix Spike (MS-1)

Spiked Sample: 179175

QC Batch: Prep Batch:

54291 46447 Date Analyzed:

2008-11-14

QC Preparation: 2008-11-14 Analyzed By: AG

Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	12.1	mg/Kg	1	10.0	1.54	106	22.3 - 134.6

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

	MSD			Spike	Matrix		Rec .		RPD
Param	 Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	11.5	mg/Kg	1	10.0	1.54	100	22.3 - 134.6	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	\mathbf{Result}	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.02	0.995	mg/Kg	1	1	102	100	68.4 - 113.1
4-Bromofluorobenzene (4-BFB)	0.861	0.848	mg/Kg	1	1	86	85	66.7 - 134.3

Matrix Spike (MS-1) Spiked Sample: 179159

QC Batch:

54375

Date Analyzed:

2008-11-18

Analyzed By: MN

Prep Batch:

46514

QC Preparation: 2008-11-18 Prepared By: MN

MS Spike Matrix Rec. Result Units Dil. Result Limit Param Amount Rec. DRO 216 mg/Kg 250 47.1 68 50.7 - 134

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	250	mg/Kg	1	250	47.1	81	50.7 - 134	15	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.	${f Limit}$
n-Triacontane	135	142	m mg/Kg	1	100	135	142	49.5 - 185

Matrix Spike (MS-1) Spiked Sample: 179172

QC Batch: 54376 Prep Batch: 46515 Date Analyzed: 2008-11-18 QC Preparation:

2008-11-18

Analyzed By: MN Prepared By:

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 31 of 34

New Mexico

	MS			Spike	Matrix		Rec.
Param	\mathbf{Result}	\mathbf{Units}	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	317	mg/Kg	1	250	118	80	50.7 - 134

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
DRO	371	mg/Kg	1	250	118	101	50.7 - 134	16	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	131	146	mg/Kg	1	100	131	146	49.5 - 185

Standard (ICV-1)

QC Batch: 54242

Date Analyzed: 2008-11-13

Analyzed By: AG

Param	$\dot{ ext{Flag}}$	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0950	95	85 - 115	2008-11-13
Toluene		mg/Kg	0.100	0.0952	95	85 - 115	2008-11-13
Ethylbenzene		mg/Kg	0.100	0.0935	94	85 - 115	2008-11-13
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2008-11-13

Standard (CCV-1)

QC Batch: 54242

Date Analyzed: 2008-11-13

Analyzed By: AG

			CCVs True	CCVs Found	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0940	94	85 - 115	2008-11-13
Toluene		mg/Kg	0.100	0.0937	94	85 - 115	2008-11-13
Ethylbenzene		mg/Kg	0.100	0.0910	91	85 - 115	2008-11-13
Xylene		mg/Kg	0.300	0.268	89	85 - 115	2008-11-13

Standard (ICV-1)

QC Batch: 54243

Date Analyzed: 2008-11-13

Analyzed By: AG

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 32 of 34

New Mexico

Param	Flag	Units	ICVs True Conc.	ICVs Found	ICVs Percent Recovery	Percent Recovery Limits	Date
raram	riag	Omes	Conc.	Conc.	Recovery	Lilling	Analyzed
GRO		mg/Kg	1.00	0.967	97	85 - 115	2008-11-13

Standard (CCV-1)

QC Batch: 54243

Date Analyzed: 2008-11-13

Analyzed By: AG

!			CCVs	\mathbf{CCVs}	CCVs	Percent	
			${f True}$	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.955	96	85 - 115	2008-11-13

Standard (ICV-1)

QC Batch: 54290

Date Analyzed: 2008-11-14

Analyzed By: AG

	T 33	TT •.	ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0940	94	85 - 115	2008-11-14
Toluene		mg/Kg	0.100	0.0937	94	.85 - 115	2008-11-14
Ethylbenzene		mg/Kg	0.100	0.0910	91	85 - 115	2008-11-14
Xylene		mg/Kg	0.300	0.268	89	85 - 115	2008-11-14

Standard (CCV-1)

QC Batch: 54290

Date Analyzed: 2008-11-14

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	0.0923	92	85 - 115	2008-11-14
Toluene		mg/Kg	0.100	0.0907	91	85 - 115	2008-11-14
Ethylbenzene		mg/Kg	0.100	0.0895	90	85 - 115	2008-11-14
Xylene		mg/Kg	0.300	0.262	87	85 - 115	2008-11-14

Standard (ICV-1)

QC Batch: 54291

Date Analyzed: 2008-11-14

Analyzed By: AG

Report Date: November 19, 2008 Work Order: 8111329 Page Number: 33 of 34 34 Junction to Lea Station 2002-10286 New Mexico **ICVs ICVs ICVs** Percent True Found Recovery Percent Date Param Conc. Flag Units Conc. Recovery Limits Analyzed mg/Kg GRO 1.00 0.984 98 85 - 115 2008-11-14 Standard (CCV-1) Analyzed By: AG Date Analyzed: 2008-11-14 QC Batch: 54291 **CCVs CCVs CCVs** Percent True Found Percent Recovery Date Units Conc. Flag Conc. Recovery Limits Analyzed Param 85 - 115 GRO mg/Kg 1.00 0.938 94 2008-11-14 Standard (CCV-1) Date Analyzed: 2008-11-18 QC Batch: 54375 Analyzed By: MN **CCVs CCVs CCVs** Percent True Found Percent Recovery Date Flag Units Param Conc. Conc. Recovery Limits Analyzed DRO mg/Kg 250 272 109 85 - 115 2008-11-18 Standard (CCV-2) Date Analyzed: 2008-11-18 Analyzed By: MN QC Batch: 54375 **CCVs CCVs CCVs** Percent True Found Percent Recovery Date Flag Units Conc. Conc. Recovery Limits Analyzed Param DRO mg/Kg 250 268 107 85 - 115 2008-11-18 Standard (CCV-3) Date Analyzed: 2008-11-18 Analyzed By: MN QC Batch: 54375

CCVs

Found

Conc.

256

CCVs

Percent

Recovery

102

Standard (CCV-1)

Param

DRO

Flag

QC Batch: 54376 Date Analyzed: 2008-11-18

Units

mg/Kg

CCVs

True

Conc.

250

Analyzed By: MN

Date

Analyzed

2008-11-18

Percent

Recovery

Limits

85 - 115

2002-10286

Work Order: 8111329 34 Junction to Lea Station Page Number: 34 of 34

New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	277	111	85 - 115	2008-11-18

Standard (CCV-2)

QC Batch: 54376

Date Analyzed: 2008-11-18

Analyzed By: MN

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
$\overline{\mathrm{D}\mathrm{RO}}$		mg/Kg	250	268	107	85 - 115	2008-11-18

LAB Order 10# 8111329

TraceAnalysis, Inc.

email: lab@traceanalysis.com

NOVA (Street, City, Zip)

Address:

Company Name:

6701 Aberdeen Avenue, Suite 9 Lubbock, Taxas 79424 18 (806) 794-1286 Fax (806) 794-1298 1 (800) 378-1298

Phone #:

Fax #:

5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313

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8808 Camp Bowie Blvd. West, Suite 180 Ft. Worth. Texas 76116 16 (317) 201-5260 Fax (817) 560-4336

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Contact Person:

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200 East Sunset Rd., Suite E El Paso, Texas 79922 Tel (915) 585-3443 Tex (915) 585-4944 1 (888) 588-3443

All tests Midland Moisture Content Hq ,SST ,QOB Pesticides 8081A / 608 **BCB.**2 8085 \ 608 GC/MS Semi. Vol. 8270C / 625 REMARKS GC/W2 APF 8560B / 624 ВCI TCLP Pesticides TCLP Semi Volatiles TCLP Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 PAH 8270<u>C /</u> TPH 8015 GRO / DRO TVHC TPH 418.1 / TX1005 / TX1005 EX(C35) ₹81EX 8051B) 602 / 8260B / 624 Temp`c: 3.0% 80218 / 602 / 82608 / 624 MTBE 1432 1436 1410 1855 414 1423 1420

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Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O.

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6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 16 (906) 794-1296 Fax (806) 794-1298 1 (800) 378-1296

TraceAnalysis, Inc.

email: lab@traceanalysis.com

NOVA

Company Name:

(Street, City, Zip)

Address:

5002 Basin Street, Suite A1 Midland, Texas 78703 Tel (432) 689-6301 Fax (432) 689-6313

200 East Sunset Rd., Suite El Paso, Texas 79922 Tel (915) 565-3443 Fal (915) 585-4944 1 (888) 588-3443

1. Suite 79922

8808 Camp Bowie Blvd. West, Suite 1 Ft. Worth, Texas 76116 Tel (817) 201-5260 Fax (817) 560-4336

ANALYSIS REQUEST or Specify Method No.) Moisture Content BOD, TSS, pH Pesticides 8081A / 608 PCB's 8082 / 608 3C/MS Semi. Vol. 8270C / 625 GC/W2 AOI: 8560B / 654 **BCI** TCLP Pesticides TCLP Semi Volatiles Circle TCLP Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 PAH 8270C / 625

TPH 8015 GRO / DRO TVHC

₹ 8021B) 602 / 8260B / 624

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STATION

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noter Signature:

rounsAville @ novaturantors.cc

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Kontro

Contact Person:

PLHIUS

(if different from above)

Project #:

nvoice to

10286

7007

(including state

Project Location

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Fax #:

Turn Around Time if different from standard

Hold

All tests Milland Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required REMARKS Temp°c: Temp'c: Temp°c: Ö,

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Company:

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OPIGINAL COPY

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O.



6701 Aberdeen Avenue: Suite 9 * 200 East Sunset/Road, Suite E El Paso, Texas 79922 5002 Basin Street, Suite A1 Midland, Texas 79703

800 • 37B • 1296 888 • 588 • 3443

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

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

, 6015 Harris Parkway, Suite 110 Ft. Worth Texas 76132

817 • 201 • 5260

FAX 432 • 689 • 6313

E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

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HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA

WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX El Paso:

T104704221-08-TX

LELAP-02002

Midland: T104704392-08-TX

LELAP-02003 Kansas E-10317

Analytical and Quality Control Report

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

Report Date: March 13, 2009

Work Order: 9031139

Project Location: New Mexico

Project Name: 34 Junction to Lea Station

Project Number: 2002-10286

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

	•		Date	Time	\mathbf{Date}
Sample	Description	Matrix	Taken	Taken	Received
189897	West Wall-1, 10'	soil	2009-03-10	12:08	2009-03-11
189898	West Wall-2, 12'	soil	2009-03-10	12:12	2009-03-11
189899	West Wall-3, 10'	soil	2009-03-10	12:04	2009-03-11
189900	North Wall-1, 10'	soil	2009-03-10	12:16	2009-03-11
189901	North Wall-2, 10'	soil	2009-03-10	12:20	2009-03-11
189902	South Wall-1, 12'	soil	2009-03-10	12:38	2009-03-11
189903	South Wall-2, 12'	soil	2009-03-10	12:42	2009-03-11

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

This report consists of a total of 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael abel

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2009-03-11 and assigned to work order 9031139. Samples for work order 9031139 were received intact at a temperature of 2.4 deg. C.

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

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		Prep	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	49197	2009-03-12 at 10:25	57587	2009-03-12 at 10:25
TPH DRO	Mod. 8015B	49181	2009-03-12 at 12:00	57583	2009-03-12 at 13:50
TPH GRO	S 8015B	49197	2009-03-12 at 10:25	57588	2009-03-12 at 10:25

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 9031139 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.

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Work Order: 9031139 34 Junction to Lea Station Page Number: 4 of 17

New Mexico

Analytical Report

Sample: 189897 - West Wall-1, 10'

Laboratory:

Midland

Analysis:

BTEX

57587

Analytical Method:

S 8021B

Prep Method: S 5035

QC Batch: Prep Batch: 49197 Date Analyzed: Sample Preparation: 2009-03-12

2009-03-12

Analyzed By: ME Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.127	mg/Kg	1	0.0100
Xylene		0.340	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	1	1.00	103	45.2 - 144.3

Sample: 189897 - West Wall-1, 10'

Laboratory:

Midland

49181

Analysis: QC Batch:

Prep Batch:

TPH DRO 57583

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B

2009-03-12 2009-03-12

Prep Method: N/A

Analyzed By: LDPrepared By: LD

RT.

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		56.6	mg/Kg	1	100	57	13.2 - 219.3

Sample: 189897 - West Wall-1, 10'

Laboratory:

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Midland

Analysis: QC Batch: Prep Batch:

TPH GRO

57588

49197

Date Analyzed:

Analytical Method:

S 8015B

2009-03-12

Sample Preparation: 2009-03-12 Prep Method: S 5035 Analyzed By:

ME ME

Prepared By:

 $continued \dots$

Work Order: 9031139

Page Number: 5 of 17

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34 Junction to Lea Station

New Mexico

sample 189897 continued ...

			m RL					
Parameter	Flag		Result		Units		Dilution	RL
			m RL					
Parameter	Flag		Result		Units		Dilution	RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate	•	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			0.961	mg/Kg	1	1.00	96	68.5 - 119.4
4-Bromofluorobenzene	(4-BFB)		0.933	mg/Kg	1	1.00	93	52 - 117

Sample: 189898 - West Wall-2, 12'

Laboratory: Midland

Analytical Method: Analysis: **BTEX** S 8021B QC Batch: 57587 Date Analyzed: 2009-03-12 Prep Batch: 49197 Sample Preparation: 2009-03-12 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

		${f RL}$			
Parameter	Flag	Result	Units	Dilution	${ m RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

Sample: 189898 - West Wall-2, 12'

Laboratory: Midland

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Analysis: TPH DRO QC Batch: 57583 Prep Batch: 49181

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-12 Sample Preparation: 2009-03-12

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

		RL			
Parameter	Flag	Result	${f Units}$	Dilution	${ m RL}$
DRO		<50.0	mg/Kg	1	50.0

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New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		54.2	mg/Kg	. 1	100	54	13.2 - 219.3

Sample: 189898 - West Wall-2, 12'

Laboratory: Midland

Analysis:

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QC Batch: Prep Batch:

57588 49197

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B

2009-03-12 2009-03-12 Prep Method: S 5035 Analyzed By:

Prepared By:

MEME

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

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.919	$_{ m mg/Kg}$	1	1.00	92	52 - 117

Sample: 189899 - West Wall-3, 10'

Laboratory: Midland

Analysis: QC Batch:

BTEX 57587 Prep Batch: 49197

Analytical Method: Date Analyzed:

S 8021B 2009-03-12

Sample Preparation: 2009-03-12

Prep Method: S 5035

Analyzed By: MEPrepared By: ME

		m RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

				Spike	Percent	Recovery
Flag	Result	Units	Dilution	Amount	Recovery	Limits
	0.998	mg/Kg	1	1.00	100	49 - 129.7
	1.01	mg/Kg	1	1.00	101	45.2 - 144.3
	Flag	0.998	0.998 mg/Kg	0.998 mg/Kg 1	Flag Result Units Dilution Amount 0.998 mg/Kg 1 1.00	Flag Result Units Dilution Amount Recovery 0.998 mg/Kg 1 1.00 100

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Work Order: 9031139 34 Junction to Lea Station Page Number: 7 of 17

New Mexico

Sample: 189899 - West Wall-3, 10'

Laboratory: Midland

49181

Analysis: QC Batch:

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Prep Batch:

TPH DRO 57583

Analytical Method: Date Analyzed:

Mod. 8015B

2009-03-12

Sample Preparation: 2009-03-12 Prep Method: N/A Analyzed By: LĎ

Prepared By:

LD

RL

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		54.2	mg/Kg	1	100	54	13.2 - 219.3

Sample: 189899 - West Wall-3, 10'

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57588 Prep Batch: 49197

Analytical Method: Date Analyzed:

S 8015B 2009-03-12 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

Flag Result Units Dilution RLParameter <1.00 GRO mg/Kg 1.00

Sample Preparation: 2009-03-12

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.906	mg/Kg	1	1.00	91	52 - 117

Sample: 189900 - North Wall-1, 10'

Laboratory: Midland

Analysis: **BTEX** QC Batch: 57587 Prep Batch: 49197

Analytical Method: Date Analyzed:

S 8021B 2009-03-12 Sample Preparation: 2009-03-12 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

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

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New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

Sample: 189900 - North Wall-1, 10'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57583 Prep Batch: 49181 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-12 Sample Preparation: 2009-03-12

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

RL

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		49.4	$_{ m mg/Kg}$	1	100	49	13.2 - 219.3

Sample: 189900 - North Wall-1, 10'

Laboratory: Midland

GRO

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Analysis: TPH GRO
QC Batch: 57588
Prep Batch: 49197

Analytical Method: S 8015B
Date Analyzed: 2009-03-12
Sample Preparation: 2009-03-12

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

RL Parameter Flag Result

 Result
 Units
 Dilution
 RL

 <1.00</td>
 mg/Kg
 1
 1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	1	1.00	90	52 - 117

Sample: 189901 - North Wall-2, 10'

Laboratory: Midland

Analysis: BTEX
QC Batch: 57587
Prep Batch: 49197

Analytical Method: S 8021B
Date Analyzed: 2009-03-12
Sample Preparation: 2009-03-12

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

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Work Order: 9031139 34 Junction to Lea Station Page Number: 9 of 17 New Mexico

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
Benzene	<u> </u>	< 0.0100	mg/Kg	1	0.0100
Toluene		$\boldsymbol{0.124}$	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.373	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

Sample: 189901 - North Wall-2, 10'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57583 Prep Batch: 49181

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-12

Sample Preparation: 2009-03-12

Prep Method: N/A Analyzed By: LDPrepared By: LD

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		57.4	mg/Kg	1 .	100	57	13.2 - 219.3

Sample: 189901 - North Wall-2, 10'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57588 Prep Batch: 49197

Analytical Method: S 8015B Date Analyzed: 2009-03-12 Sample Preparation: 2009-03-12

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

RLResult Dilution Flag Units RLParameter <1.00 $\overline{\text{GRO}}$ mg/Kg 1.00 Spike Percent Recovery

Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.890	mg/Kg	1	1.00	89	52 - 117
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Work Order: 9031139 34 Junction to Lea Station Page Number: 10 of 17

New Mexico

Sample: 189902 - South Wall-1, 12'

Laboratory: Midland

Analysis: BTEX QC Batch: 57587

Analytical Method: Date Analyzed:

S 8021B 2009-03-12 Prep Method: S 5035 Analyzed By:

ME

Prep Batch: 49197 Sample Preparation:

2009-03-12

Prepared By:

ME

RL

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} ext{Recovery} \ ext{Limits} \end{array}$
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

Sample: 189902 - South Wall-1, 12'

Laboratory: Midland

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Analysis: TPH DRO QC Batch: 57583 Prep Batch: 49181

Analytical Method: Date Analyzed:

Mod. 8015B 2009-03-12

Prep Method: N/A Analyzed By: LD

Sample Preparation:

2009-03-12

Prepared By: LD

RL

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

Surrogate	Flag	Result	Units	Dilution	$egin{aligned} ext{Spike} \ ext{Amount} \end{aligned}$	Percent Recovery	Recovery Limits
n-Triacontane		64.7	mg/Kg	1	100	65	13.2 - 219.3

Sample: 189902 - South Wall-1, 12'

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57588 Prep Batch: 49197

Analytical Method: Date Analyzed:

S 8015B 2009-03-12 Sample Preparation: 2009-03-12 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Units Flag Result Dilution RLParameter <1.00 GRO mg/Kg 1.00

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Work Order: 9031139 34 Junction to Lea Station Page Number: 11 of 17

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.889	mg/Kg	1	1.00	89	52 - 117

Sample: 189903 - South Wall-2, 12'

Laboratory: Midland

Analysis: BTEX QC Batch: 57587 Prep Batch: 49197 Analytical Method: S 8021B Date Analyzed: 2009-03-12 Sample Preparation: 2009-03-12

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

RL

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

					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.988	mg/Kg	1	1.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

Sample: 189903 - South Wall-2, 12'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57583 Prep Batch: 49181 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-12 Sample Preparation: 2009-03-12

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

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		59.7	mg/Kg	1	100	60	13.2 - 219.3

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Work Order: 9031139 34 Junction to Lea Station Page Number: 12 of 17

New Mexico

Sample: 189903 - South Wall-2, 12'

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 57588 Prep Batch: 49197

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2009-03-12

Prepared By: 2009-03-12

Prep Method: S 5035 Analyzed By: ME ME

RL

Result Units Dilution RLParameter Flag <1.00 1.00 GRO mg/Kg 1

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.886	mg/Kg	1	1.00	89	52 - 117

Method Blank (1)

QC Batch: 57583

QC Batch: 57583 Prep Batch: 49181

Date Analyzed: 2009-03-12 QC Preparation: 2009-03-12 Analyzed By: LD

Prepared By: LD

MDL

Result Units RLFlag Parameter <13.4 mg/Kg 50 DRO

					Spike	Percent	Recovery
Surrogate	Flag	Result	${f Units}$	Dilution	Amount	Recovery	Limits
n-Triacontane		77.9	mg/Kg	1	100	78	13 - 178.5

Method Blank (1)

QC Batch: 57587

QC Batch: 57587 Prep Batch: 49197 Date Analyzed: 2009-03-12 QC Preparation: 2009-03-12

Analyzed By: ME Prepared By: ME

MDL Result Units RLFlag Parameter < 0.00100 mg/Kg 0.01 Benzene mg/Kg 0.01 Toluene < 0.00100 Ethylbenzene < 0.00110 mg/Kg 0.01 < 0.00360 mg/Kg 0.01 **Xylene**

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	1	1.00	100	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	51.9 - 128.1

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Work Order: 9031139 34 Junction to Lea Station Page Number: 13 of 17

New Mexico

Method Blank (1)

QC Batch: 57588

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

Prepared By:

ME

MDL

Result Units Parameter Flag RL< 0.482 $\overline{\text{GRO}}$ mg/Kg $\overline{1}$

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.878	mg/Kg	1	1.00	88	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.905	mg/Kg	11	1.00	90	56.5 - 109.5

Laboratory Control Spike (LCS-1)

QC Batch: 57583 Date Analyzed: 2009-03-12 Analyzed By: LD

Prep Batch: 49181

QC Preparation: 2009-03-12

Prepared By: LD

•	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	236	mg/Kg	1	250	<13.4	94	57.4 - 133.4

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.	Limit	RPD	Limit
DRO	232	mg/Kg	1	250	<13.4	93	57.4 - 133.4	2	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.	${f Amount}$	Rec.	Rec.	Limit
n-Triacontane	62.5	64.2	mg/Kg	1	100	62	64	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 57587 Prep Batch: 49197 Date Analyzed: 2009-03-12 QC Preparation: 2009-03-12

Analyzed By: ME Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	$egin{array}{l} ext{Matrix} \ ext{Result} \end{array}$	Rec.	Rec. Limit
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	72.7 - 129.8
Toluene	1.07	mg/Kg	1	1.00	< 0.00100	107	71.6 - 129.6
Ethylbenzene	1.06	mg/Kg	1	1.00	< 0.00110	106	70.8 - 129.7
Xylene	3.19	mg/Kg	1	3.00	< 0.00360	106	70.9 - 129.4

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Work Order: 9031139 34 Junction to Lea Station Page Number: 14 of 17 New Mexico

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	1.12	mg/Kg	1	1.00	< 0.00100	112	72.7 - 129.8	5	20
Toluene	1.12	mg/Kg	1	1.00	< 0.00100	112	71.6 - 129.6	5	20
Ethylbenzene	1.13	mg/Kg	1	1.00	< 0.00110	113	70.8 - 129.7	6	20
Xylene	3.40	mg/Kg	1	3.00	< 0.00360	113	70.9 - 129.4	6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.00	1.01	mg/Kg	1	1.00	100	101	65.9 - 132
4-Bromofluorobenzene (4-BFB)	1.04	1.03	mg/Kg	1	1.00	104	103	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

57588

Date Analyzed:

2009-03-12

Analyzed By: ME Prepared By: ME

Prep Batch: 49197

QC Preparation: 2009-03-12

•	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.61	m mg/Kg	1	10.0	< 0.482	76	60.5 - 100.1

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	\mathbf{Limit}
GRO	7.31	mg/Kg	1	10.0	< 0.482	73	60.5 - 100.1	4	20

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

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)	0.905	0.908	mg/Kg	1	1.00	90	91	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.927	0.929	mg/Kg	1	1.00	93	93	66.1 - 107.3

Matrix Spike (MS-1) Spiked Sample: 189585

QC Batch: Prep Batch:

1

57583

49181

Date Analyzed:

QC Preparation:

2009-03-12

2009-03-12

Analyzed By: LD

Prepared By: LD

		MS			Spike	Matrix		Rec.
Param		Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	1	1570	mg/Kg	1	250	1570	0	35.2 - 167.1

¹Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

2002-10286

Work Order: 9031139 34 Junction to Lea Station Page Number: 15 of 17 New Mexico

•		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	\mathbf{Limit}
DRO	2	1520	mg/Kg	1	250	1570	0	35.2 - 167.1	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	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	3 4	189	182	mg/Kg	1	100	189	182	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 189903

QC Batch: 57587 Prep Batch: 49197 Date Analyzed: 2009-03-12 QC Preparation: 2009-03-12 Analyzed By: ME Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	\mathbf{Result}	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Benzene	1.16	mg/Kg	1	1.00	< 0.00100	116	58.6 - 165.2
Toluene	1.17	mg/Kg	1	1.00	< 0.00100	117	64.2 - 153.8
Ethylbenzene	1.18	mg/Kg	1	1.00	< 0.00110	118	61.6 - 159.4
Xylene	3.55	mg/Kg	1	3.00	< 0.00360	118	64.4 - 155.3

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
Benzene	1.16	mg/Kg	1	1.00	< 0.00100	116	58.6 - 165.2	0	20
Toluene	1.13	mg/Kg	1	1.00	< 0.00100	113	64.2 - 153.8	4	20
Ethylbenzene	1.16	mg/Kg	1	1.00	< 0.00110	116	61.6 - 159.4	2	20
Xylene	3.50	mg/Kg	1	3.00	< 0.00360	117	64.4 - 155.3	1	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.998	1.03	mg/Kg	1	1	100	103	76 - 127.9
4-Bromofluorobenzene (4-BFB)	1.02	1.02	mg/Kg	1	1	102	102	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 189900

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

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

³High surrogate recovery due to peak interference.

⁴High surrogate recovery due to peak interference.

2002-10286

Work Order: 9031139 34 Junction to Lea Station Page Number: 16 of 17 New Mexico

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	9.91	mg/Kg	1	10.0	< 0.482	97	12.8 - 175.2

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	10.2	mg/Kg	1	10.0	< 0.482	100	12.8 - 175.2	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	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.11	1.11	mg/Kg	1	1	111	111	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.921	0.921	mg/Kg	1	1	92	92	31.3 - 161.7

Standard (CCV-2)

QC Batch: 57583

Date Analyzed: 2009-03-12

Analyzed By: LD

			CCVs	CCVs	CCVs	Percent	
		•	True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	213	85	85 - 115	2009-03-12

Standard (CCV-3)

QC Batch: 57583

Date Analyzed: 2009-03-12

Analyzed By: LD

			CCVs True	$\begin{array}{c} { m CCVs} \\ { m Found} \end{array}$	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	262	105	85 - 115	2009-03-12

Standard (CCV-4)

QC Batch: 57583

Date Analyzed: 2009-03-12

Analyzed By: LD

			CCVs True	CCVs Found	$egin{array}{c} ext{CCVs} \ ext{Percent} \end{array}$	Percent Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	221	88	85 - 115	2009-03-12

Standard (ICV-1)

QC Batch: 57587

Date Analyzed: 2009-03-12

Analyzed By: ME

2002-10286

Work Order: 9031139 34 Junction to Lea Station Page Number: 17 of 17

New Mexico

			ICVs	ICVs	ICVs	Percent	70-4-
			True	\mathbf{Found}	$\operatorname{Percent}$	Recovery	\mathbf{Date}
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-12
Toluene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-12
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-12
Xylene		mg/Kg	0.300	0.322	107	85 - 115	2009-03-12

Standard (CCV-1)

QC Batch: 57587

Date Analyzed: 2009-03-12

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.112	112	85 - 115	2009-03-12
Toluene		mg/Kg	0.100	0.112	112	85 - 115	2009-03-12
Ethylbenzene		mg/Kg	0.100	0.111	111	85 - 115	2009-03-12
Xylene		mg/Kg	0.300	0.333	111	85 - 115	2009-03-12

Standard (ICV-1)

QC Batch: 57588

Date Analyzed: 2009-03-12

Analyzed By: ME

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.869	87	85 - 115	2009-03-12

Standard (CCV-1)

QC Batch: 57588

Date Analyzed: 2009-03-12

Analyzed By: ME

			\mathbf{CCVs}	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.945	94	85 - 115	2009-03-12

4031 AB Order ID#

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01 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 774-1298 1 (800) 378-1296

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

5002 Basin Street, Sulte A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313

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20 East Sunset·Rd., Suite E El Paso, Texas 78922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443

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8808 Camp Bowle Blvd. West, Suite 180 Ft. Worth, Texas 76116 Tel (817) 201-5260 Fax (817) 560-4336

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bloH tests Midland Turn Around Time if different from standard or Specify Method No.) Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required **ANALYSIS REQUEST** Moisture Content Hq ,2ST ,008 Pesticides 8081A \ 608 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS GC/W2 A91 8560B / 624 **BCI** TCLP Pesticides TCLP Semi Volatiles Circle TCLP Volatiles A BOLLON TCLP Metals Ag As Ba Cd Cr Pb Se Hg ONE Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 PAH 8270C / 625 TPH 8015 GRO / DRO) TVHC TPH 418.1 / TX1005 / TX1005 Ext(C35) BIEX 8021B 602 / 8260B / 624 1°7 × Temp°c: **38TM** 8021B / 602 / 8260B / 624 Temp 242/ 1220 1238 1212 1204 3/10/04 1208 7/21 SAMPLING **JMIT** rounstyille Chavatraining. cc 16:58 Time: Time: **3TA**@ G 3-11: Date: T PRESERVATIVE NONE ICE METHOD NaOH P 106 Company: Company: Company 'OS^zH Project Name [€]ONH 34 Phone #: HCI Fax#: Tunction Received by: STUDGE 1-1012 2011-1 Received by Received by MATRIX ЯІА TIOS **ABTAW** Hor Yolume / Amount lime: Time: # CONTAINERS 2002-10286 Kouns Avi Date PLAINS County, NA 0 WEST WALL-Z, WESTWAU-3 South WALL-Z Nova FIELD CODE WEST WALL-I South WALL-MOSTH WALL-Company: Project Location (including state) Company (Street, City, Zip) Noeth WAL ZZ (If different from above) SRS# Relinquished by: Relinquished by Relingwished by Contact Person: Company Name: ĝ 9 93 95 nvoice to Project #: Address:

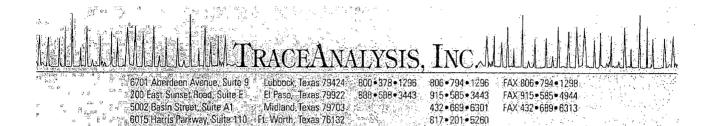
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O.

ORIGINAL COPY

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Carrier #



E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA

WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

El Paso:

T104704221-08-TX

Midland: T104704392-08-TX

LELAP-02003

LELAP-02002

Kansas E-10317

Analytical and Quality Control Report

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

Report Date: March 25, 2009

Work Order: 9032005

Project Location: New Mexico

Project Name: 34

34 Junction to Lea Station

Project Number:

2002-10286

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
190762	SW-3	soil	2009-03-19	10:50	2009-03-20
190763	EW-1	soil	2009-03-19	10:55	2009-03-20
190764	EW-2	soil	2009-03-19	11:00	2009-03-20
190765	EW-3	soil	2009-03-19	11:05	2009-03-20
190766	EW-4	soil	2009-03-19	11:10	2009-03-20

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 19 pages and shall not be reproduced except in its entirety, without written approval of

TraceAnalysis, Inc.

Michael abel

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2009-03-20 and assigned to work order 9032005. Samples for work order 9032005 were received intact at a temperature of 3.2 deg. C.

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

		Prep	Prep	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	49429	2009-03-20 at 15:47	57860	2009-03-20 at 15:47
\mathbf{BTEX}	S 8021B	49454	2009-03-23 at 11:38	57900	2009-03-23 at 11:38
TPH DRO	Mod. 8015B	49402	2009-03-20 at 10:30	57873	2009-03-25 at 13:40
TPH GRO	S 8015B	49429	2009-03-20 at 15:47	57861	2009-03-20 at 15:47
TPH GRO	S 8015B	49454	2009-03-23 at 11:38	57901	2009-03-23 at 11:38

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 9032005 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.

2002-10286

Work Order: 9032005 34 Junction to Lea Station Page Number: 4 of 19

New Mexico

Analytical Report

Sample: 190762 - SW-3

Laboratory:

Midland

Analysis: QC Batch: Prep Batch:

BTEX 57860 49429

Analytical Method: Date Analyzed:

S 8021B

2009-03-20

Prep Method: Analyzed By:

S 5035 ME

Sample Preparation: 2009-03-20

Prepared By: ME

RL

		100			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		0.0773	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.186	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.968	mg/Kg	1	1.00	97	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.738	mg/Kg	1	1.00	74	45.2 - 144.3

Sample: 190762 - SW-3

Laboratory:

Midland

Analysis:

TPH DRO

QC Batch: 57873 Prep Batch: 49402

Analytical Method: Date Analyzed:

Mod. 8015B 2009-03-25

Sample Preparation: 2009-03-20 Prep Method: N/A

Analyzed By: LD Prepared By: LD

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Parameter	Flag	Result	Units	Dilution	RL
DRO		103	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		69.2	m mg/Kg	1	100	69	13.2 - 219.3

Sample: 190762 - SW-3

Laboratory:

Midland

Analysis: QC Batch: Prep Batch: TPH GRO

57861 49429 Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B2009-03-20

2009-03-20

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

continued ...

2002-10286

Work Order: 9032005 34 Junction to Lea Station Page Number: 5 of 19

New Mexico

sample 190762 continued ...

Parameter	Flag		RL Result		Units		Dilution	RL
Parameter	Flag		RL Result		Units		Dilution	m RL
GRO			<1.00		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TH 4-Bromofluorobenze			0.933 0.666	mg/Kg mg/Kg	1 1	1.00 1.00	93 67	68.5 - 119.4 52 - 117

Sample: 190763 - EW-1

Laboratory: Midland

Analysis: BTEX QC Batch: 57900 Prep Batch: 49454 Analytical Method: S 8021B Date Analyzed: 2009-03-23 Sample Preparation: 2009-03-23 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

		m RL			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0200	mg/Kg	2	0.0100
Toluene		< 0.0200	mg/Kg	2	0.0100
Ethylbenzene		< 0.0200	mg/Kg	2	0.0100
Xylene		< 0.0200	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.95	mg/Kg	2	2.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.58	mg/Kg	2	2.00	79	45.2 - 144.3

Sample: 190763 - EW-1

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57873 Prep Batch: 49402 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-25 Sample Preparation: 2009-03-20

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

		m RL			
Parameter	Flag	Result	Units	Dilution	${ m RL}$
DRO		310	mg/Kg	1	50.0

2002-10286

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Work Order: 9032005 34 Junction to Lea Station Page Number: 6 of 19

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1 .	100	159	13.2 - 219.3

Sample: 190763 - EW-1

Laboratory: Midland

Analysis: QC Batch:

TPH GRO 57901

Analytical Method: Date Analyzed:

S 8015B 2009-03-23 Prep Method: S 5035 Analyzed By:

Prep Batch:

49454

Sample Preparation:

2009-03-23

ME Prepared By: ME

RL

Parameter Flag Result Units Dilution RL< 2.00 $\overline{\text{GRO}}$ mg/Kg $\overline{2}$ 1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.79	mg/Kg	2	2.00	90	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.44	${ m mg/Kg}$	2	2.00	72	52 - 117

Sample: 190764 - EW-2

Laboratory:

Midland

Analysis: QC Batch: BTEX 57900

Prep Batch: 49454

Analytical Method: Date Analyzed:

S 8021B

2009-03-23 Sample Preparation: 2009-03-23 Prep Method: S 5035 Analyzed By:

ME

Prepared By:

ME

RL

		1613			
Parameter	Flag	Result	\mathbf{Units}	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.224	mg/Kg	. 1	0.0100
Xylene		0.418	mg/Kg	1	0.0100

					Spike	$\operatorname{Percent}$	Recovery
Surrogate	Flag	Result	Units	Dilution	${f Amount}$	Recovery	\mathbf{Limits}
Trifluorotoluene (TFT)		0.978	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.04	$_{ m mg/Kg}$	1	1.00	104	45.2 - 144.3

2002-10286

Work Order: 9032005 34 Junction to Lea Station Page Number: 7 of 19

New Mexico

Sample: 190764 - EW-2

Laboratory:

Midland

Analysis: QC Batch: TPH DRO

57873 49402

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B

2009-03-25 2009-03-20 Prep Method: N/A Analyzed By: LD

Prepared By:

LD

RL

Parameter

Prep Batch:

Flag

Result

Units

Dilution $\overline{1}$ RL

50.0

DRO

1040

mg/Kg

Recovery

Surrogate n-Triacontane

Flag

Result Units

135

Dilution mg/Kg 1

Spike Amount 100

Percent Recovery 135

Limits 13.2 - 219.3

Sample: 190764 - EW-2

Laboratory:

Prep Batch:

Midland

Analysis: QC Batch: TPH GRO

57901 49454 Analytical Method:

S 8015B 2009-03-23 Prep Method: S 5035 Analyzed By:

Date Analyzed:

Sample Preparation: 2009-03-23 Prepared By:

ME

Parameter \overline{GRO}

RL

ME

Flag

Result

Units

Dilution

RL

32.6

mg/Kg

1.00

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits Trifluorotoluene (TFT) 0.899 mg/Kg 1 1.00 90 68.5 - 119.4 4-Bromofluorobenzene (4-BFB) 1.15 mg/Kg 1 1.00 115 52 - 117

Sample: 190765 - EW-3

Laboratory:

Midland

Analysis: QC Batch:

Prep Batch:

BTEX 57900

Analytical Method: Date Analyzed:

S 8021B 2009-03-23 Prep Method: Analyzed By:

S 5035 ME

49454

Sample Preparation: 2009-03-23

Prepared By:

ME

RL

Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xvlene		< 0.0100	mg/Kg	1	0.0100

2002-10286

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Work Order: 9032005 34 Junction to Lea Station Page Number: 8 of 19

New Mexico

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} \text{Spike} \\ \text{Amount} \end{array}$	Percent Recovery	Recovery Limits
Triffuorotoluene (TFT)		0.949	mg/Kg	1	1.00	95	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.807	mg/Kg	1	1.00	81	45.2 - 144.3

Sample: 190765 - EW-3

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57873 Prep Batch: 49402 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-25 Sample Preparation: 2009-03-20

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

 \mathbf{RL}

a .	T71	D 1:	TT	70.0	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		89.8	mg/Kg	1	100	90	13.2 - 219.3

Sample: 190765 - EW-3

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57901 Prep Batch: 49454 Analytical Method: S 8015B
Date Analyzed: 2009-03-23
Sample Preparation: 2009-03-23

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

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	,	1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.740	mg/Kg	11	1.00	74	52 - 117

Sample: 190766 - EW-4

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 57900 Date Analyzed: 2009-03-23 Analyzed By: ME Prep Batch: 49454 Sample Preparation: 2009-03-23 Prepared By: ME

2002-10286

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New Mexico

	m RL			
Flag	Result	Units	Dilution	RL
	< 0.0100	mg/Kg	1	0.0100
•	< 0.0100	mg/Kg	1	0.0100
	< 0.0100	mg/Kg	1	0.0100
	< 0.0100	mg/Kg	1	0.0100
	Flag	Flag Result	Flag Result Units <0.0100 mg/Kg <0.0100 mg/Kg <0.0100 mg/Kg <0.0100 mg/Kg	Flag Result Units Dilution <0.0100

• •					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.955	mg/Kg	1	1.00	96	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.780	mg/Kg	1	1.00	78	45.2 - 144.3

Sample: 190766 - EW-4

Midland Laboratory:

TPH DRO Analysis: QC Batch: 57873

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-25

Prep Method: N/A Analyzed By: LD

Prep Batch: 49402 Sample Preparation: 2009-03-20

Prepared By: LD

RLParameter Flag Result Units Dilution RL258 50.0 DRO mg/Kg

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		90.6	mg/Kg	1	100	91	13.2 - 219.3

Sample: 190766 - EW-4

Laboratory: Midland

TPH GRO Analysis: 57901 QC Batch: Prep Batch: 49454

Analytical Method: S 8015B Date Analyzed: 2009-03-23 Sample Preparation: 2009-03-23

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

Result Dilution RLFlag Units Parameter GRO 1.85 mg/Kg 1.00

RL

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.984	mg/Kg	1	1.00	98	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.704	mg/Kg	1	1.00	70	52 - 117

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New Mexico

Method Blank (1)

QC Batch: 57860

QC Batch: 57860 Prep Batch: 49429 Date Analyzed: 2009-03-20 QC Preparation: 2009-03-20

Analyzed By: ME Prepared By: ME

MDL

		ÍATIDID		
Parameter	Flag	Result	Units	m RL
Benzene		< 0.00100	mg/Kg	0.01
Toluene		< 0.00100	${ m mg/Kg}$	0.01
Ethylbenzene		< 0.00110	mg/Kg	0.01
Xylene		<0.00360	mg/Kg	0.01

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.966	mg/Kg	1	1.00	97	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.813	mg/Kg	1	1.00	81	51.9 - 128.1

Method Blank (1)

QC Batch: 57861

QC Batch: 57861 Date Analyzed:

2009-03-20

Analyzed By: ME

Prep Batch: 49429

QC Preparation: 2009-03-20

Prepared By: ME

MDT.

		111.010		
Parameter	Flag	Result	Units	m RL
GRO		< 0.482	mg/Kg	1

•					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	·	0.909	mg/Kg	1	1.00	91	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.734	mg/Kg	1	1.00	73	56.5 - 109.5
	•						

Method Blank (1)

QC Batch: 57873

QC Batch: 57873 Date Analyzed: 2009-03-25 Analyzed By: LD

Prep Batch: 49402

QC Preparation: 2009-03-20

Prepared By: LD

 \mathbf{MDL}

Parameter	Flag	Result	Units	RL
DRO		<46.2	mg/Kg	50

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		41.3	mg/Kg	1	100	41	13 - 178.5

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Work Order: 9032005 34 Junction to Lea Station Page Number: 11 of 19

New Mexico

Method Blank (1)

QC Batch: 57900

QC Batch:

57900

Date Analyzed:

2009-03-23

Analyzed By: ME

Prep Batch:

49454

QC Preparation: 2009-03-23

Prepared By: ME

MDL

Parameter Flag Result Units RLBenzene < 0.00100 mg/Kg 0.01 Toluene < 0.00100 mg/Kg 0.01 Ethylbenzene < 0.00110 mg/Kg 0.01 Xylene < 0.00360 mg/Kg 0.01

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits Trifluorotoluene (TFT) 0.951 1.00 95 65.6 - 130.6 mg/Kg 1 4-Bromofluorobenzene (4-BFB) 0.7871.00 79 mg/Kg 1 51.9 - 128.1

Method Blank (1)

QC Batch: 57901

QC Batch:

57901

Date Analyzed:

2009-03-23

Analyzed By: ME

Prep Batch: 49454

QC Preparation: 2009-03-23

Prepared By: ME

MDL

Parameter Flag Result Units RL< 0.482 GRO mg/Kg

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.916	mg/Kg	1	1.00	92	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.722	mg/Kg	1	1.00	72	56.5 - 109.5

Laboratory Control Spike (LCS-1)

QC Batch:

57860

Date Analyzed:

2009-03-20

Analyzed By: ME

Prep Batch: 49429

QC Preparation:

2009-03-20

Prepared By: ME

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. 1.09 mg/Kg < 0.00100 72.7 - 129.8 Benzene 1 1.00 109 1.06 mg/Kg 1.00 < 0.00100 71.6 - 129.6 Toluene 1 106 1.04 Ethylbenzene mg/Kg 1 1.00 < 0.00110 104 70.8 - 129.7 3.06 mg/Kg 1 3.00 < 0.00360 102 70.9 - 129.4 **Xylene**

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Work Order: 9032005 34 Junction to Lea Station Page Number: 12 of 19

New Mexico

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.08	mg/Kg	1	1.00	< 0.00100	108	72.7 - 129.8	1	20
Toluene	1.06	mg/Kg	1	1.00	< 0.00100	106	71.6 - 129.6	0	20
Ethylbenzene	1.03	mg/Kg	1	1.00	< 0.00110	103	70.8 - 129.7	1	20
Xylene	3.05	mg/Kg	1	3.00	< 0.00360	102	70.9 - 129.4	0	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.960	0.981	mg/Kg	1	1.00	96	98	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.844	0.827	mg/Kg	1	1.00	84	83	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

57861

Date Analyzed:

2009-03-20

Analyzed By: ME

Prep Batch: 49429

QC Preparation: 2009-03-20 Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.04	$_{ m mg/Kg}$	1	10.0	< 0.482	70	60.5 - 100.1

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	7.02	mg/Kg	1	10.0	< 0.482	70	60.5 - 100.1	0	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.955	0.936	mg/Kg	1	1.00	96	94	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.759	0.764	mg/Kg	1	1.00	76	76	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch:

57873

Prep Batch: 49402

Date Analyzed:

2009-03-25

QC Preparation: 2009-03-20

Analyzed By: LD

Prepared By: LD

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	. Amount	Result	Rec.	Limit
DRO	282	mg/Kg	1	250	<46.2	113	57.4 - 133.4

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New Mexico

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	295	mg/Kg	1	250	<46.2	118	57.4 - 133.4	4	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	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	55.1	57.2	mg/Kg	1	100	55	57	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 57900 Prep Batch: 49454 Date Analyzed: 2009-03-23 QC Preparation: 2009-03-23 Analyzed By: ME Prepared By: ME

Param	$egin{array}{c} ext{LCS} \ ext{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.04	mg/Kg	1	1.00	< 0.00100	104	72.7 - 129.8
Toluene	1.06	mg/Kg	1	1.00	< 0.00100	106	71.6 - 129.6
Ethylbenzene	1.05	mg/Kg	1	1.00	< 0.00110	105	70.8 - 129.7
Xylene	3.10	mg/Kg	1	3.00	< 0.00360	103	70.9 - 129.4

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	1.08	mg/Kg	1	1.00	< 0.00100	108	72.7 - 129.8	4	20
Toluene	1.08	mg/Kg	1	1.00	< 0.00100	108	71.6 - 129.6	2	20
Ethylbenzene	1.08	mg/Kg	1	1.00	< 0.00110	108	70.8 - 129.7	3	20
Xylene	3.19	mg/Kg	1	3.00	< 0.00360	106	70.9 - 129.4	3	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	Units	Dil.	Amount	Rec.	Rec.	${f Limit}$
Trifluorotoluene (TFT)	0.938	0.936	mg/Kg	1	1.00	94	94	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.819	0.831	mg/Kg	1	1.00	82	83	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 57901 Prep Batch: 49454 Date Analyzed: 2009-03-23 QC Preparation: 2009-03-23 Analyzed By: ME Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	6.30	mg/Kg	1	10.0	< 0.482	63	60.5 - 100.1

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New Mexico

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	Limit
GRO	6.53	mg/Kg	1	10.0	< 0.482	65	60.5 - 100.1	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	\mathbf{Units}	Dil.	Amount	${ m Rec.}$	Rec.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.937	0.933	mg/Kg	1	1.00	94	93	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.764	0.776	mg/Kg	1	1.00	76	78	66.1 - 107.3

Matrix Spike (MS-1) Spiked Sample: 190641

QC Batch:

57860 Prep Batch: 49429 Date Analyzed:

2009-03-20 QC Preparation: 2009-03-20 Analyzed By: ME

Prepared By: ME

Param	$rac{ ext{MS}}{ ext{Result}}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.06	mg/Kg	1	1.00	< 0.00100	106	58.6 - 165.2
Toluene	1.04	mg/Kg	1	1.00	< 0.00100	104	64.2 - 153.8
Ethylbenzene	1.05	mg/Kg	1	1.00	< 0.00110	105	61.6 - 159.4
Xvlene	3.06	mg/Kg	1	3.00	<0.00360	102	64 4 - 155 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	\mathbf{Result}	Units	Dil.	Amount	\mathbf{Result}	Rec.	${f Limit}$	RPD	Limit
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	58.6 - 165.2	1	20
Toluene	1.05	mg/Kg	1	1.00	< 0.00100	105	64.2 - 153.8	1	20
Ethylbenzene	1.06	mg/Kg	1	1.00	< 0.00110	106	61.6 - 159.4	1	20
Xylene	3.10	mg/Kg	1	3.00	< 0.00360	103	64.4 - 155.3	1	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.952	0.956	mg/Kg	1	1	95	96	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.784	0.764	mg/Kg	1	1	78	76	72 - 127.8

Spiked Sample: 190762 Matrix Spike (MS-1)

QC Batch:

57861

Date Analyzed:

2009-03-20

Analyzed By: ME

Prep Batch: 49429

QC Preparation:

2009-03-20

Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	10.8	mg/Kg	1	10.0	< 0.482	105	12.8 - 175.2

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New Mexico

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$	RPD	Limit
GRO	10.4	mg/Kg	1	10.0	< 0.482	101	12.8 - 175.2	4	20

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

	MS	MSD			Spike	MS	MSD	Rec .
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.976	0.965	mg/Kg	1	1	98	96	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.700	0.674	mg/Kg	1	1	70	67	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 190765

QC Batch: 57873 Date Analyzed: 2009-03-25

Analyzed By: LD

Prep Batch: 49402

QC Preparation: 2009-03-20

Prepared By: LD

		MS			\mathbf{Spike}	Matrix		Rec.
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	1	546	mg/Kg	1	250	<46.2	218	35.2 - 167.1

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

	MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	 244	mg/Kg	1	250	<46.2	98	35.2 - 167.1	76	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	\mathbf{Result}	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	3	194	70.7	mg/Kg	1	100	194	71	34.5 - 178.4

Spiked Sample: 190766 Matrix Spike (MS-1)

QC Batch: 57900 Prep Batch: 49454 Date Analyzed: 2009-03-23 QC Preparation: 2009-03-23

Analyzed By: ME Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	${f Result}$	${f Units}$	Dil.	Amount	\mathbf{Result}	${ m Rec.}$	\mathbf{Limit}
Benzene	1.10	mg/Kg	1	1.00	< 0.00100	110	58.6 - 165.2
Toluene	1.08	mg/Kg	1	1.00	< 0.00100	108	64.2 - 153.8
Ethylbenzene	1.09	mg/Kg	1	1.00	< 0.00110	109	61.6 - 159.4
Xylene	3.20	mg/Kg	1	3.00	< 0.00360	107	64.4 - 155.3

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

³High surrogate recovery due to peak interference.

¹Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

²MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: March 25, 2009 2002-10286

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New Mexico

Param	MSD Result	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Matrix Result	Rec.	${ m Rec.} \ { m Limit}$	RPD	RPD Limit
Benzene	1.04	mg/Kg	1	1.00	< 0.00100	104	58.6 - 165.2	6	20
Toluene	1.06	mg/Kg	1	1.00	< 0.00100	106	64.2 - 153.8	2	20
Ethylbenzene	1.07	mg/Kg	1	1.00	< 0.00110	107	61.6 - 159.4	2	20
Xylene	3.16	mg/Kg	1	3.00	< 0.00360	105	64.4 - 155.3	1	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.967	0.945	mg/Kg	1	1	97	94	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.773	0.786	mg/Kg	1	1	77	79	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 190763

QC Batch: 57901 Date Analyzed: 2009-03-23 Analyzed By: ME Prepared By: ME

Prep Batch: 49454

QC Preparation: 2009-03-23

	MS			Spike	Matrix		Rec .
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	19.0	mg/Kg	2	20.0	< 0.963	95	12.8 - 175.2

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	16.5	mg/Kg	2	20.0	< 0.963	82	12.8 - 175.2	14	20

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

Surrogate	$rac{ ext{MS}}{ ext{Result}}$	$rac{ ext{MSD}}{ ext{Result}}$	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	$egin{array}{c} \operatorname{Rec.} \ \operatorname{Limit} \end{array}$
Trifluorotoluene (TFT)	2.00	2.07	mg/Kg	2	2	100	104	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	1.54	1.53	mg/Kg	2	2	77	76	31.3 - 161.7

Standard (CCV-1)

QC Batch: 57860

Date Analyzed: 2009-03-20

Analyzed By: ME

			${ m CCVs} \ { m True}$	CCVs Found	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.112	112	85 - 115	2009-03-20
Toluene		$_{ m mg/Kg}$	0.100	0.111	111	85 - 115	2009-03-20
Ethylbenzene		${ m mg/Kg}$	0.100	0.107	107	85 - 115	2009-03-20
Xylene		mg/Kg	0.300	0.316	105	85 - 115	2009-03-20

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New Mexico

Standard (CCV-2)

QC Batch: 57860

Date Analyzed: 2009-03-20

Analyzed By: ME

			$rac{ ext{CCVs}}{ ext{True}}$	CCVs Found	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.112	112	85 - 115	2009-03-20
Toluene		mg/Kg	0.100	0.110	110	85 - 115	2009-03-20
Ethylbenzene		mg/Kg	0.100	0.103	103	85 - 115	2009-03-20
Xylene		mg/Kg	0.300	0.305	102	85 - 115	2009-03-20

Standard (CCV-1)

QC Batch: 57861

Date Analyzed: 2009-03-20

Analyzed By: ME

			CCVs True	CCVs Found	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.893	89	85 - 115	2009-03-20

Standard (CCV-2)

QC Batch: 57861

Date Analyzed: 2009-03-20

Analyzed By: ME

			\mathbf{CCVs}	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.902	90	85 - 115	2009-03-20

Standard (CCV-1)

QC Batch: 57873

Date Analyzed: 2009-03-25

Analyzed By: LD

			CCVs True	CCVs Found	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	270	108	85 - 115	2009-03-25

Standard (CCV-2)

QC Batch: 57873

Date Analyzed: 2009-03-25

Analyzed By: LD

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Work Order: 9032005 34 Junction to Lea Station Page Number: 18 of 19

New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO	1 100	mg/Kg	250	267	107	85 - 115	2009-03-25

Standard (CCV-1)

QC Batch: 57900

Date Analyzed: 2009-03-23

Analyzed By: ME

			CCVs	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.104	104	85 - 115	2009-03-23
Toluene		${ m mg/Kg}$	0.100	0.107	107	85 - 115	2009-03-23
Ethylbenzene		mg/Kg	0.100	0.105	105	85 - 115	2009-03-23
Xylene		mg/Kg	0.300	0.308	103	85 - 115	2009-03-23

Standard (CCV-2)

QC Batch: 57900

Date Analyzed: 2009-03-23

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-23
Toluene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-23
Ethylbenzene		mg/Kg	0.100	0.105	105	85 - 115	2009-03-23
Xylene		mg/Kg	0.300	0.312	104	85 - 115	2009-03-23

Standard (CCV-1)

QC Batch: 57901

Date Analyzed: 2009-03-23

Analyzed By: ME

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.876	88	85 - 115	2009-03-23

Standard (CCV-2)

QC Batch: 57901

Date Analyzed: 2009-03-23

Analyzed By: ME

Report Date: March 25, 2009 2002-10286

Work Order: 903200534 Junction to Lea Station Page Number: 19 of 19

New Mexico

			CCVs	CCVs	CCVs	Percent	
			True	\mathbf{Found}	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.878	88	85 - 115	2009-03-23

LAB Order ID #

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6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (306) 794-1296 Fax (306) 794-1298 1 (300) 378-1296

TraceAnalysis, Inc.

5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313

200 East Sunset Rd., Sulte E El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-494

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8808 Camp Bowle Blvd. West, Suite 180 Ft. Worth. Texas 76116 Ft. 816 817) 201-5260 Fax (817) 560-4336

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Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

CALCY 10 Carrier #

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E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA

WFWB38444Y0909

NELAP Certifications

T104704219-08-TX Lubbock:

El Paso:

T104704221-08-TX

Midland: T104704392-08-TX

LELAP-02003 Kansas E-10317

LELAP-02002

Analytical and Quality Control Report

Ron Rounsaville Nova Safety & Environmental

Report Date: April 7, 2009

2057 Commerce St. Midland, TX, 79703 Work Order:

9040109

Project Location: New Mexico

Project Name:

34 Junction to Lea Station

Project Number:

2002-10286

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
191707	East Wall 1A, 12'	soil	2009-03-31	13:09	2009-04-01
191708	East Wall 2A, 12'	soil	2009-03-31	13:00	2009-04-01
191709	East Wall 4A, 10'	soil	2009-03-31	13:17	2009-04-01

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

15 i Yan

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2009-04-01 and assigned to work order 9040109. Samples for work order 9040109 were received intact at a temperature of 6.8 deg. C.

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

		\mathbf{Prep}	Prep	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	49768	2009-04-03 at 12:57	58270	2009-04-03 at 12:57
TPH DRO	Mod. 8015B	49669	2009-04-01 at 10:00	58173	2009-04-01 at 14:50
TPH GRO	S 8015B	49768	2009-04-03 at 12:57	58271	2009-04-03 at 12:57

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 9040109 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.

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 4 of 13

New Mexico

Analytical Report

Sample: 191707 - East Wall 1A, 12'

Laboratory: Midland

Analysis: BTEX QC Batch: 58270 Prep Batch: 49768

Analytical Method: Date Analyzed:

S 8021B 2009-04-03 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

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		1613			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

Sample Preparation: 2009-04-03

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.931	$_{ m mg/Kg}$	1	1.00	93	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.564	mg/Kg	1	1.00	56	45.2 - 144.3

Sample: 191707 - East Wall 1A, 12'

Laboratory: Midland

TPH DRO Analysis: QC Batch: 58173

Analytical Method: Date Analyzed:

Mod. 8015B 2009-04-01

Prep Method: N/A Analyzed By: LD

Prep Batch:

49669

Sample Preparation:

2009-04-01

Prepared By: $^{
m LD}$

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		211	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
n-Triacontane		123	mg/Kg	1	100	123	13.2 - 219.3

Sample: 191707 - East Wall 1A, 12'

Laboratory: Midland

TPH GRO Analysis: QC Batch: 58271 Prep Batch: 49768

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B 2009-04-03 2009-04-03 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

continued ...

Report Date: April 7, 2009 2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 5 of 13 New Mexico

ME

ME

sample 191707 continued ...

Parameter	Flag		RL Result		Units		Dilution	RL
			RL					
Parameter	Flag		Result		${f Units}$		Dilution	m RL
GRO			1.62		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TF	$^{\circ}\mathrm{T})$		1.08	mg/Kg	1	1.00	108	68.5 - 119.4
4-Bromofluorobenze	ne (4-BFB)		0.981	mg/Kg	1	1.00	98	52 - 117

Sample: 191708 - East Wall 2A, 12'

Laboratory: Midland

Analysis: **BTEX** Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 58270 Date Analyzed: 2009-04-03 Analyzed By: Prep Batch: 49768 Sample Preparation: 2009-04-03 Prepared By:

		${f RL}$			
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	mg/Kg	1	0.0100
Xylene		0.239	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.929	mg/Kg	1	1.00	93	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.649	mg/Kg	1	1.00	65	45.2 - 144.3

Sample: 191708 - East Wall 2A, 12'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 58173 Date Analyzed: 2009-04-01 Analyzed By: LDPrep Batch: 49669 Sample Preparation: 2009-04-01 Prepared By: LD

		m RL			
Parameter	Flag	Result	Units	Dilution	m RL
DRO		816	mg/Kg	1	50.0

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 6 of 13

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		204	mg/Kg	1	100	204	13.2 - 219.3

Sample: 191708 - East Wall 2A, 12'

Laboratory: Midland

Analysis: QC Batch:

TPH GRO

58271 Prep Batch: 49768

Analytical Method: Date Analyzed:

S 8015B

2009-04-03 Sample Preparation: 2009-04-03 Prep Method: S 5035 Analyzed By:

ME

Prepared By: ME

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		32.5	mg/Kg	1	1.00

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.16	mg/Kg	1	1.00	116	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.15	mg/Kg	1	1.00	115	52 - 117

Sample: 191709 - East Wall 4A, 10'

Laboratory: Midland

Analysis: BTEX 58270 QC Batch:

Prep Batch: 49768

Analytical Method: Date Analyzed:

S 8021B 2009-04-03

Analyzed By: Prepared By:

Prep Method: S 5035 MEME

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		\mathbf{n}			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100
					

Sample Preparation: 2009-04-03

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.940	mg/Kg	1	1.00	94	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.570	mg/Kg	1	1.00	57	45.2 - 144.3

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 7 of 13

New Mexico

Sample: 191709 - East Wall 4A, 10'

Laboratory: Analysis:

Midland TPH DRO 58173

Analytical Method: Date Analyzed:

Mod. 8015B 2009-04-01

Prep Method: N/A Analyzed By: LDLD

QC Batch: Prep Batch:

49669

Sample Preparation:

2009-04-01

Prepared By:

RL

Parameter DRO

Result 98.8

Units mg/Kg Dilution 1

RL50.0

Surrogate

Spike Percent

Recovery

n-Triacontane

Flag Result 173

Flag

Units Dilution mg/Kg

Amount 100

Limits 13.2 - 219.3

Sample: 191709 - East Wall 4A, 10'

Laboratory:

Midland

Analysis: QC Batch: TPH GRO

58271

Analytical Method:

Date Analyzed:

S 8015B

2009-04-03

Prep Method: Analyzed By:

S 5035 ME

Prep Batch:

49768

Sample Preparation: 2009-04-03 Prepared By:

ME

RL

Parameter Flag Result

Units

Dilution

Recovery

173

RL

 \overline{GRO}

3.26

mg/Kg

1.00

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.19	mg/Kg	1	1.00	119	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.989	mg/Kg	1	1.00	99	52 - 117

Method Blank (1)

QC Batch: 58173

QC Batch:

58173

Date Analyzed:

2009-04-01

Analyzed By: LD

Prep Batch:

49669

Flag

QC Preparation: 2009-04-01

Prepared By: LD

MDL

Result <46.2 Units

RL

Flag Parameter

mg/Kg

50

Surrogate n-Triacontane

 $\overline{\text{DRO}}$

Result 99.8

Units mg/Kg Dilution

Spike Amount 100

Percent Recovery 100

Recovery Limits 13 - 178.5

34 Junction to Lea Station 2002-10286

Page Number: 8 of 13

New Mexico

Method Blank (1)

QC Batch: 58270

QC Batch: 58270 Prep Batch: 49768 Date Analyzed: 2009-04-03 QC Preparation: 2009-04-03

Work Order: 9040109

Analyzed By: ME

Prepared By: ME

		MDL		
Parameter	Flag	\mathbf{Result}	${f Units}$	\mathbf{RL}
Benzene		< 0.00100	mg/Kg	0.01
Toluene		< 0.00100	mg/Kg	0.01
Ethylbenzene		< 0.00110	mg/Kg	0.01
Xylene		<0.00360	mg/Kg	0.01

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.907	mg/Kg	1	1.00	91	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.629	mg/Kg	1	1.00	63	51.9 - 128.1

Method Blank (1)

QC Batch: 58271

QC Batch: 58271 Date Analyzed:

2009-04-03

Analyzed By: ME

Prep Batch: 49768

QC Preparation: 2009-04-03

Prepared By: ME

MDL

Parameter	Flag	Result	Units	m RL
GRO		< 0.482	mg/Kg	1

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	71.9 - 115
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	45.7 - 118.9

Laboratory Control Spike (LCS-1)

QC Batch: 58173 Prep Batch: 49669 Date Analyzed:

2009-04-01

Analyzed By: LD

QC Preparation: 2009-04-01

Prepared By: LD

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$
DRO	296	mg/Kg	1	250	<46.2	118	57.4 - 133.4

	LCSD			Spike	Matrix		Rec.		RPD
Param	\mathbf{Result}	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	288	mg/Kg	1	250	<46.2	115	57.4 - 133.4	3	20

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 9 of 13 New Mexico

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

	$_{ m LCS}$	LCSD		-	Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
n-Triacontane	124	126	mg/Kg	1	100	124	126	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 58270 Prep Batch: 49768 Date Analyzed: 2009-04-03 QC Preparation: 2009-04-03

Analyzed By: ME Prepared By: ME

LCS Spike Matrix Rec. Result Dil. Param Units Amount Result Rec. Limit Benzene 0.988 mg/Kg 1 1.00 < 0.00100 99 72.7 - 129.8 Toluene 0.969 mg/Kg 1 1.00 < 0.00100 97 71.6 - 129.6Ethylbenzene 0.943 mg/Kg 1 1.00 < 0.00110 94 70.8 - 129.7 Xylene 2.76 mg/Kg 1 3.00 < 0.00360 92 70.9 - 129.4

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.	Limit	RPD	Limit
Benzene	1.03	mg/Kg	1	1.00	< 0.00100	103	72.7 - 129.8	4	20
Toluene	0.978	mg/Kg	1	1.00	< 0.00100	98	71.6 - 129.6	1	20
Ethylbenzene	0.974	mg/Kg	1	1.00	< 0.00110	97	70.8 - 129.7	3	20
Xylene	2.82	mg/Kg	1	3.00	< 0.00360	94	70.9 - 129.4	2	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.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.903	0.937	mg/Kg	1	1.00	90	94	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.670	0.643	mg/Kg	1	1.00	67	64	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 58271 Prep Batch: 49768 Date Analyzed: 2009-04-03 QC Preparation: 2009-04-03 Analyzed By: ME Prepared By: ME

LCS Spike Matrix Rec. Result Dil. Param Units Amount Result Rec. Limit 6.96 $\overline{\text{GRO}}$ mg/Kg 10.0 < 0.482 70 60.5 - 100.1

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	${f Limit}$	RPD	\mathbf{Limit}
GRO	 7.28	mg/Kg	1	10.0	< 0.482	73	60.5 - 100.1	4	20

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 10 of 13

New Mexico

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.04	1.04	mg/Kg	1	1.00	104	104	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	1.05	1.04	mg/Kg	1	1.00	105	104	66.1 - 107.3

Matrix Spike (MS-1) Spiked Sample: 191709

QC Batch: 58173 Prep Batch: 49669 Date Analyzed: QC Preparation: 2009-04-01

2009-04-01

Analyzed By: LD

Prepared By: LD

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	278	mg/Kg	1	250	98.85	72	35.2 - 167.1

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

		MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	1	340	mg/Kg	1	250	98.85	96	35.2 - 167.1	20	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
n-Triacontane	96.1	103	mg/Kg	1	100	96	103	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 191945

58270 QC Batch: Prep Batch: 49768 Date Analyzed: 2009-04-03 QC Preparation: 2009-04-03 Analyzed By: ME Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
Benzene	0.951	mg/Kg	1	1.00	< 0.00100	95	58.6 - 165.2
Toluene	0.988	mg/Kg	1	1.00	< 0.00100	99	64.2 - 153.8
Ethylbenzene	0.980	mg/Kg	1	1.00	< 0.00110	98	61.6 - 159.4
Xylene	2.82	mg/Kg	1	3.00	0.2078	87	64.4 - 155.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	$egin{array}{c} ext{RPD} \ ext{Limit} \end{array}$
	0.964	mg/Kg	1	1.00	< 0.00100	96	58.6 - 165.2	1	
Benzene		O , O	1					Ţ	20
Toluene	0.980	mg/Kg	1	1.00	< 0.00100	98	64.2 - 153.8	1	20

 $\overline{continued}$. . .

¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 11 of 13

New Mexico

matrix spikes continued ...

·	MSD			Spike	Matrix		Rec.		RPD
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	${f Limit}$	RPD	Limit
Ethylbenzene	0.979	mg/Kg	1	1.00	< 0.00110	98	61.6 - 159.4	0	20
Xylene	2.86	mg/Kg	1	3.00	0.2078	88	64.4 - 155.3	1	20

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

		MS .	MSD			Spike	MS	MSD	Rec.
Surrogate		Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)		0.923	0.913	mg/Kg	1	1	92	91	76 - 127.9
4-Bromofluorobenzene (4-BFB)	2 3	0.642	0.624	mg/Kg	1	1	64	62	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 191814

QC Batch:

58271

Date Analyzed:

2009-04-03

Analyzed By: ME

Prepared By: ME

Prep Batch: 49768

QC Preparation: 2009-04-03

	MS			$_{ m Spike}$	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	16.8	mg/Kg	1	10.0	5.3994	114	12.8 - 175.2

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	\mathbf{Limit}
GRO	14.7	mg/Kg	1	10.0	5.3994	93	12.8 - 175.2	13	20

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

Surrogate	$rac{ ext{MS}}{ ext{Result}}$	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	${ m Rec.} \ { m Limit}$
Trifluorotoluene (TFT)	1.22	1.19	mg/Kg	1	1	122	119	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	1.15	1.05	mg/Kg	1	1	115	105	31.3 - 161.7

Standard (CCV-1)

QC Batch: 58173

Date Analyzed: 2009-04-01

Analyzed By: LD

			\mathbf{CCVs}	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	294	118	80 - 120	2009-04-01

²Surrogate out due to peak interference.

³Surrogate out due to peak interference.

2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 12 of 13

New Mexico

Standard (CCV-2)

QC Batch: 58173

Date Analyzed: 2009-04-01

Analyzed By: LD

			\mathbf{CCVs}	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	258	103	80 - 120	2009-04-01

Standard (CCV-1)

QC Batch: 58270

Date Analyzed: 2009-04-03

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0965	96	80 - 120	2009-04-03
Toluene		mg/Kg	0.100	0.0972	97	80 - 120	2009-04-03
Ethylbenzene		mg/Kg	0.100	0.0969	97	80 - 120	2009-04-03
Xylene		mg/Kg	0.300	0.281	94	80 - 120	2009-04-03

Standard (CCV-2)

QC Batch: 58270

Date Analyzed: 2009-04-03

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.102	102	80 - 120	2009-04-03
Toluene		mg/Kg	0.100	0.106	106	80 - 120	2009-04-03
Ethylbenzene		$_{ m mg/Kg}$	0.100	0.104	104	80 - 120	2009-04-03
Xylene		mg/Kg	0.300	0.296	99	80 - 120	2009-04-03

Standard (CCV-1)

QC Batch: 58271

Date Analyzed: 2009-04-03

Analyzed By: ME

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	\mathbf{Date}
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.18	118	80 - 120	2009-04-03

Standard (CCV-2)

QC Batch: 58271

Date Analyzed: 2009-04-03

Analyzed By: ME

Report Date: April 7, 2009 2002-10286

Work Order: 9040109 34 Junction to Lea Station Page Number: 13 of 13

New Mexico

			CCVs	CCVs	\mathbf{CCVs}	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	1.18	118	80 - 120	2009-04-03

LAB Order 1D # 9040109

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TraceAnalysis, Inc.

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Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Jany-17 Carrier #



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Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE:

VN 20657

NCTRCA

WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

LELAP-02003 Kansas E-10317 El Paso: T104704221-08-TX

LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ron Rounsaville Nova Safety & Environmental

2057 Commerce St. Midland, TX, 79703 Report Date: March 18, 2009

Work Order: 9031324

Project Location: New Mexico

Project Name: 34 Junction to Lea Station

Project Number: 2002-10286

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
190190	SS-6	soil	2009-03-12	11:27	2009-03-13
190191	SS-7A	soil	2009-03-12	11:32	2009-03-13
190192	SS-7B	soil	2009-03-12	11:35	2009-03-13
190193	SS-7C	soil	2009-03-12	11:39	2009-03-13
190194	SS-7D	soil	2009-03-12	11:43	2009-03-13
190195	SS-7E	soil	2009-03-12	11:48	2009-03-13
190196	SS-8	soil	2009-03-12	11:54	2009-03-13
190197	SS-9	soil	2009-03-12	11:59	2009-03-13
190198	SS-10A	soil	2009-03-12	12:04	2009-03-13
190199	SS-10B	soil	2009-03-12	12:10	2009-03-13

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
190200	SS-11	soil	2009-03-12	12:15	2009-03-13
190201	SS-12	soil	2009-03-12	12:19	2009-03-13
190202	SS-13	soil	2009-03-12	12:24	2009-03-13
190203	SS-14A	soil	2009-03-12	12:29	2009-03-13
190204	SS-14B	soil	2009-03-12	12:34	2009-03-13
190205	SS-15A	soil	2009-03-12	12:39	2009-03-13
190206	SS-15B	soil	2009-03-12	12:44	2009-03-13
190207	SS-16A	soil	2009-03-12	12:50	2009-03-13
190208	SS-16B	soil	2009-03-12	12:55	2009-03-13
190209	SS-17A	soil	2009-03-12	13:01	2009-03-13
190210	SS-17B	soil	2009-03-12	13:05	2009-03-13
190211	SS-18A	soil	2009-03-12	13:10	2009-03-13
190212	SS-18B	soil	2009-03-12	13:14	2009-03-13
190213	SS-19A	soil	2009-03-12	13:18	2009-03-13
190214	SS-19B	soil	2009-03-12	13:24	2009-03-13
190215	SS-20A	soil	2009-03-12	13:30	2009-03-13
190216	SS-20B	soil	2009-03-12	13:35	2009-03-13
190217	SS-21A	soil	2009-03-12	13:40	2009-03-13
190218	SS-21B	soil	2009-03-12	13:45	2009-03-13
190219	SS-22A	soil	2009-03-12	13:49	2009-03-13
190220	SS-22B	soil	2009-03-12	13:55	2009-03-13
190221	SS-23A	soil	2009-03-12	14:00	2009-03-13
190222	SS-23B	soil	2009-03-12	14:06	2009-03-13
190223	SS-23C	soil	2009-03-12	14:10	2009-03-13
190224	SS-23D	soil	2009-03-12	14:15	2009-03-13
190225	SS-24A	soil	2009-03-12	14:20	2009-03-13
190226	SS-24B	soil	2009-03-12	14:25	2009-03-13

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 65 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 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2009-03-13 and assigned to work order 9031324. Samples for work order 9031324 were received intact at a temperature of 10.8 deg. C.

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

		\mathbf{Prep}	\mathbf{Prep}	$_{ m QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
$\overline{\mathrm{BTEX}}$	S 8021B	49239	2009-03-13 at 15:19	57635	2009-03-13 at 15:19
BTEX	S 8021B	49283	2009-03-16 at 10:14	57687	2009-03-16 at 10:14
BTEX	S 8021B	49309	2009-03-17 at 10:05	57721	2009-03-17 at 10:05
TPH DRO	Mod. 8015B	49244	2009-03-16 at 09:00	57661	2009-03-16 at 10:00
TPH DRO	Mod. 8015B	49284	2009-03-17 at 09:00	57719	2009-03-17 at 11:30
TPH DRO	Mod. 8015B	49284	2009-03-17 at 09:00	57723	2009-03-17 at 23:25
TPH GRO	S 8015B	49239	2009-03-13 at 15:19	57636	2009-03-13 at 15:19
TPH GRO	S 8015B	49283	2009-03-16 at 10:14	57688	2009-03-16 at 10:14
TPH GRO	S 8015B	49309	2009-03-17 at 10:05	57722	2009-03-17 at 10:05

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 9031324 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Report Date: March 18, 2009 2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 4 of 65

New Mexico

Analytical Report

Sample: 190190 - SS-6

Laboratory: Midland

Analysis: **BTEX** QC Batch: 57635 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8021B 2009-03-13 2009-03-13 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Sample Preparation:

		161			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0500	mg/Kg	5	0.0100
Toluene		< 0.0500	mg/Kg	5	0.0100
Ethylbenzene		< 0.0500	mg/Kg	5	0.0100
Xylene		1.81	mg/Kg	5	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		4.96	mg/Kg	5	5.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		4.19	mg/Kg	5_	5.00	84	45.2 - 144.3

Sample: 190190 - SS-6

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244

Analytical Method: Date Analyzed: Sample Preparation:

Mod. 8015B 2009-03-16 2009-03-16

N/A Prep Method: Analyzed By: LD

Prepared By: LD

RLParameter Flag Result Units DRO 711 mg/Kg

Dilution RL50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		139	m mg/Kg	1	100	139	13.2 - 219.3

Sample: 190190 - SS-6

Laboratory: Midland

TPH GRO Analysis: QC Batch: 57636 Prep Batch: 49239

Analytical Method: Date Analyzed: Sample Preparation: S 8015B 2009-03-13 2009-03-13 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

continued ...

Report Date: March 18, 2009 2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 5 of 65 New Mexico

sample 190190 continued ...

			RL					
Parameter	Flag		Result		Units		Dilution	RL
			RL					
Parameter	Flag		Result		Units		Dilution	$_{ m RL}$
GRO			13.7		mg/Kg		5	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{Flag}	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT))		4.26	mg/Kg	5	5.00	85	68.5 - 119.4
4-Bromofluorobenzene	(4-BFB)		3.71	mg/Kg	5	5.00	74	52 - 117

Sample: 190191 - SS-7A

Laboratory: Midland

Analysis:BTEXAnalytical Method:S 8021BQC Batch:57635Date Analyzed:2009-03-13Prep Batch:49239Sample Preparation:2009-03-13

: S 8021B 2009-03-13 n: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

	•	${f RL}$			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	$_{ m mg/Kg}$	1	0.0100
Xylene	· · · · · · · · · · · · · · · · · · ·	< 0.0100	mg/Kg	1	0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.761	mg/Kg	1	1.00	76	45.2 - 144.3

Sample: 190191 - SS-7A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

		\mathbf{KL}			
Parameter	Flag	Result	Units	Dilution	RL
DRO		366	mg/Kg	1	50.0

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 6 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		145	mg/Kg	1	100	145	13.2 - 219.3

Sample: 190191 - SS-7A

Laboratory:

Midland

Analysis:

TPH GRO

QC Batch: Prep Batch:

57636 49239

Analytical Method: Date Analyzed:

S 8015B

2009-03-13

Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	${ m RL}$
GRO		6.62	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.858	mg/Kg	1	1.00	- 86	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.701	mg/Kg	1	1.00	70	52 - 117

Sample: 190192 - SS-7B

Midland Laboratory:

Analysis: BTEX 57635 QC Batch:

Prep Batch: 49239

Analytical Method:

S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene	1200	<0.0200	mg/Kg	2	0.0100
Toluene		< 0.0200	mg/Kg	$\overset{\mathtt{z}}{2}$	0.0100
Ethylbenzene		< 0.0200	mg/Kg	2	0.0100
Xylene		0.709	mg/Kg	2	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.98	mg/Kg	2	2.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.65	mg/Kg	2	2.00	82	45.2 - 144.3

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 7 of 65 New Mexico

Sample: 190192 - SS-7B

Laboratory: Midland Analysis:

Prep Batch: 49244

TPH DRO QC Batch: 57661

Analytical Method: Date Analyzed:

Mod. 8015B

2009-03-16 Sample Preparation:

2009-03-16

Prep Method: N/A Analyzed By: LD

Prepared By: LD

RL

Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
$\overline{\mathrm{DRO}}$		297	mg/Kg	1	50.0

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		111	mg/Kg	1	100	111	13.2 - 219.3

Sample: 190192 - SS-7B

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 57636 Prep Batch: 49239

Analytical Method: S 8015B Date Analyzed:

2009-03-13 Sample Preparation: 2009-03-13

Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	$_{ m L}$
GRO	·	12.2	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike. Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.72	mg/Kg	2	2.00	86	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.54	mg/Kg	2	2.00	77	52 - 117

Sample: 190193 - SS-7C

Laboratory: Midland

BTEX Analysis: 57635 QC Batch: Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8021B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

Parameter	Flag	Result	Units	Dilution	RL
Benzene	· · · · · · · · · · · · · · · · · · ·	< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.336	mg/Kg	1	0.0100

Report Date: March 18, 2009 2002-10286

Work Order: 9031324

34 Junction to Lea Station

Page Number: 8 of 65 New Mexico

Spike Percent Recovery Dilution Limits Flag Result Units Amount Recovery Surrogate Trifluorotoluene (TFT) 0.990 mg/Kg 1 1.00 99 49 - 129.7 4-Bromofluorobenzene (4-BFB) 0.668 1 1.00 67 45.2 - 144.3 mg/Kg

Sample: 190193 - SS-7C

Midland Laboratory:

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244

Analytical Method: Mod. 8015B 2009-03-16 Date Analyzed:

Sample Preparation: 2009-03-16 Prep Method: N/A

Analyzed By: LD Prepared By: LD

RL

Flag Parameter Result Units Dilution RLDRO 201 50.0 mg/Kg 1

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits 123 13.2 - 219.3 123 100 n-Triacontane mg/Kg

Sample: 190193 - SS-7C

Laboratory: Midland

TPH GRO Analysis: 57636 QC Batch: Prep Batch: 49239

Analytical Method: S 8015B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13

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

RLFlag RLParameter Result Units Dilution 1.50mg/Kg 1.00 GRO

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits Trifluorotoluene (TFT) 0.933 1 1.00 93 68.5 - 119.4 mg/Kg 0.608 1 1.00 61 52 - 117 4-Bromofluorobenzene (4-BFB) mg/Kg

Sample: 190194 - SS-7D

Laboratory: Midland

Analytical Method: S 8021B Prep Method: S 5035 Analysis: **BTEX** Date Analyzed: 2009-03-13 Analyzed By: MEQC Batch: 57635 Prep Batch: 49239 Sample Preparation: 2009-03-13 Prepared By: ME

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Work Order: 9031324 34 Junction to Lea Station Page Number: 9 of 65

New Mexico

			RL				
Parameter F	lag	Re	sult	Units		Dilution	RL
Benzene		<0.0	100	mg/Kg		1	0.0100
Toluene		< 0.0	100	mg/Kg		1	0.0100
Ethylbenzene		< 0.0	100	mg/Kg		1	0.0100
Xylene		<0.0	100	mg/Kg		11	0.0100
					Spike	Percent	Recovery
Surrogate	Fla	g Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.989	mg/Kg	1	1.00	99	49 - 129.7
4-Bromofluorobenzene (4-BF)	B)	0.690	mg/Kg	1	1.00	69	45.2 - 144.3

Sample: 190194 - SS-7D

Laboratory: Midland

Analysis: QC Batch:

TPH DRO 57661

Analytical Method:

Mod. 8015B

Prep Method: N/A Analyzed By: LD

Prep Batch: 49244

Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

Prepared By: $\overline{\mathbf{L}}\mathbf{D}$

Parameter	Flag	RL Result	Units	Dilution	m RL
DRO		368	${ m mg/Kg}$	1	50.0
	· · · · · · · · · · · · · · · · · · ·		C:1	D	D

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		156	mg/Kg	1	100	156	13.2 - 219.3

Sample: 190194 - SS-7D

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 57636 Prep Batch: 49239 Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

		${ m RL}$			
Parameter	Flag	\mathbf{Result}	\mathbf{Units}	Dilution	RL
GRO		3.72	mg/Kg	1	1.00

				•	Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	-	0.966	mg/Kg	1	1.00	97	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.640	mg/Kg	1	1.00	64	52 - 117

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Work Order: 9031324 34 Junction to Lea Station Page Number: 10 of 65

New Mexico

Sample: 190195 - SS-7E

Laboratory: Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239 Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

		1613			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.336	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.982	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.742	mg/Kg	1	1.00	74	45.2 - 144.3

Sample: 190195 - SS-7E

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
DRO	В	172	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		99.4	mg/Kg	1	100	99	13.2 - 219.3

Sample: 190195 - SS-7E

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57636 Prep Batch: 49239 Analytical Method: S 8015B
Date Analyzed: 2009-03-13
Sample Preparation: 2009-03-13

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		5.63	mg/Kg	1	1.00

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Work Order: 9031324 34 Junction to Lea Station Page Number: 11 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.973	mg/Kg	ĺ	1.00	97	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.705	mg/Kg	1	1.00	70	52 - 117

Sample: 190196 - SS-8

Laboratory: Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239 Analytical Method: S 8021B
Date Analyzed: 2009-03-13
Sample Preparation: 2009-03-13

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

RLParameter Flag Result Units Dilution RL< 0.0500 0.0100 Benzene mg/Kg 5 Toluene < 0.0500 mg/Kg 5 0.0100Ethylbenzene 0.6715 mg/Kg 0.0100 5 **Xylene** 1.78 mg/Kg 0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.89	mg/Kg	5	5.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		4.30	mg/Kg	5	5.00	86	45.2 - 144.3

Sample: 190196 - SS-8

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244 Analytical Method: Mod. 8015B
Date Analyzed: 2009-03-16
Sample Preparation: 2009-03-16

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

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
n-Triacontane		177	mg/Kg	1	100	177	13.2 - 219.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 12 of 65

New Mexico

Sample: 190196 - SS-8

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57636 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Prep Method: Analyzed By: ME

S 5035 ME

Sample Preparation: 2009-03-13

Prepared By:

RL

Parameter Fl	ag	Result		Units		Dilution	m RL
GRO		31.1		mg/Kg		5	1.00
Surrogate	Flag	g Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.38	mg/Kg	5	5.00	88	68.5 - 119.4
4-Bromofluorobenzene (4-BF	B)	4.17	mg/Kg	5	5.00	83	52 - 117

Sample: 190197 - SS-9

Midland Laboratory:

Analysis: **BTEX** QC Batch: 57635 Prep Batch: 49239

Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	${ m RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.980	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.751	$_{ m mg/Kg}$	1	1.00	75	45.2 - 144.3

Sample: 190197 - SS-9

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

Prep Method: N/A Analyzed By: $\overline{\text{LD}}$ Prepared By: LD

Parameter	Flag R	esuit	Units	Dilution	$\kappa_{\rm L}$
DRO	_	69.5 mg	3/1 \ 8	1	50.0

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New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		95.6	mg/Kg	1	100	96	13.2 - 219.3

Sample: 190197 - SS-9

Laboratory: Midland

Analysis: QC Batch:

TPH GRO 57636 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8015B

2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

RL

Parameter	Flag		Result		Units		Dilution	RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
This description of	DEAD)		0.017	/TZ	1	1.00	00	CO E 110 A

2 427 50-111	0						
Trifluorotoluene (TFT)	-	0.917	mg/Kg	1	1.00	92	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.680	mg/Kg	1	1.00	68	52 - 117

Sample: 190198 - SS-10A

Laboratory: Midland

Analysis: **BTEX** QC Batch: 57635 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8021B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.992	mg/Kg	1	1.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.757	mg/Kg	1	1.00	76	45.2 - 144.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 14 of 65 New Mexico

Sample: 190198 - SS-10A

Laboratory:

Midland

Analysis: QC Batch: Prep Batch:

TPH DRO 57661

49244

Analytical Method:

Mod. 8015B

Date Analyzed: Sample Preparation: 2009-03-16

2009-03-16

Prep Method: N/A Analyzed By: LD

LD

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO	В	149	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		105	mg/Kg	1	100	105	13.2 - 219.3

Sample: 190198 - SS-10A

Laboratory: Midland

TPH GRO Analysis: QC Batch: 57636 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME

Prepared By: ME

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

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.989	mg/Kg	1	1.00	99	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.681	mg/Kg	1	1.00	68	52 - 117

Sample: 190199 - SS-10B

Laboratory: Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239

Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.373	mg/Kg	1	0.0100

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Work Order: 9031324 34 Junction to Lea Station Page Number: 15 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.975	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.808	${ m mg/Kg}$	1	1.00	81	45.2 - 144.3

Sample: 190199 - SS-10B

Laboratory:

Midland

Analysis:

TPH DRO

QC Batch:

57661

Analytical Method: Date Analyzed:

Mod. 8015B

Prep Method: N/A

LD

Prep Batch:

49244

Sample Preparation:

2009-03-16 2009-03-16

Analyzed By: LD

Prepared By:

RL

Result Dilution RLFlag Units Parameter 399 mg/Kg 50.0 DRO

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
n-Triacontane		129	mg/Kg	1	100	129	13.2 - 219.3

Sample: 190199 - SS-10B

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 57636

Analytical Method: Date Analyzed:

S 8015B

2009-03-13

Prep Method: S 5035

Analyzed By: ME

Prep Batch: 49239

Sample Preparation: 2009-03-13

Prepared By: ME

RLResult Units Dilution RLParameter Flag 6.87 1.00 mg/Kg $\overline{\text{GRO}}$

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	1	1.00	100	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.759	mg/Kg	1	1.00	76	52 - 117

Sample: 190200 - SS-11

Laboratory:

Midland

Analysis: BTEX 57635 QC Batch: Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8021B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

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Work Order: 9031324 34 Junction to Lea Station Page Number: 16 of 65

New Mexico

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

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.984	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.790	${ m mg/Kg}$	1	1.00	79	45.2 - 144.3

Sample: 190200 - SS-11

Laboratory: Midland

 $\overline{\text{DRO}}$

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

Prep Method: N/A Analyzed By: LDPrepared By: LD

Parameter

RLFlag Result Units Dilution RL82.5 mg/Kg 50.0

Surrogata	Flag	Result	Units	Dilution	$rac{ ext{Spike}}{ ext{Amount}}$	Percent Recovery	Recovery Limits
n-Triacontane	riag	96.1	/T.	1	100	96	12 2 210 2
n-inacontane		90.1	mg/Kg		100	90	13.2 - 219.3

Sample: 190200 - SS-11

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57636 Prep Batch: 49239

Analytical Method: S 8015B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13

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

RLResult Units Dilution RLParameter Flag 2.54 mg/Kg GRO 1.00 1

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.998	mg/Kg	1	1.00	100	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.728	mg/Kg	1	1.00	73	52 - 117

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QC Batch:

Work Order: 9031324 34 Junction to Lea Station Page Number: 17 of 65

New Mexico

Sample: 190201 - SS-12

Laboratory: Midland Analysis:

BTEX 57635 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8021B2009-03-13 Prep Method: S 5035 Analyzed By:

ME Prepared By: ME

RL.

		16.1.7			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	${ m mg/Kg}$	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.377	mg/Kg	1	0.0100

Sample Preparation: 2009-03-13

,					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	$\mathbf{Units}_{_}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.982	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.881	mg/Kg	1	1.00	88	45.2 - 144.3

Sample: 190201 - SS-12

Laboratory:

Midland TPH DRO

Analysis: QC Batch: 57661 Prep Batch: 49244 Analytical Method:

Date Analyzed:

Mod. 8015B 2009-03-16

Sample Preparation: 2009-03-16 Prep Method: N/A Analyzed By: LD

Prepared By: LD

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		438	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution_	Amount	Recovery	Limits
n-Triacontane		161	m mg/Kg	. 1	100	161	13.2 - 219.3

Sample: 190201 - SS-12

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57636 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Sample Preparation: 2009-03-13

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		26.6	mg/Kg	1	1.00

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Work Order: 9031324 34 Junction to Lea Station Page Number: 18 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.880	mg/Kg	11	1.00	88	52 - 117

Sample: 190202 - SS-13

Laboratory:

Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239 Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13

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

RLFlag Result Units Dilution RLParameter Benzene < 0.0100 mg/Kg 1 0.0100 Toluene mg/Kg 1 0.0100 < 0.0100 mg/Kg Ethylbenzene < 0.0100 1 0.0100 Xylene < 0.0100 mg/Kg 1 0.0100

	•				Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.985	mg/Kg	1	1.00	98	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.796	mg/Kg	1_	1.00	80	45.2 - 144.3

Sample: 190202 - SS-13

Laboratory: Midland

Analysis: TPH DRO

QC Batch: 57661 Prep Batch: 49244 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		115	mg/Kg	1	100	115	13.2 - 219.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 19 of 65

New Mexico

Sample: 190202 - SS-13

Laboratory:

Midland TPH GRO

Analysis: QC Batch: 57636 49239 Prep Batch:

Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	m RL
GRO		2.33	mg/Kg	1	1.00
					_

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.985	mg/Kg	1	1.00	98	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.718	mg/Kg	1	1.00	72	52 - 117

Sample: 190203 - SS-14A

Laboratory: Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239

Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.138	mg/Kg	1	0.0100
Xylene		0.374	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	1	1.00	100	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.891	mg/Kg	1	1.00	89	45.2 - 144.3

Sample: 190203 - SS-14A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57661 Prep Batch: 49244

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

Prep Method: N/A Analyzed By: LDPrepared By: LD

 $RL \mid$

DRO 463 mg/Kg 1 50.0	Parameter	Flag	Result	Units	Dilution	RL
	DRO		463		1	

Report Date: March 18, 2009 2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 20 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	100	142	13.2 - 219.3

Sample: 190203 - SS-14A

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57636 Prep Batch: 49239 Analytical Method: S 8015B
Date Analyzed: 2009-03-13
Sample Preparation: 2009-03-13

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

RLParameter Flag Result Units Dilution RL28.5 1.00 GRO mg/Kg Spike Percent Recovery Flag Result Units Dilution Amount Recovery Limits Surrogate Trifluorotoluene (TFT) 1.01 1.00 101 68.5 - 119.4 mg/Kg 1 4-Bromofluorobenzene (4-BFB) 0.881 mg/Kg 1 1.00 88 52 - 117

Sample: 190204 - SS-14B

Laboratory: Midland

Analysis: BTEX QC Batch: 57635 Prep Batch: 49239 Analytical Method: S 8021B Date Analyzed: 2009-03-13 Sample Preparation: 2009-03-13

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

RLDilution RLResult Units Parameter Flag 0.0100 Benzene < 0.0100 mg/Kg 1 < 0.0100 mg/Kg 1 0.0100 Toluene mg/Kg 1 0.0100 Ethylbenzene < 0.0100 Xylene 0.383mg/Kg 1 0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.989	mg/Kg	1	1.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.926	mg/Kg	11	1.00	93	45.2 - 144.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 21 of 65

New Mexico

Sample: 190204 - SS-14B

Laboratory: Analysis:

Midland TPH DRO

QC Batch: 57661 Prep Batch: 49244

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2009-03-16 2009-03-16

Prep Method: N/A Analyzed By:

LD Prepared By: LD

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		352	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		135	mg/Kg	1	100	135	13.2 - 219.3

Sample: 190204 - SS-14B

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57636 Prep Batch: 49239

Analytical Method: Date Analyzed:

S 8015B 2009-03-13 Sample Preparation: 2009-03-13 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
GRO		35.8	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.961	mg/Kg	1	1.00	96	52 - 117

Sample: 190205 - SS-15A

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
Benzene	<u> </u>	< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.128	mg/Kg	1	0.0100
Xylene		0.365	mg/Kg	. 1	0.0100

R.L.

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 22 of 65

New Mexico

LD

LD

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.937	mg/Kg	1	1.00	94	45.2 - 144.3

Sample: 190205 - SS-15A

Laboratory:

Midland

Analysis:

TPH DRO

QC Batch: Prep Batch:

57661 49244

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B

2009-03-16

Prep Method: N/A Analyzed By: 2009-03-16 Prepared By:

RL

Result Units Dilution RLParameter Flag $\overline{\mathrm{DRO}}$ 380 mg/Kg 50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		114	mg/Kg	1	100	114	13.2 - 219.3

Sample: 190205 - SS-15A

Laboratory: Midland

Analysis: TPH GRO QC Batch:

57688 Prep Batch: 49283 Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RL

Flag Result Units Dilution RLParameter 31.2 GRO mg/Kg 1.00

- ·					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.931	mg/Kg	1	1.00	93	52 - 117
` ,				1			_

Sample: 190206 - SS-15B

Midland Laboratory:

Analysis: BTEX 57687 QC Batch: 49283 Prep Batch:

S 8021B Analytical Method: Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

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Work Order: 9031324 34 Junction to Lea Station Page Number: 23 of 65

New Mexico

		R	L				
Parameter F	lag	Resu	lt	Units		Dilution	RL
Benzene		< 0.0100		mg/Kg		1	
Toluene		< 0.010	00	mg/Kg		1	0.0100
Ethylbenzene		< 0.010	00	mg/Kg		1	0.0100
Xylene		0.37	4	mg/Kg		1	0.0100
_					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFI	3)	0.949	mg/Kg	1	1.00	95	45.2 - 144.3

Sample: 190206 - SS-15B

Laboratory: Midland

Analysis:

TPH DRO

57719

Analytical Method:

Mod. 8015B

Prep Method: N/A

QC Batch:

Prep Batch: 49284

Date Analyzed: Sample Preparation: 2009-03-17

2009-03-17

Analyzed By: LD

Prepared By: LD

RL

Parameter	Flag	Re	sult	Units	Dilution	m RL
DRO	 		366	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	100	144	13.2 - 219.3

Sample: 190206 - SS-15B

Laboratory:

Midland

Analysis:

TPH GRO

QC Batch:

57688

Analytical Method:

S 8015B

Prep Method: S 5035 Analyzed By: ME

Date Analyzed:

2009-03-16

Prep Batch: 49283

Sample Preparation: 2009-03-16

Prepared By: ME

Parameter	\mathbf{Flag}	Result	Units	Dilution	m RL
GRO	-	24.5	mg/Kg	1	1.00

					\mathbf{Spike}	$\mathbf{Percent}$	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.864	mg/Kg	1	1.00	86	52 - 117

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Work Order: 9031324 34 Junction to Lea Station Page Number: 24 of 65

New Mexico

Sample: 190207 - SS-16A

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283 Analytical Method: S 8021B
Date Analyzed: 2009-03-16
Sample Preparation: 2009-03-16

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

 \mathbf{RL}

		100			
Parameter	\mathbf{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		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.12	mg/Kg	1	1.00	112	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.834	mg/Kg	1	1.00	83	45.2 - 144.3

Sample: 190207 - SS-16A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284 Analytical Method: Mod. 8015B
Date Analyzed: 2009-03-17
Sample Preparation: 2009-03-17

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

m RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		242	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} \mathbf{Spike} \ \mathbf{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	100	120	13.2 - 219.3

Sample: 190207 - SS-16A

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283 Analytical Method: S 8015B
Date Analyzed: 2009-03-16
Sample Preparation: 2009-03-16

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		8.00	mg/Kg	1	1.00

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Work Order: 9031324 34 Junction to Lea Station Page Number: 25 of 65 New Mexico

Spike Percent Recovery Surrogate Flag Result Units Dilution Amount Recovery Limits Trifluorotoluene (TFT) 1.07mg/Kg 68.5 - 119.4 1 1.00 107 1.00 4-Bromofluorobenzene (4-BFB) 0.741mg/Kg 1 74 52 - 117

Sample: 190208 - SS-16B

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283 Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

RLFlag Result Units Dilution RLParameter < 0.0100 mg/Kg 0.0100 Benzene Toluene < 0.0100 mg/Kg 1 0.0100 Ethylbenzene < 0.0100 mg/Kg 1 0.0100 Xylene < 0.0100 mg/Kg 1 0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.12	mg/Kg	1	1.00	112	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	1	1.00	90	45.2 - 144.3

Sample: 190208 - SS-16B

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284 Analytical Method: Mod. 8015B
Date Analyzed: 2009-03-17
Sample Preparation: 2009-03-17

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		98.5	mg/Kg	1	100	98	13.2 - 219.3

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 26 of 65

New Mexico

Sample: 190208 - SS-16B

Laboratory:

Midland

Analysis:

TPH GRO 57688

Analytical Method:

S 8015B

Prep Method: S 5035

QC Batch: Prep Batch:

49283

Date Analyzed: Sample Preparation:

2009-03-16 2009-03-16

Analyzed By: Prepared By:

ME ME

RL

1.00

RL

Result Parameter Units Dilution Flag 28.7mg/Kg GRO

					$\mathbf{S}_{\mathbf{pike}}$	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.829	mg/Kg	1	1.00	83	52 - 117

Sample: 190209 - SS-17A

Laboratory: Midland

BTEX Analysis: QC Batch: 57687

Analytical Method:

S 8021B

Prep Method: S 5035

Prep Batch: 49283

Date Analyzed: 2009-03-16 2009-03-16 Sample Preparation:

Analyzed By: Prepared By:

ME ME

RL

Flag Result Units Dilution RLParameter mg/Kg 0.0100 < 0.0100 Benzene 1 Toluene < 0.0100 mg/Kg 1 0.0100 < 0.0100 mg/Kg 1 0.0100 Ethylbenzene mg/Kg 1 0.3460.0100 Xylene

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.862	mg/Kg	1	1.00	86	45.2 - 144.3

Sample: 190209 - SS-17A

Laboratory: Midland

Parameter

DRO

TPH DRO Analysis: QC Batch: 57719 Prep Batch: 49284

Mod. 8015B Analytical Method: 2009-03-17 Date Analyzed:

Prep Method: N/A

Analyzed By: LD Prepared By: LD

Flag

RL

Sample Preparation:

Result Units Dilution RL224 mg/Kg 50.0

2009-03-17

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Work Order: 9031324 34 Junction to Lea Station Page Number: 27 of 65 New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		106	mg/Kg	1	100	106	13.2 - 219.3

Sample: 190209 - SS-17A

Laboratory:

Midland

Analysis: QC Batch:

TPH GRO 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B

2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035

Analyzed By: ME Prepared By: ME

RL

Parameter	Flag	\mathbf{Result}	Units	Dilution	RL
GRO		11.8	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.776	mg/Kg	1	1.00	78	52 - 117

Sample: 190210 - SS-17B

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283

Analytical Method: S 8021BDate Analyzed: 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

		m RL			
Parameter	Flag	Result	\mathbf{Units}	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.364	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.863	mg/Kg	1	1.00	86	45.2 - 144.3
4-bromonuorobenzene (4-brb)		0.000	mg/Kg		1.00		40

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Work Order: 9031324 34 Junction to Lea Station Page Number: 28 of 65

New Mexico

Sample: 190210 - SS-17B

Laboratory:

Midland

Analysis:

TPH DRO

QC Batch: Prep Batch:

49284

57719

Analytical Method: Date Analyzed:

Mod. 8015B

2009-03-17

Prep Method: N/A Analyzed By: LD

Sample Preparation:

2009-03-17

Prepared By: LD

RL

Parameter

n-Triacontane

Result

Units

Dilution

RL

DRO

Flag

Flag

271

mg/Kg

mg/Kg

50.0

Surrogate

Result

99.5

Units

Dilution

Spike Amount 100

Percent Recovery

100

Recovery Limits

13.2 - 219.3

Sample: 190210 - SS-17B

Laboratory:

Midland

Analysis:

TPH GRO

QC Batch: Prep Batch: 57688

49283

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B

2009-03-16 2009-03-16 Prep Method: S 5035 Analyzed By:

ME ME

Prepared By:

RL

Parameter

Result Flag

Units

Dilution 1

GRO

25.1

mg/Kg

RL1.00

Limits

68.5 - 119.4

52 - 117

Surrogate

Recovery

Spike Percent Flag Result Units Dilution Amount Recovery Trifluorotoluene (TFT) 1.07 mg/Kg 1 1.00 107 4-Bromofluorobenzene (4-BFB) 0.833 mg/Kg 1 1.00 83

Sample Preparation:

Sample: 190211 - SS-18A

Laboratory:

Prep Batch:

Midland

Analysis: QC Batch: **BTEX** 57687 49283

Analytical Method: Date Analyzed:

S 8021B

2009-03-16 2009-03-16

Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RLResult Units Dilution RLParameter Flag < 0.0100 mg/Kg 0.0100 Benzene mg/Kg 1 Toluene < 0.0100 0.0100 mg/Kg 1 Ethylbenzene < 0.0100 0.0100 Xylene 0.445 mg/Kg 1 0.0100

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Work Order: 9031324 34 Junction to Lea Station Page Number: 29 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	45.2 - 144.3

Sample: 190211 - SS-18A

Laboratory:

Midland

Analysis: QC Batch: TPH DRO 57719

Prep Batch: 49284

Analytical Method: Date Analyzed:

Mod. 8015B

2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A

Analyzed By: LDPrepared By: LD

RL

Units Parameter Flag Result Dilution RL474 DRO mg/Kg 50.0

	•				Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		132	mg/Kg	1	100	132	13.2 - 219.3

Sample: 190211 - SS-18A

Laboratory:

Midland TPH GRO

Analysis: QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RL

Result Units Dilution RLParameter Flag 41.5 \overline{GRO} mg/Kg 1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	11	1.00	105	52 - 117

Sample: 190212 - SS-18B

Midland Laboratory:

BTEX Analysis: 57687 QC Batch: Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

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Work Order: 9031324 34 Junction to Lea Station Page Number: 30 of 65

New Mexico

		RJ					
Parameter Fl.	ag	Resul	t	Units		Dilution	RL
Benzene		< 0.010	0	mg/Kg		1	0.0100
Toluene		< 0.010	0	mg/Kg		1	0.0100
Ethylbenzene		0.220)	mg/Kg		1	0.0100
Xylene		0.569	9	mg/Kg		1	0.0100
					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	49 - 129.7
4-Bromofluorobenzene (4-BFB)	1.16	mg/Kg	1	1.00	116	45.2 - 144.3

Sample: 190212 - SS-18B

Laboratory:

Midland

Analysis:

DRO

TPH DRO 57719

QC Batch: Prep Batch: 49284

Analytical Method:

Date Analyzed:

Mod. 8015B 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A

Analyzed By: LD

Prepared By: LD

Parameter Flag

RLResult 424

Units mg/Kg Dilution

RL50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	100	121	13.2 - 219.3

Sample: 190212 - SS-18B

Laboratory: Midland

Analysis: QC Batch:

TPH GRO 57688 Prep Batch: 49283

Analytical Method:

Date Analyzed:

S 8015B

2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035

Analyzed By: ME Prepared By:

RL

Result 75.6 Units

Flag Parameter GRO

mg/Kg

Dilution

RL1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	68.5 - 119.4
1. Bromofluorobenzene (1-RFR)	1	1.36	mg/Kg	1	1.00	136	59 - 117

¹High surrogate recovery due to peak interference.

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Work Order: 9031324 34 Junction to Lea Station Page Number: 31 of 65

New Mexico

Sample: 190213 - SS-19A

Laboratory: Analysis:

QC Batch:

Prep Batch:

Midland BTEX

57687 49283 Analytical Method: Date Analyzed:

S 8021B 2009-03-16

Prep Method: S 5035 Analyzed By: ME

Sample Preparation: 2009-03-16

Prepared By:

ME

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	$ m_{RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	. 1	0.0100
Xylene		0.361	mg/Kg	1.	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	$\mathbf{Units}_{_}$	Dilution	Amount	Recovery	${f Limits}$
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.947	mg/Kg	. 1	1.00	95	45.2 - 144.3

Sample: 190213 - SS-19A

Laboratory: Midland

Analysis: QC Batch:

TPH DRO 57719 Prep Batch: 49284

Analytical Method: Date Analyzed:

Mod. 8015B 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By:

LD Prepared By: LD

BL

Parameter	Flag	Result	Units	Dilution	$\mathbf{R}\mathbf{L}$
DRO		401	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		140	mg/Kg	1	100	140	13.2 - 219.3

Sample: 190213 - SS-19A

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: Analyzed By:

MEPrepared By: ME

S 5035

Parameter	Flag	Result	Units	Dilution	RL
GRO		35.4	mg/Kg	1	1.00

2002-10286

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Work Order: 9031324 34 Junction to Lea Station Page Number: 32 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.944	mg/Kg	1	1.00	94	52 - 117

Sample: 190214 - SS-19B

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283 Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

		m RL			
Parameter	Flag	\mathbf{Result}	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units.	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.853	mg/Kg	1	1.00	85	45.2 - 144.3

Sample: 190214 - SS-19B

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		120	mg/Kg	1 _	100	120	13.2 - 219.3

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 33 of 65 New Mexico

Sample: 190214 - SS-19B

Midland Laboratory:

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		10.9	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.777	mg/Kg	1	1.00	78	52 - 117

Sample: 190215 - SS-20A

Laboratory: Midland

BTEX Analysis: 57687 QC Batch: Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed:

2009-03-16 Sample Preparation: 2009-03-16

Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	${f Units}$	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.350	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.886	mg/Kg	1	1.00	89_	45.2 - 144.3

Sample: 190215 - SS-20A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

Parameter	Flag	Result	Units	Dilution	$_{\rm L}$
DRO		292	mg/Kg	1	50.0

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Work Order: 9031324 34 Junction to Lea Station Page Number: 34 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		101	mg/Kg	1	100	101	13.2 - 219.3

Sample: 190215 - SS-20A

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283 Analytical Method: S 8015B Date Analyzed: 2009-03-16

Sample Preparation: 2009-03-16

Prep Method: S 5035

Analyzed By: ME Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	$_{ m L}$
GRO		13.2	mg/Kg	1	1.00

,					\mathbf{S} pike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.886	mg/Kg	1	1.00	89	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.816	mg/Kg	1	1.00	82	52 - 117

Sample: 190216 - SS-20B

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283 Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL ameter Flag Result

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.426	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	49 - 129.7
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	45.2 - 144.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 35 of 65 New Mexico

Sample: 190216 - SS-20B

Laboratory:

Analysis:

Midland TPH DRO

QC Batch: 57719 Prep Batch: 49284 Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2009-03-17

2009-03-17

Prep Method: N/A Analyzed By: LD

LD

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		335	mg/Kg	1	50.0

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		124	mg/Kg	1	100	124	13.2 - 219.3

Sample: 190216 - SS-20B

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	hoRL
GRO		45.4	mg/Kg	1	1.00

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	1	1.00	_ 103	52 - 117

Sample: 190217 - SS-21A

Midland Laboratory:

Analysis: **BTEX** QC Batch: 57687 Prep Batch: 49283

S 8021B Analytical Method: Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	${ m RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	${ m mg/Kg}$	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

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Work Order: 9031324 34 Junction to Lea Station Page Number: 36 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.846	mg/Kg	1	1.00	85	45.2 - 144.3

Sample: 190217 - SS-21A

Laboratory: Midland

Analysis: QC Batch: TPH DRO

Prep Batch: 49284

57719

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B

2009-03-17 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By:

LD

RL50.0

		${ m RL}$			
Parameter	Flag	Result	Units	Dilution	
DRO		186	mg/Kg	1	

					Spike	Percent	Recovery
Surrogate	Flag	Result	${f Units}$	Dilution	Amount	Recovery	Limits
n-Triacontane		127	mg/Kg	1	100	127	13.2 - 219.3

Sample: 190217 - SS-21A

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

Sample Preparation:

S 8015B

2009-03-16 2009-03-16

Prep Method: S 5035 Analyzed By:

MEPrepared By: ME

RLResult Units Dilution RLParameter Flag 2.16 mg/Kg GRO 1.00

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.757	mg/Kg	1	1.00	76	52 - 117

Sample: 190218 - SS-21B

Laboratory: Midland

Analysis: **BTEX** QC Batch: 57687 Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 37 of 65 New Mexico

·		\mathbf{R}^{2}	L .				
Parameter Fla	.g	Resul	lt	Units		Dilution	RL
Benzene		< 0.010	0	mg/Kg		1	0.0100
Toluene		< 0.010	0	mg/Kg		1	0.0100
Ethylbenzene		< 0.0100		mg/Kg		1	0.0100
Xylene		0.37	2	mg/Kg		1	0.0100
					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.865	mg/Kg	1	1.00	86	45.2 - 144.3

Sample: 190218 - SS-21B

Laboratory: Midland

Analysis: QC Batch: TPH DRO

57719

Analytical Method:

Mod. 8015B 2009-03-17

Prep Method: N/A Analyzed By: LD

Prep Batch: 49284

Date Analyzed: Sample Preparation: 2009-03-17

Prepared By: LD

		m RL			
Parameter	\mathbf{Flag}	Result	Units	Dilution	m RL
DRO		129	mg/Kg	1	50.0

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		102	mg/Kg	1	100	102	13.2 - 219.3

Sample: 190218 - SS-21B

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 57688 Prep Batch: 49283 Analytical Method:

S 8015B 2009-03-16 Prep Method: S 5035 Analyzed By:

Date Analyzed: Sample Preparation: 2009-03-16

MEPrepared By: ME

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		9.92	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.800	mg/Kg	1	1.00	80	52 - 117

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Work Order: 9031324 34 Junction to Lea Station Page Number: 38 of 65

New Mexico

Sample: 190219 - SS-22A

Laboratory:

Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8021B 2009-03-16 Prep Method: S 5035 Analyzed By:

Prepared By:

MEME

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

Sample Preparation: 2009-03-16

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.839	mg/Kg	1	1.00	84	45.2 - 144.3

Sample: 190219 - SS-22A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2009-03-17 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By: LD

RL.

Parameter	Flag	Result	Units	Dilution	RL
DRO		70.6	m mg/Kg	1	50.0

			-		Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		103	mg/Kg	1	100	103	13.2 - 219.3

Sample: 190219 - SS-22A

Laboratory:

Midland

TPH GRO Analysis: QC Batch: 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

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

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Work Order: 9031324 34 Junction to Lea Station Page Number: 39 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} \text{Spike} \\ \text{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.765	mg/Kg	1	1.00	76	52 - 117

Sample: 190220 - SS-22B

Laboratory:

Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283 Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

RLUnits Dilution RLParameter Flag Result Benzene < 0.0100 mg/Kg 1 0.0100 mg/Kg Toluene < 0.0100 1 0.0100 Ethylbenzene < 0.0100 mg/Kg 1 0.0100 mg/Kg 0.0100 Xylene < 0.0100 1

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{U} nits	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.858	mg/Kg	1	1.00	86	45.2 - 144.3

Sample: 190220 - SS-22B

Laboratory: N

Midland

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

RL

50.0

Spike Percent Recovery Units Dilution Amount Recovery Limits Surrogate Flag Result 100 108 13.2 - 219.3 n-Triacontane 108 mg/Kg 1

Report Date: March 18, 2009 2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 40 of 65 New Mexico

Sample: 190220 - SS-22B

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283

Analytical Method: S 8015B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Parameter Fla	g	\mathbf{Result}		\mathbf{Units}		Dilution	RL
GRO		<1.00		mg/Kg		1	1.00
					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	${f Amount}$	Recovery	Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	68.5 - 119.4
4-Bromofluorobenzene (4-BFE	3)	0.762	mg/Kg	1	1.00	76	52 - 117

Sample: 190221 - SS-23A

Laboratory: Midland

Analysis: BTEX QC Batch: 57687 Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.130	mg/Kg	1	0.0100
Xylene		0.416	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.886	mg/Kg	1	1.00	89	45.2 - 144.3

Sample: 190221 - SS-23A

Midland Laboratory:

Analysis: TPH DRO QC Batch: 57719 Prep Batch: 49284

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LDPrepared By: LD

		${ m RL}$			
Parameter	\mathbf{Flag}	\mathbf{Result}	Units	Dilution	\mathbf{RL}
DRO		166	mg/Kg	1	50.0

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Work Order: 9031324 34 Junction to Lea Station Page Number: 41 of 65 New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	100	132	13.2 - 219.3

Sample: 190221 - SS-23A

Laboratory:

Midland

Analysis: QC Batch:

TPH GRO 57688 Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B

2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035

Analyzed By: MEPrepared By: ME

RL

Parameter	\mathbf{Flag}	\mathbf{Result}		Units		Dilution	m RL
GRO		4.10		mg/Kg		1	1.00
					Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	68.5 - 119.4
4-Bromofluorobenzene (4	-BFB)	0.801	mg/Kg	1	1.00	80	52 - 117

Sample: 190222 - SS-23B

Laboratory: Midland

BTEX Analysis: QC Batch: 57687 Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 ME Analyzed By: Prepared By: ME

		${f RL}$			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.344	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	${f Limits}$
Trifluorotoluene (TFT)		1.00	mg/Kg	1	1.00	100	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.882	mg/Kg	1	1.00	88	45.2 - 144.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 42 of 65

New Mexico

Sample: 190222 - SS-23B

Laboratory:

Midland

Analysis: QC Batch:

TPH DRO 57719

Analytical Method:

Mod. 8015B 2009-03-17

Prep Method: N/A Analyzed By: LD

Prep Batch:

49284

Date Analyzed: Sample Preparation:

2009-03-17

Prepared By: LD

RL

Parameter

Result

Units

Dilution

RL50.0

DRO

Flag 190

mg/Kg

Recovery

Surrogate n-Triacontane Flag Result 105

Units Dilution mg/Kg 1

Spike Amount 100

Percent Recovery 105

Limits 13.2 - 219.3

Sample: 190222 - SS-23B

Laboratory:

Midland

Analysis:

TPH GRO Analytical Method:

S 8015B

Prep Method: S 5035 Analyzed By:

ME

QC Batch: Prep Batch: 49283

57688

Date Analyzed: Sample Preparation: 2009-03-16

2009-03-16

Prepared By: ME

RL

Parameter

Result

Units

GRO

Flag

3.44

Dilution

RL

Flag

mg/Kg

 $\overline{1}$

78

1.00

Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Result Units 1.05mg/Kg 0.781mg/Kg Dilution

7

1

Spike Percent

Amount

1.00

1.00

Recovery

Recovery Limits 68.5 - 119.4 105 52 - 117

Sample: 190223 - SS-23C

Laboratory:

Midland

Analysis: QC Batch:

Prep Batch:

BTEX 57687 49283

Analytical Method:

S 8021B

2009-03-16 2009-03-16 Prep Method: S 5035

Analyzed By: MEPrepared By: ME

DI

Sample Preparation:

Date Analyzed:

		$\mathbf{r}_{\mathbf{r}}$			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xvlene		< 0.0100	mg/Kg	1	0.0100

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Work Order: 9031324 34 Junction to Lea Station Page Number: 43 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.853	mg/Kg	1	1.00	85	45.2 - 144.3

Sample: 190223 - SS-23C

Midland Laboratory:

TPH DRO Analysis: QC Batch: 57719

Prep Batch: 49284

Analytical Method:

Mod. 8015B 2009-03-17 Date Analyzed: Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	RL
DRO		69.2	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		110	mg/Kg	1	100	110	13.2 - 219.3

Sample: 190223 - SS-23C

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688 Prep Batch: 49283

Analytical Method: S 8015B Date Analyzed: 2009-03-16

Prep Method: S 5035 Analyzed By: MESample Preparation: 2009-03-16 Prepared By: ME

RL

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.763	mg/Kg	1	1.00	76	52 - 117

Sample: 190224 - SS-23D

Laboratory: Midland

Analysis: BTEX 57687 QC Batch: Prep Batch: 49283

Analytical Method: S 8021B Date Analyzed: 2009-03-16 Sample Preparation: 2009-03-16

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

2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 44 of 65 New Mexico

			RJ	L				
Parameter	lag		Resul	t	Units		Dilution	RL
Benzene			< 0.010	0	mg/Kg		1	0.0100
Toluene			0.12	3	mg/Kg		1	0.0100
Ethylbenzene			0.124	4	mg/Kg		1	0.0100
Xylene			0.38	2	mg/Kg		1	0.0100
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.05	mg/Kg	1	1.00	105	49 - 129.7
4-Bromofluorobenzene (4-BF	B)		0.923	mg/Kg	1	1.00	92	45.2 - 144.3

Sample: 190224 - SS-23D

Laboratory: Midland

Analysis:

DRO

TPH DRO 57719

QC Batch: Prep Batch: 49284

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B

2009-03-17 2009-03-17

Prep Method: N/A LD

Analyzed By: Prepared By:

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Parameter Flag

RLResult 245

Units mg/Kg Dilution RL

LD

50.0

C	T31	m 14	TT:4	Dilation	Spike	Percent	Recovery
Surrogate	${f Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		116	mg/Kg	$\overline{1}$	100	116	13.2 - 219.3

Sample: 190224 - SS-23D

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57688

Prep Batch: 49283

Analytical Method: Date Analyzed:

S 8015B 2009-03-16 Sample Preparation: 2009-03-16 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

		RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		15.5	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.863	mg/Kg	1	1.00	86	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.858	mg/Kg	1	1.00	86	52 - 117

2002-10286

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Work Order: 9031324 34 Junction to Lea Station Page Number: 45 of 65 New Mexico

Sample: 190225 - SS-24A

Laboratory:

Midland BTEX

Analysis: QC Batch: 57721 Prep Batch: 49309

Analytical Method: Date Analyzed:

S 8021B 2009-03-17

Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: ME

Prepared By: ME

RL

Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene	1	0.120	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1145	1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.906	mg/Kg	1	1.00	91	45.2 - 144.3

Sample: 190225 - SS-24A

Laboratory:

Prep Batch:

Midland

Analysis: QC Batch:

TPH DRO 57719 49284

Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2009-03-17 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By: LD

RL

Parameter	$\operatorname{Flag}_{}$	Result	Units	Dilution	RL
DRO		216	mg/Kg	1	50.0

•					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		146	mg/Kg	1	100	146	13.2 - 219.3

Sample: 190225 - SS-24A

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57722 Prep Batch: 49309

Analytical Method: Date Analyzed:

S 8015B 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	RL
GRO		1.37	mg/Kg	1	1.00

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Work Order: 9031324 34 Junction to Lea Station Page Number: 46 of 65 New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.806	mg/Kg	1	1.00	81	52 - 117

Sample: 190226 - SS-24B

Laboratory: Midland

BTEX

Analysis: QC Batch: 57721 Prep Batch: 49309 Analytical Method: Date Analyzed:

S 8021B 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RLFlag Result Units Dilution Parameter RLBenzene < 0.0100 mg/Kg 0.0100 Toluene < 0.0100 mg/Kg 1 0.0100 Ethylbenzene < 0.0100 mg/Kg 1 0.0100 Xylene < 0.0100 mg/Kg 1 0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	${f Amount}$	Recovery	Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.908	mg/Kg	1	1.00	91	45.2 - 144.3

Sample: 190226 - SS-24B

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57723 49284 Prep Batch:

Analytical Method: Date Analyzed: Sample Preparation:

Mod. 8015B 2009-03-17 2009-03-17

Prep Method: N/A Analyzed By: LD

LD

Prepared By:

RLFlag Result Units Dilution RLParameter 162 DRO mg/Kg 50.0

	a.				Spike	Percent	Recovery
Surrogate	$_{_}$ Flag $_{_}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		112	mg/Kg	1	100	112	13.2 - 219.3

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Work Order: 9031324 34 Junction to Lea Station Page Number: 47 of 65

New Mexico

Sample: 190226 - SS-24B

Laboratory: Midland

Analysis: QC Batch: Prep Batch:

TPH GRO

57722 49309

Analytical Method: Date Analyzed:

S 8015B 2009-03-17

Sample Preparation: 2009-03-17

Prep Method: S 5035 Analyzed By: ME

Prepared By: ME

RL

Flag Result Units Dilution Parameter RL2.65 GRO mg/Kg 1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.816	${ m mg/Kg}$	1	1.00	82	52 - 117

Method Blank (1)

QC Batch: 57635

QC Batch: 57635 Prep Batch: 49239 Date Analyzed: QC Preparation:

2009-03-13 2009-03-13 Analyzed By: ME

Prepared By: ME

MDL

Flag Result Units RLParameter mg/Kg < 0.00100 Benzene 0.01< 0.00100 mg/Kg 0.01 Toluene < 0.00110 mg/Kg 0.01 Ethylbenzene < 0.00360 mg/Kg 0.01 Xylene

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.989	mg/Kg	1 .	1.00	99	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.773	mg/Kg	1	1.00	77	51.9 - 128.1

Method Blank (1)

QC Batch: 57636

QC Batch: 57636 Prep Batch: 49239

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Date Analyzed: 2009-03-13 QC Preparation: 2009-03-13 Analyzed By: Prepared By: ME

MDL

Result Units Flag RLParameter < 0.482 mg/Kg GRO

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.865	mg/Kg	1	1.00	86	75.8 - 98.5

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Work Order: 9031324 34 Junction to Lea Station Page Number: 48 of 65

New Mexico

method blank continued							
α .	T21	TD 11	T T **	D:1 -:	Spike	Percent	Recovery
Surrogate	Flag	\mathbf{Result}	Units	Dilution	Amount	Recovery	Limits
4-Bromofluorobenzene (4-BFB)		0.702	${ m mg/Kg}$	1	1.00	70	56.5 - 109.5

Method Blank (1)

QC Batch: 57661

QC Batch:

57661

Date Analyzed:

2009-03-16

Analyzed By: LD

Prep Batch: 49244

QC Preparation: 2009-03-16

Prepared By: LD

MDL

Units Result RLParameter Flag $\overline{\text{DRO}}$ 24.6 mg/Kg 50

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		173	mg/Kg	1	100	173	13 - 178.5

Method Blank (1)

QC Batch: 57687

QC Batch: 57687 Date Analyzed:

2009-03-16

Analyzed By: ME

Prep Batch: 49283

QC Preparation: 2009-03-16

Prepared By: ME

MDLParameter Flag Result Units RL< 0.00100 mg/Kg 0.01 Benzene mg/Kg Toluene < 0.00100 0.01 Ethylbenzene < 0.00110 mg/Kg 0.01 Xylene < 0.00360 mg/Kg 0.01

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.840	mg/Kg	1	1.00	84	51.9 - 128.1

Method Blank (1)

QC Batch: 57688

QC Batch: 57688

Date Analyzed:

2009-03-16

Analyzed By: ME

Prep Batch: 49283

QC Preparation: 2009-03-16

Prepared By:

MDL

Flag Result Units RLParameter < 0.482 mg/Kg GRO

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Work Order: 9031324 34 Junction to Lea Station Page Number: 49 of 65

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.888	mg/Kg	1	1.00	89	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.750	mg/Kg	1	1.00	75	56.5 - 109.5

Method Blank (1)

QC Batch: 57719

QC Batch:

57719

Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

QC Preparation: 2009-03-17 Prepared By: LD

MDL

Result Units RLFlag Parameter <13.4 DRO mg/Kg 50

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
n-Triacontane	<u> </u>	127	mg/Kg	1	100	127	13 - 178.5

Method Blank (1)

QC Batch: 57721

QC Batch: 57721 Prep Batch: 49309

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Date Analyzed:

2009-03-17 QC Preparation: 2009-03-17 Analyzed By: ME

Prepared By: ME

MDL Flag Result Units RLParameter < 0.00100 0.01 mg/Kg Benzene < 0.00100 mg/Kg 0.01 Toluene mg/Kg Ethylbenzene < 0.00110 0.01 < 0.00360 0.01 Xylene mg/Kg

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.946	mg/Kg	1	1.00	95	51.9 - 128.1

Method Blank (1)

QC Batch: 57722

QC Batch: 57722 Prep Batch: 49309 Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: ME

Prepared By: ME

MDL

Parameter	Flag	Result	Units	m RL
GRO		< 0.482	mg/Kg	1

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New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.893	mg/Kg	1	1.00	89	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.845	mg/Kg	11	1.00	84	56.5 - 109.5

Method Blank (1)

QC Batch: 57723

QC Batch: 57723 Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

QC Preparation: 2009-03-17

Prepared By: LD

Parameter	Flag	Result	Units	RL
DRO		<13.4	mg/Kg	50

•					\mathbf{Spike}	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		133	mg/Kg	1	100	133	13 - 178.5

Laboratory Control Spike (LCS-1)

QC Batch: 57635 Prep Batch: 49239 Date Analyzed:

2009-03-13

Analyzed By: ME

QC Preparation: 2009-03-13

Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	1.01	mg/Kg	1	1.00	< 0.00100	101	72.7 - 129.8
Toluene	1.01	mg/Kg	1	1.00	< 0.00100	101	71.6 - 129.6
Ethylbenzene	1.00	mg/Kg	1	1.00	< 0.00110	100	70.8 - 129.7
Xylene	2.96	mg/Kg	1	3.00	<0.00360	99	70.9 - 129.4

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	\mathbf{Result}	\mathbf{Units}	Dil.	Amount	Result	Rec.	\mathbf{Limit}	RPD	\mathbf{Limit}
Benzene	1.06	mg/Kg	1	1.00	< 0.00100	106	72.7 - 129.8	5	20
Toluene	1.07	mg/Kg	1	1.00	< 0.00100	107	71.6 - 129.6	6	20
Ethylbenzene	1.05	mg/Kg	1	1.00	< 0.00110	105	70.8 - 129.7	5	20
Xylene	3.07	mg/Kg	1	3.00	< 0.00360	102	70.9 - 129.4	4	20

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

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)	0.988	1.04	mg/Kg	1	1.00	99	104	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.781	0.791	mg/Kg	1	1.00	78	79	55.2 - 128.9

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Laboratory Control Spike (LCS-1)

QC Batch:

57636

Date Analyzed:

2009-03-13

Analyzed By: ME

Prep Batch: 49239

QC Preparation: 2009-03-13

Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	6.62	mg/Kg	1	10.0	< 0.482	66	60.5 - 100.1

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	$_{ m RPD}$	Limit
GRO	6.82	mg/Kg	1	10.0	< 0.482	68	60.5 - 100.1	3	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	\mathbf{Result}	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.905	0.896	mg/Kg	1	1.00	90	90	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.719	0.725	mg/Kg	1	1.00	72	72	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch:

57661

Date Analyzed:

2009-03-16

Analyzed By: LD

Prep Batch: 49244

QC Preparation: 2009-03-16

Prepared By: LD

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	280	mg/Kg	1	250	24.6	102	57.4 - 133.4

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.	Limit	$_{ m RPD}$	Limit
DRO	268	mg/Kg	1	250	24.6	97	57.4 - 133.4	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	${ m Rec.}$
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	122	119	mg/Kg	1	100	122	119	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch:

57687

Date Analyzed:

2009-03-16

Analyzed By: ME

Prepared By: ME

Prep Batch: 49283

QC Preparation: 2009-03-16

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Param	$egin{array}{c} ext{LCS} \ ext{Result} \end{array}$	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Matrix Result	Rec.	Rec. Limit
Benzene	1.09	mg/Kg	1	1.00	< 0.00100	109	72.7 - 129.8
Toluene	1.10	mg/Kg	1	1.00	< 0.00100	110	71.6 - 129.6
Ethylbenzene	1.07	mg/Kg	1	1.00	< 0.00110	107	70.8 - 129.7
Xylene	3.18	mg/Kg	1	3.00	< 0.00360	106	70.9 - 129.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.10	mg/Kg	1	1.00	< 0.00100	110	72.7 - 129.8	1	20
Toluene	1.11	mg/Kg	1	1.00	< 0.00100	111	71.6 - 129.6	1	20
Ethylbenzene	1.09	mg/Kg	1	1.00	< 0.00110	109	70.8 - 129.7	2	20
Xylene	3.27	mg/Kg	1	3.00	< 0.00360	109	70.9 - 129.4	3	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)	- 1.11	1.17	mg/Kg	1	1.00	111	117	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.872	0.890	mg/Kg	1	1.00	87	89	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

57688 Prep Batch: 49283 Date Analyzed:

2009-03-16 QC Preparation: 2009-03-16 Analyzed By: ME

Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.42	mg/Kg	1	10.0	< 0.482	74	60.5 - 100.1

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	\mathbf{Units}	$\mathbf{Dil}.$	Amount	Result	Rec.	Limit	RPD	Limit
GRO	7.67	mg/Kg	1	10.0	< 0.482	77	60.5 - 100.1	3	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.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.912	0.919	mg/Kg	1	1.00	91	92	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.791	0.810	mg/Kg	1	1.00	79	81	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch:

57719

Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

QC Preparation:

2009-03-17

Prepared By:

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m LD}$

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Work Order: 9031324 34 Junction to Lea Station Page Number: 53 of 65

New Mexico

Param	$egin{array}{c} ext{LCS} \ ext{Result} \end{array}$	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Matrix Result	Rec.	Rec. Limit
DRO	227	mg/Kg	1	250	<13.4	91	57.4 - 133.4

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.	Limit	RPD	Limit
DRO	225	mg/Kg	1	250	<13.4	90	57.4 - 133.4	1	20

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

	LCS	LCSD			Spike	LCS	LCSD	$\operatorname{Rec.}$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
n-Triacontane	84.3	82.2	mg/Kg	1	100	84	82	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 57721 Prep Batch: 49309

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Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: ME Prepared By: ME

	LCS			Spike	Matrix		${ m Rec.}$
Param	\mathbf{Result}	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Benzene	1.08	mg/Kg	1	1.00	< 0.00100	108	72.7 - 129.8
Toluene	1.09	mg/Kg	1	1.00	< 0.00100	109	71.6 - 129.6
Ethylbenzene	1.08	mg/Kg	1	1.00	< 0.00110	108	70.8 - 129.7
Xylene	3.21	mg/Kg	1	3.00	< 0.00360	107	70.9 - 129.4

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
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	72.7 - 129.8	1	20
Toluene	1.10	mg/Kg	1	1.00	< 0.00100	110	71.6 - 129.6	1	20
Ethylbenzene	1.10	mg/Kg	1	1.00	< 0.00110	110	70.8 - 129.7	2	20
Xylene	3.27	mg/Kg	1	3.00	< 0.00360	109	70.9 - 129.4	2	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	$\mathrm{Rec.}$	Rec.	${f Limit}$
Trifluorotoluene (TFT)	1.02	1.14	mg/Kg	1	1.00	102	114	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.955	0.967	mg/Kg	1	1.00	96	97	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch: 57722 Prep Batch: 49309 Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: ME Prepared By: ME

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New Mexico

	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
GRO	8.86	mg/Kg	1	10.0	< 0.482	89	60.5 - 100.1

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	9.24	mg/Kg	1	10.0	< 0.482	92	60.5 - 100.1	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	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	${f Limit}$
Trifluorotoluene (TFT)	0.923	0.922	mg/Kg	1	1.00	92	92	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.873	0.867	mg/Kg	1	1.00	87	87	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch:

57723

Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch:

49284

QC Preparation: 2009-03-17

Prepared By: LD

-	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
DRO	257	mg/Kg	1	250	<13.4	103	57.4 - 133.4

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.	Limit	RPD	Limit
DRO	265	mg/Kg	1	250	<13.4	106	57.4 - 133.4	3	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
n-Triacontane	92.1	95.8	mg/Kg	1	100	92	96	48.5 - 146.7

Matrix Spike (MS-1) Spiked Sample: 190048

QC Batch: 57635 Prep Batch: 49239 Date Analyzed:

2009-03-13

Analyzed By: ME

QC Preparation: 2009-03-13

Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	${f Limit}$
Benzene	1.10	mg/Kg	1	1.00	< 0.00100	110	58.6 - 165.2
Toluene	1.13	mg/Kg	1	1.00	< 0.00100	113	64.2 - 153.8
Ethylbenzene	1.11	mg/Kg	1	1.00	< 0.00110	111	61.6 - 159.4

continued ...

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Work Order: 9031324 34 Junction to Lea Station Page Number: 55 of 65 New Mexico

matrix spikes continued ...

	MS			Spike	\mathbf{Matrix}		${ m Rec.}$
Param	 Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
Xylene	 3.30	mg/Kg	1	3.00	< 0.00360	110	64.4 - 155.3

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	1.09	mg/Kg	1	1.00	< 0.00100	109	58.6 - 165.2	1	20
Toluene	1.09	mg/Kg	1	1.00	< 0.00100	109	64.2 - 153.8	4	20
Ethylbenzene	1.09	mg/Kg	1	1.00	< 0.00110	109	61.6 - 159.4	2	20
Xylene	3.22	mg/Kg	1	3.00	< 0.00360	_107	64.4 - 155.3	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
Trifluorotoluene (TFT)	1.00	1.00	mg/Kg	1	1	100	100	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.823	0.797	${ m mg/Kg}$	1	11	82	80	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 189786

QC Batch: 57636 Prep Batch: 49239

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Date Analyzed: 2009-03-13 QC Preparation: 2009-03-13 Analyzed By: ME Prepared By: ME

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	${f Units}$	Dil.	Amount	Result	Rec.	\mathbf{Limit}
GRO	9.09	mg/Kg	1	10.0	< 0.482	91	12.8 - 175.2

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
$\overline{ ext{GRO}}$	9.32	mg/Kg	1	10.0	< 0.482	93	12.8 - 175.2	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
Trifluorotoluene (TFT)	1.00	1.01	mg/Kg	1	1	100	101	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.677	0.682	mg/Kg	1	1	68	68	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 189778

QC Batch: 57661 Prep Batch: 49244 Date Analyzed: 2009-03-16 QC Preparation: 2009-03-16

Analyzed By: LD Prepared By: LD

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Work Order: 9031324 34 Junction to Lea Station Page Number: 56 of 65 New Mexico

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	248	mg/Kg	1	250	35.8	85	35.2 - 167.1

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

	MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	227	mg/Kg	1	250	35.8	76	35.2 - 167.1	9	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	89.4	79.2	mg/Kg	1	100	89	79	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 190224

QC Batch: 57687 Prep Batch: 49283 Date Analyzed: 2009-03-16 QC Preparation: 2009-03-16 Analyzed By: ME Prepared By: ME

	MS			Spike	Matrix	٠	Rec.
Param	Result	Units	Dil.	Amount	Result	Rec .	\mathbf{Limit}
Benzene	1.13	mg/Kg	1	1.00	< 0.00100	113	58.6 - 165.2
Toluene	1.16	mg/Kg	. 1	1.00	0.1226	104	64.2 - 153.8
Ethylbenzene	1.15	mg/Kg	1	1.00	0.1242	102	61.6 - 159.4
Xylene	3.46	mg/Kg	1	3.00	0.3815	103	64.4 - 155.3

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
Benzene	1.15	mg/Kg	1	1.00	< 0.00100	115	58.6 - 165.2	2	20
Toluene	1.17	mg/Kg	1	1.00	0.1226	105	64.2 - 153.8	1	20
Ethylbenzene	1.16	mg/Kg	1	1.00	0.1242	104	61.6 - 159.4	1	20
Xylene	3.55	mg/Kg	1	3.00	0.3815	106	64.4 - 155.3	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
Trifluorotoluene (TFT)	1.07	1.03	mg/Kg	1	1	107	103	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.918	0.929	mg/Kg	1	1	92	93	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 190223

QC Batch: 57688 Prep Batch: 49283 Date Analyzed: 2009-03-16 QC Preparation: 2009-03-16

Analyzed By: ME Prepared By: ME

2002-10286

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Work Order: 9031324 34 Junction to Lea Station Page Number: 57 of 65

New Mexico

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	11.6	${ m mg/Kg}$	1	10.0	< 0.482	115	12.8 - 175.2

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

	MSD			Spike	Matrix		Rec.		\overrightarrow{RPD}
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	11.7	mg/Kg	1	10.0	< 0.482	116	12.8 - 175.2	1	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	\mathbf{Result}	${f Units}$	Dil.	Amount	$\mathrm{Rec}.$	Rec .	${f Limit}$
Trifluorotoluene (TFT)	1.11	1.08	mg/Kg	1	1	111	108	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.799	0.813	mg/Kg	1	1	80	81	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 190206

QC Batch: 57719 Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

QC Preparation: 2009-03-17

Prepared By: LD

	MS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
DRO	567	mg/Kg	1	250	366	80	35.2 - 167.1

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	\mathbf{Limit}
DRO	515	mg/Kg	1	250	366	60	35.2 - 167.1	10	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	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	108	91.7	mg/Kg	1	100	、 108	92	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 190265

QC Batch: 57721 Prep Batch: 49309 Date Analyzed:

2009-03-17

Analyzed By: ME

QC Preparation: 2009-03-17

Prepared By: ME

Param	$rac{ ext{MS}}{ ext{Result}}$	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Matrix Result	Rec.	Rec. Limit
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	58.6 - 165.2
Toluene	1.11	mg/Kg	1	1.00	< 0.00100	111	64.2 - 153.8
Ethylbenzene	1.13	mg/Kg	1	1.00	< 0.00110	113	61.6 - 159.4

 $continued \dots$

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Work Order: 9031324 34 Junction to Lea Station Page Number: 58 of 65 New Mexico

matrix spikes continued ...

	MS			Бріке	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Xylene	3.38	mg/Kg	1	3.00	0.3381	101	64.4 - 155.3

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
Benzene	1.12	mg/Kg	1	1.00	< 0.00100	112	58.6 - 165.2	5	20
Toluene	1.13	mg/Kg	1	1.00	< 0.00100	113	64.2 - 153.8	2	20
Ethylbenzene	1.15	mg/Kg	1	1.00	< 0.00110	115	61.6 - 159.4	2	20
Xylene	3.43	mg/Kg	1	3.00	0.3381	103	64.4 - 155.3	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
Trifluorotoluene (TFT)	0.993	1.03	mg/Kg	1	1	99	103	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.898	0.884	mg/Kg	1	1	90	88	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 190269

QC Batch: 57722 Prep Batch: 49309

Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: ME Prepared By: ME

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	\mathbf{Amount}	Result	Rec.	Limit
GRO	7.81	mg/Kg	1	10.0	< 0.482	78	12.8 - 175.2

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	\mathbf{Limit}
GRO	2	9.84	mg/Kg	1	10.0	< 0.482	98	12.8 - 175.2	23	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)	1.01	1.11	mg/Kg	1	1	101	111	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.821	0.827	mg/Kg	1	1	82	83	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 190226

QC Batch: 57723 Prep Batch: 49284 Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: LD Prepared By: LD

²MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

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New Mexico

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	${f Limit}$
DRO	370	mg/Kg	1	250	162	83	35.2 - 167.1

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	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	367	mg/Kg	1	250	162	82	35.2 - 167.1	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
n-Triacontane	97.6	96.5	mg/Kg	1	100	98	96	34.5 - 178.4

Standard (ICV-1)

QC Batch: 57635

Date Analyzed: 2009-03-13

Analyzed By: ME

			ICVs True	ICVs Found	$rac{ ext{ICVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	\mathbf{Flag}	${f Units}$	Conc.	Conc.	$\operatorname{Recovery}$	${f Limits}$	$\mathbf{Analyzed}$
Benzene		mg/Kg	0.100	0.110	110	85 - 115	2009-03-13
Toluene		$_{ m mg/Kg}$	0.100	0.109	109	85 - 115	2009-03-13
Ethylbenzene		mg/Kg	0.100	0.109	109	85 - 115	2009-03-13
Xylene		mg/Kg	0.300	0.319	106	85 - 115	2009-03-13

Standard (CCV-1)

QC Batch: 57635

Date Analyzed: 2009-03-13

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-13
Toluene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-13
Ethylbenzene		mg/Kg	0.100	0.106	106	85 - 115	2009-03-13
Xylene	,	mg/Kg	0.300	0.311	104	85 - 115	2009-03-13

Standard (CCV-2)

QC Batch: 57635

Date Analyzed: 2009-03-13

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Work Order: 9031324 34 Junction to Lea Station Page Number: 60 of 65

New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-13
Toluene		mg/Kg	0.100	0.106	106	85 - 115	2009-03-13
Ethylbenzene		mg/Kg	0.100	0.106	106	85 - 115	2009-03-13
Xylene		${ m mg/Kg}$	0.300	0.307	102	85 - 115	2009-03-13

Standard (ICV-1)

QC Batch: 57636

Date Analyzed: 2009-03-13

Analyzed By: ME

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.847	85	85 - 115	2009-03-13

Standard (CCV-1)

QC Batch: 57636

Date Analyzed: 2009-03-13

Analyzed By: ME

			CCVs True	CCVs Found	$egin{array}{c} ext{CCVs} \ ext{Percent} \end{array}$	Percent Recovery	Date
Param	\mathbf{Flag}	\mathbf{Units}	Conc.	Conc.	Recovery	Limits	Analyzed
$\overline{\text{GRO}}$		mg/Kg	1.00	0.858	86	85 - 115	2009-03-13

Standard (CCV-2)

QC Batch: 57636

Date Analyzed: 2009-03-13

Analyzed By: ME

			CCVs True	CCVs Found	$egin{array}{c} ext{CCVs} \ ext{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.884	88	85 - 115	2009-03-13

Standard (CCV-1)

QC Batch: 57661

Date Analyzed: 2009-03-16

Analyzed By: LD

			\mathbf{CCVs}	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	251	100	85 - 115	2009-03-16

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Work Order: 9031324 34 Junction to Lea Station Page Number: 61 of 65

New Mexico

Standard (CCV-2)

QC Batch: 57661

Date Analyzed: 2009-03-16

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	262	105	85 - 115	2009-03-16

Standard (CCV-3)

QC Batch: 57661

Date Analyzed: 2009-03-16

Analyzed By: LD

_		TT 11	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	267	107	85 - 115	2009-03-16

Standard (CCV-4)

QC Batch: 57661

Date Analyzed: 2009-03-16

Analyzed By: LD

			$rac{ ext{CCVs}}{ ext{True}}$	CCVs Found	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	Flag	\mathbf{U} nits	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	267	107	85 - 115	2009-03-16

Standard (ICV-1)

QC Batch: 57687

Date Analyzed: 2009-03-16

Analyzed By: ME

Param	Flag	${ m Units}$	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.101	101	85 - 115	2009-03-16
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2009-03-16
Ethylbenzene		mg/Kg	0.100	0.101	101	85 - 115	2009-03-16
Xylene		mg/Kg	0.300	0.296	99	85 - 115	2009-03-16

Standard (CCV-1)

QC Batch: 57687

Date Analyzed: 2009-03-16

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Work Order: 9031324 34 Junction to Lea Station Page Number: 62 of 65 New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-16
Toluene		mg/Kg	0.100	0.109	109	85 - 115	2009-03-16
Ethylbenzene		mg/Kg	0.100	0.106	106	85 - 115	2009-03-16
Xylene		mg/Kg	0.300	0.314	105	85 - 115	2009-03-16

Standard (CCV-2)

QC Batch: 57687

Date Analyzed: 2009-03-16

Analyzed By: ME

			\mathbf{CCVs}	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-16
Toluene		${ m mg/Kg}$	0.100	0.108	108	85 - 115	2009-03-16
Ethylbenzene		mg/Kg	0.100	0.105	105	85 - 115	2009-03-16
Xylene		mg/Kg	_ 0.300	0.313	104	85 - 115	2009-03-16

Standard (ICV-1)

QC Batch: 57688

Date Analyzed: 2009-03-16

Analyzed By: ME

			ICVs	ICVs	ICVs	Percent	
		•	True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.871	87	85 - 115	2009-03-16

Standard (CCV-1)

QC Batch: 57688

Date Analyzed: 2009-03-16

Analyzed By: ME

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.940	94	85 - 115	2009-03-16

Standard (CCV-2)

QC Batch: 57688

Date Analyzed: 2009-03-16

Report Date: March 18, 2009 2002-10286

Work Order: 9031324 34 Junction to Lea Station Page Number: 63 of 65 New Mexico

Param	Flag	${ m Units}$	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.889	89	85 - 115	2009-03-16

Standard (CCV-1)

QC Batch: 57719

Date Analyzed: 2009-03-17

Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	220	88	85 - 115	2009-03-17

Standard (CCV-2)

QC Batch: 57719

Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	\mathbf{CCVs}	\mathbf{CCVs}	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	276	110	85 - 115	2009-03-17

Standard (CCV-3)

QC Batch: 57719

Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	262	105	85 - 115	2009-03-17

Standard (CCV-4)

QC Batch: 57719

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Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	CCVs	\mathbf{CCVs}	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
$\overline{ ext{DRO}}$		mg/Kg	250	226	90	85 - 115	2009-03-17

Standard (ICV-1)

QC Batch: 57721

Date Analyzed: 2009-03-17

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Work Order: 9031324 34 Junction to Lea Station Page Number: 64 of 65 New Mexico

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
Benzene		mg/Kg	0.100	0.104	104	85 - 115	2009-03-17
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-17
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-17
Xylene		mg/Kg	0.300	0.316	105	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57721

Date Analyzed: 2009-03-17

Analyzed By: ME

			$rac{ ext{CCVs}}{ ext{True}}$	CCVs Found	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-17
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-17
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-17
Xylene		mg/Kg	0.300	0.318	106	85 - 115	2009-03-17

Standard (ICV-1)

QC Batch: 57722

Date Analyzed: 2009-03-17

Analyzed By: ME

			ICVs True	ICVs Found	$\begin{array}{c} \text{ICVs} \\ \text{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.06	106	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57722

Date Analyzed: 2009-03-17

Analyzed By: ME

			\mathbf{CCVs}^{\cdot}	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.944	94	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57723

Date Analyzed: 2009-03-17

Analyzed By: LD

2002-10286

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Work Order: 9031324 34 Junction to Lea Station Page Number: 65 of 65

New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	85 - 115	2009-03-17

Standard (CCV-2)

QC Batch: 57723

Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	CCVs	CCVs	Percent	
		•	True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	250	100	85 - 115	2009-03-17

374 **0** LAB Order ID# • •

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6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296

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I., Suite 79922 200 East Sunset Rd., Suite El Paso, Texas 79922 Tel (915) 585-3443 Fa (915) 586-3944 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Ft. Worth, Texas 7611 Tel (817) 201-5260 Fax (817) 560-4336

HOIG Turn Around Time if different from standard <u>S</u> or Specify Method Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required **ANALYSIS REQUEST** Moisture Content BOD, TSS, pH Pesticides 8081A \ 608 bcB,2 8085 \ 608 GC/MS Semi. Vol. 8270C / 625 REMARKS CC/W2 A91 8560B / 624 RCI TCLP Pesticides TCLP Semi Volatiles Circle AR USH TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 TPH 8015 GRO / DRO) TVHC TPH 418.1 / TX1005 / TX1005 Ext(C35) BTEX 8021B 602 / 8260B / 624 Temp°c: Temp°c: Ó 80218 / 602 / 82608 / 624 **BETM** 1250 17/14 1305 225 1239 123 130/ TIME SAMPLING STATION 17/80/21/8 200 Time: Time: Time: **BTA**0 407 Date: Date: PRESERVATIVE NONE ICE METHOD \times Samplet Signature 7 HOBN Company: OS^zH Project Name HNO3 Phone #: HCI E-mail: Fax#: Received by: SLUDGE MATRIX ЯIA POIL **NATER** 405 finomA \ emulo∨ Time: Time: # CONTAINERS 98201 FIELD CODE Company: Company including state) Project #: SRS # 2002 -107 (Street, City, Zip) 401--158 SS-16B 55-17A S5-17B -13 (If different from above) Refindulshed by: Relinquished by: Company Name: Contact Person: Invoice to: Address:

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IraceAnalysis, Inc. email: lab@traceanalysis.com

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Company Name:

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ш 200 East Sunset Rd., Suite El Paso, Texas 79922 Tel (915) 585-343 Fax (915) 585-4944 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180 Ft. **Worth.** Texas **76116** Tei (817) 201-5260 Fax (817) 560-4336

ANALYSIS REQUEST

PIOH Turn Around Time if different from standard or Specify Method No.) Dry Weight Basis Required Moisture Content BOD, TSS, pH Pesticides 8081A \ 608 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS GC/W2 APF 8580B \ 854 **BCI** TCLP Pesticides TCLP Semi Volatiles Circle TCLP Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 PAH 8270C / 625 TPH 8015 GRO / DRO) TVHC TPH 418.1 / TX1005 / TX1005 Ex(C35) BLEX 8021B 002 / 8260B / 624 Temp c: 8021B / 602 / 8260B / 624 **BETM** 1340 1345 1324 1330 1349 1335 1314 3/12/04/310 1318 SAMPLING **JIME** Time: **BTAG** Lest STATION PRESERVATIVE NONE METHOD ICE NaOH Sampler Signature ompany OS2H Project Name 2 HNO HCI E-mail: Fax#; JUNGTION STADGE MATRIX ЯІА **7108 MATER** 34 402 13/5 InuomA \ emuloV Time: # CONTAINERS Date: PLAINS 3824 2002-10286 FIELD CODE (including state): Company (Street, City, Zip -22H 55-20A -19B 55~20R -18B 481-VS 6 (If different from above) Relinquished by: Contact Person: nvoice to: Project #: Address: N N

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Check If Special Reporting Limits Are Needed TRRP Report Required

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TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name:

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200 East Sunset Rd., Suite E El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 565-4944 1 (868) 569-3443

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

817 • 201 • 5260

É-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA

WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX

LELAP-02003

Kansas E-10317

El Paso: T104704221-08-TX

LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

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

Report Date: March 18, 2009

Work Order: 9031332

Project Location: New Mexico

Project Name: 34 Junction to Lea Station

Project Number: 2002-10286

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
190258	SS-26A	soil	2009-03-13	10:45	2009-03-13
190259	SS-26B	soil	2009-03-13	10:55	2009-03-13
190260	SS-26C	soil	2009-03-13	11:00	2009-03-13
190261	SS-26D	soil	2009-03-13	11:10	2009-03-13
190262	SS-27A	soil	2009-03-13	11:30	2009-03-13
190263	SS-27B	soil	2009-03-13	11:45	2009-03-13
190264	SS-27C	soil	2009-03-13	11:50	2009-03-13
190265	SS-27D	soil	2009-03-13	12:00	2009-03-13

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

Michael abel

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 34 Junction to Lea Station were received by TraceAnalysis, Inc. on 2009-03-13 and assigned to work order 9031332. Samples for work order 9031332 were received intact at a temperature of 15.3 deg. C (straight from field).

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

		\mathbf{Prep}	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	49309	2009-03-17 at 10:05	57721	2009-03-17 at 10:05
TPH DRO	Mod. 8015B	49284	2009-03-17 at 09:00	57723	2009-03-17 at 23:25
TPH GRO	S 8015 B	49309	2009-03-17 at 10:05	57722	2009-03-17 at 10:05

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 9031332 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.

2002-10286

Work Order: 9031332 34 Junction to Lea Station Page Number: 4 of 19

New Mexico

Analytical Report

Sample: 190258 - SS-26A

Laboratory: Midland

Analysis: BTEX QC Batch: 57721 Prep Batch: 49309

Analytical Method: Date Analyzed:

S 8021B 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: ME

Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		$\boldsymbol{0.172}$	mg/Kg	. 1	0.0100
Ethylbenzene		0.237	mg/Kg	1	0.0100
Xylene		0.790	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	$egin{aligned} ext{Spike} \ ext{Amount} \end{aligned}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.10	mg/Kg	1	1.00	110	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.984	mg/Kg	1	1.00	98	45.2 - 144.3

Sample: 190258 - SS-26A

Laboratory: Midland

TPH DRO Analysis: QC Batch: 57723 Prep Batch: 49284

Analytical Method: Date Analyzed:

Mod. 8015B 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By: LD

RL

Parameter	Flag	Result	Units	Dilution	m RL
DRO		156	mg/Kg	1	50.0

Surrogate Flag Result Units Dilution Amount Recovery n-Triacontane 93.5 mg/Kg 1 100 94 1	Recovery	Reco	Percent	\mathbf{Spike}					
n-Triacontane 93.5 mg/Kg 1 100 94 1	Limits	Lin	Recovery	Amount	Dilution	Units	Result	Flag	Surrogate
		13.2 -	94	100	1	mg/Kg	93.5		n-Triacontane

Sample: 190258 - SS-26A

Midland Laboratory:

Analysis: TPH GRO QC Batch: 57722 Prep Batch: 49309

Analytical Method: Date Analyzed:

S 8015B 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By:

ME Prepared By: ME

continued ...

Report Date: March 18, 2009 2002-10286

Work Order: 9031332 34 Junction to Lea Station Page Number: 5 of 19 New Mexico

(B)

sample 190258 continued ...

Parameter	Flag		RL Result		Units		Dilution	RL
			$^{\prime}\mathrm{RL}$					
Parameter	\mathbf{Flag}		Result		\mathbf{Units}		Dilution	RL
GRO			12.4		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	\mathbf{Units}	Dilution	${f Amount}$	Recovery	Limits
Trifluorotoluene (T	FT)		0.935	mg/Kg	1	1.00	94	68.5 - 119.4
4-Bromofluorobenz	ene (4-BFB)		0.979	mg/Kg	1	1.00	98	52 - 117

Sample: 190259 - SS-26B

Laboratory: Midland

Analysis: BTEX QC Batch: 57721 Prep Batch: 49309 Analytical Method: S 8021B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: ME Prepared By: ME

		m RL			
Parameter	Flag	Result	Units	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		$\boldsymbol{0.132}$	mg/Kg	1	0.0100
Ethylbenzene		$\boldsymbol{0.172}$	mg/Kg	1	0.0100
Xylene		0.626	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.982	mg/Kg	1	1.00	98	45.2 - 144.3

Sample: 190259 - SS-26B

Laboratory: Midland

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Analysis: TPH DRO QC Batch: 57723 Prep Batch: 49284 Analytical Method: Mod. 8015B
Date Analyzed: 2009-03-17
Sample Preparation: 2009-03-17

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

		${f RL}$			
Parameter	Flag	Result	Units	Dilution	${ m RL}$
DRO		199	mg/Kg	1	50.0

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Work Order: 9031332 34 Junction to Lea Station Page Number: 6 of 19

New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	100	110	13.2 - 219.3

Sample: 190259 - SS-26B

Laboratory:

Midland

Analysis:

TPH GRO

Flag

QC Batch: Prep Batch:

Parameter

57722 49309

Analytical Method: Date Analyzed:

S 8015B

2009-03-17

Units

Prep Method: S 5035 Analyzed By: Prepared By:

Dilution

MEME

RL

Sample Preparation: 2009-03-17

RL

Result

GRO		9.92	· · · · · · · · · · · · · · · · · · ·	mg/Kg		1	1.00
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	1	1.00	95	52 - 117

Sample: 190260 - SS-26C

Laboratory: Midland

Prep Batch: 49309

Analysis: QC Batch: **BTEX** 57721

Analytical Method: Date Analyzed:

S 8021B

2009-03-17 Sample Preparation: 2009-03-17

Prep Method: Analyzed By:

S 5035 ME

Prepared By: ME

RL

Parameter	Flag	Result	Units	Dilution	RL
Benzene	1100	<0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.129	mg/Kg	1	0.0100
Xylene		0.389	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.927	mg/Kg	1	1.00	93	45.2 - 144.3

2002-10286

Work Order: 9031332 34 Junction to Lea Station Page Number: 7 of 19

New Mexico

Sample: 190260 - SS-26C

Laboratory: Midland

Analysis: QC Batch: TPH DRO

57723 Prep Batch: 49284 Analytical Method: Date Analyzed:

Mod. 8015B

Sample Preparation:

2009-03-17 2009-03-17

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

LD LD

RL

Parameter

Flag

Result

Units

Dilution

RL

DRO

176

mg/Kg

Spike

50.0

n-Triacontane

1

0

1

(

Surrogate

Flag Result 106

Units mg/Kg

Dilution

Amount 100

Spike

Percent Recovery 106

1

Recovery Limits

13.2 - 219.3

Sample: 190260 - SS-26C

Laboratory:

Midland

Analysis: QC Batch: TPH GRO

57722

Analytical Method:

Date Analyzed:

Sample Preparation:

S 8015B 2009-03-17 2009-03-17 Prep Method: S 5035

Analyzed By: MEPrepared By: ME

Prep Batch:

49309

Flag Parameter GRO

Result <1.00 Units

C-----

RL

mg/Kg

Dilastica

Dilution 1

Percent

Recovery

90

84

RL1.00

Recovery

Limits

68.5 - 119.4

52 - 117

Surrogate	Flag	Result	Units	Dilution	Amount
Trifluorotoluene (TFT)	.,	0.903	mg/Kg	1	1.00
4-Bromofluorobenzene (4-BFB)		0.839	${ m mg/Kg}$	1	1.00

Sample: 190261 - SS-26D

Laboratory:

Midland

Analysis: QC Batch: Prep Batch:

BTEX 57721 49309

Analytical Method: Date Analyzed:

S 8021B

2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035

Analyzed By: ME Prepared By: ME

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		1617			
Parameter	\mathbf{Flag}	Result	Units	Dilution	\mathbf{RL}
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	. 1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

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Work Order: 9031332 34 Junction to Lea Station Page Number: 8 of 19

New Mexico

Surrogate	Flag	Result	Units	Dilution	$rac{ ext{Spike}}{ ext{Amount}}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	49 - 129.7.
4-Bromofluorobenzene (4-BFB)		0.905	mg/Kg	1	1.00	90	45.2 - 144.3

Sample: 190261 - SS-26D

Laboratory:

Midland TPH DRO

Analysis:

 $\overline{\text{DRO}}$

57723

Analytical Method:

Mod. 8015B

Prep Method: N/A

QC Batch: Prep Batch:

49284

Date Analyzed: Sample Preparation:

RL

270

2009-03-17 2009-03-17 Analyzed By: LDPrepared By: $\overline{\text{LD}}$

Result Parameter

Flag

Units mg/Kg Dilution

RL50.0

. Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	$_{ m mg/Kg}$	1	100	123	13.2 - 219.3

Sample: 190261 - SS-26D

Laboratory:

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(b)

Midland TPH GRO Analysis:

QC Batch:

57722

Analytical Method: Date Analyzed:

Analytical Method:

S 8015B

Prep Method: S 5035

2009-03-17

Analyzed By: ME

ME

Prep Batch:

49309

Sample Preparation: 2009-03-17

Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	ho RL
GRO		1.41	mg/Kg	1	1.00

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.795	mg/Kg	1	1.00	80	52 - 117

Sample: 190262 - SS-27A

Laboratory:

Prep Batch:

Midland

Analysis: QC Batch: 57721

BTEX

49309

Date Analyzed: Sample Preparation: 2009-03-17

S 8021B 2009-03-17 Prep Method: S 5035 Analyzed By: ME

Prepared By: ME

2002-10286

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Work Order: 9031332 34 Junction to Lea Station Page Number: 9 of 19

New Mexico

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.896	mg/Kg	1	1.00	90	45.2 - 144.3

Sample: 190262 - SS-27A

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57723 Prep Batch: 49284 Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17

Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LD

Prepared By: LD

		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		91.9	mg/Kg	1	100	92	13.2 - 219.3

Sample: 190262 - SS-27A

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57722 Prep Batch: 49309 Analytical Method: S 8015B
Date Analyzed: 2009-03-17
Sample Preparation: 2009-03-17

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.807	mg/Kg	1	1.00	81	52 - 117

Work Order: 9031332

Page Number: 10 of 19

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34 Junction to Lea Station

New Mexico

Sample: 190263 - SS-27B

Laboratory: Midland

Analysis: BTEX QC Batch: 57721 Prep Batch: 49309

Analytical Method: S 8021B Date Analyzed: 2009-03-17

Sample Preparation: 2009-03-17

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

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		1617			
Parameter	\mathbf{Flag}	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.885	mg/Kg	1	1.00	88	45.2 - 144.3

Sample: 190263 - SS-27B

Laboratory: Midland

Analysis: TPH DRO QC Batch: 57723 Prep Batch: 49284

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

RLResult Parameter Flag Units Dilution RLDRO <50.0 mg/Kg 1 50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		95.9	mg/Kg	1	100	96	13.2 - 219.3

Sample: 190263 - SS-27B

Laboratory: Midland

Analysis: TPH GRO QC Batch: 57722 Prep Batch: 49309

Analytical Method: S 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

RLResult Units RLFlag Dilution Parameter <1.00 GRO mg/Kg 1.00 Report Date: March 18, 2009 2002-10286

Work Order: 9031332 34 Junction to Lea Station

Page Number: 11 of 19

New Mexico

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.793	mg/Kg	1	1.00	79	52 - 117

Sample: 190264 - SS-27C

Laboratory: Midland

Analysis: BTEX QC Batch: 57721 Prep Batch: 49309

Analytical Method: S 8021B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

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

		m RL			
Parameter	Flag	Result	\mathbf{Units}	Dilution	m RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.990	mg/Kg	1	1.00	99	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.882	mg/Kg	1	1.00	88	45.2 - 144.3

Sample: 190264 - SS-27C

Laboratory: Midland

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Analysis: TPH DRO QC Batch: 57723 Prep Batch: 49284

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LDPrepared By: LD

RLResult Parameter Flag Units Dilution RL55.5 DRO mg/Kg 1 50.0

			T T •.		Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		85.0	mg/Kg	1	100	85	13.2 - 219.3

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Work Order: 9031332 34 Junction to Lea Station Page Number: 12 of 19

New Mexico

Sample: 190264 - SS-27C

Laboratory:

Midland

Analysis: TPH GRO QC Batch: 57722 Prep Batch: 49309

Analytical Method: Date Analyzed:

S 8015B 2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 Analyzed By: MEPrepared By: ME

RL

Dilution RLResult Units Parameter Flag GRO <1.00 mg/Kg 1.00

Surrogate	\mathbf{Flag}	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.798	mg/Kg	1	1.00	80	52 - 117

Sample: 190265 - SS-27D

Laboratory:

Midland

BTEX Analysis: QC Batch: 57721 49309 Prep Batch:

S 8021B Analytical Method: Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

RL

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

Flag

Result Units Dilution RLParameter < 0.0100 0.0100 mg/Kg 1 Benzene 1 < 0.0100 mg/Kg 0.0100 Toluene < 0.0100 mg/Kg 1 0.0100Ethylbenzene 1 0.338mg/Kg 0.0100 Xylene

					\mathbf{Spike}	$\operatorname{Percent}$	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	49 - 129.7
4-Bromofluorobenzene (4-BFB)		0.892	mg/Kg	1 .	1.00	89	45.2 - 144.3
,				1			

Sample: 190265 - SS-27D

Laboratory: Midland

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Analysis: TPH DRO QC Batch: 57723 Prep Batch: 49284

Analytical Method: Mod. 8015B Date Analyzed: 2009-03-17 Sample Preparation: 2009-03-17

Prep Method: N/A Analyzed By: LDPrepared By: LD

RLResult Units Dilution RLParameter Flag 62.4 mg/Kg 50.0 DRO

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Work Order: 9031332 34 Junction to Lea Station Page Number: 13 of 19

New Mexico

ME

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Triacontane		89.7	mg/Kg	1	100	90	13.2 - 219.3

Sample: 190265 - SS-27D

Laboratory: Midland

Analysis: QC Batch: TPH GRO 57722

Prep Batch: 49309

Date Analyzed:

Analytical Method:

S 8015B

2009-03-17 Sample Preparation: 2009-03-17 Prep Method: S 5035 MEAnalyzed By:

Prepared By:

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.13	mg/Kg	1	1.00	113	68.5 - 119.4
4-Bromofluorobenzene (4-BFB)		0.804	mg/Kg	1	1.00	80	52 - 117

Method Blank (1)

QC Batch: 57721

QC Batch: 57721 Prep Batch: 49309 Date Analyzed: QC Preparation:

2009-03-17 2009-03-17 Analyzed By: ME Prepared By: ME

		MDL		
Parameter	Flag	Result	${f Units}$	m RL
Benzene		< 0.00100	mg/Kg	0.01
Toluene		< 0.00100	mg/Kg	0.01
Ethylbenzene		< 0.00110	${ m mg/Kg}$	0.01
Xylene		< 0.00360	${ m mg/Kg}$	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	65.6 - 130.6
4-Bromofluorobenzene (4-BFB)		0.946	mg/Kg	1	1.00	95	51.9 - 128.1

Method Blank (1)

QC Batch: 57722

QC Batch: 57722 Prep Batch: 49309

(1)

Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17

Analyzed By: ME Prepared By: ME Report Date: March 18, 2009 2002-10286

Work Order: 9031332 34 Junction to Lea Station Page Number: 14 of 19

New Mexico

		MDL		
Parameter	Flag	Result	${f Units}$	RL
GRO		< 0.482	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	$egin{array}{c} ext{Spike} \ ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.893	mg/Kg	1	1.00	89	75.8 - 98.5
4-Bromofluorobenzene (4-BFB)		0.845	mg/Kg	1	1.00	84	56.5 - 109.5

Method Blank (1) QC Batch: 57723

QC Batch: 57723 Prep Batch: 49284 Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17 Analyzed By: LD Prepared By: LD

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		133	mg/Kg	1	100	133	13 - 178.5

Laboratory Control Spike (LCS-1)

QC Batch: 57721 Prep Batch: 49309

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Date Analyzed: 2009-03-17 QC Preparation: 2009-03-17

Analyzed By: ME Prepared By: ME

Param	$egin{array}{c} ext{LCS} \ ext{Result} \end{array}$	Units	Dil.	$rac{ ext{Spike}}{ ext{Amount}}$	Matrix Result	Rec.	Rec. Limit
Benzene	1.08	mg/Kg	1	1.00	< 0.00100	108	72.7 - 129.8
Toluene	1.09	mg/Kg	1	1.00	< 0.00100	109	71.6 - 129.6
Ethylbenzene	1.08	mg/Kg	1	1.00	< 0.00110	108	70.8 - 129.7
Xylene	3.21	mg/Kg	1	3.00	< 0.00360	107	70.9 - 129.4

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.	Limit	RPD	Limit
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	72.7 - 129.8	1	20
Toluene	1.10	mg/Kg	1	1.00	< 0.00100	110	71.6 - 129.6	1	20
Ethylbenzene	1.10	mg/Kg	1	1.00	< 0.00110	110	70.8 - 129.7	2	20
Xylene	3.27	mg/Kg	1	3.00	< 0.00360	109	70.9 - 129.4	2	20

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

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Work Order: 9031332 34 Junction to Lea Station Page Number: 15 of 19

New Mexico

Surrogate	$rac{ ext{LCS}}{ ext{Result}}$	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.14	mg/Kg	1	1.00	102	114	65.9 - 132
4-Bromofluorobenzene (4-BFB)	0.955	0.967	mg/Kg	1	1.00	96	97	55.2 - 128.9

Laboratory Control Spike (LCS-1)

QC Batch:

57722 Prep Batch: 49309 Date Analyzed:

2009-03-17

Analyzed By: ME

QC Preparation: 2009-03-17

Prepared By: ME

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	8.86	mg/Kg	1	10.0	< 0.482	89	60.5 - 100.1

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	\mathbf{Limit}
GRO	9.24	mg/Kg	1	10.0	< 0.482	92	60.5 - 100.1	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	$\mathbf{Dil}.$	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.923	0.922	mg/Kg	1	1.00	92	92	78.8 - 104.7
4-Bromofluorobenzene (4-BFB)	0.873	0.867	mg/Kg	1	1.00	87	87	66.1 - 107.3

Laboratory Control Spike (LCS-1)

QC Batch:

57723

Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

2009-03-17

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1 1 1 QC Preparation:

Prepared By: LD

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	257	m mg/Kg	1	250	<13.4	103	57.4 - 133.4

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.	Limit	RPD	Limit
DRO	265	mg/Kg	1	250	<13.4	106	57.4 - 133.4	3	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.	${f Limit}$
n-Triacontane	92.1	95.8	${ m mg/Kg}$	1	100	92	96	48.5 - 146.7

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Work Order: 9031332 34 Junction to Lea Station Page Number: 16 of 19 New Mexico

Matrix Spike (MS-1)

Spiked Sample: 190265

QC Batch: Prep Batch:

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M M

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M M

57721 49309 Date Analyzed:

2009-03-17

QC Preparation: 2009-03-17 Analyzed By: ME

Prepared By: ME

Param	$rac{ ext{MS}}{ ext{Result}}$	Units	Dil.	Spike Amount	$egin{array}{l} \mathbf{Matrix} \\ \mathbf{Result} \end{array}$	Rec.	Rec. Limit
Benzene	1.07	mg/Kg	1	1.00	< 0.00100	107	58.6 - 165.2
Toluene	1.11	mg/Kg	1	1.00	< 0.00100	111	64.2 - 153.8
Ethylbenzene	1.13	mg/Kg	1	1.00	< 0.00110	113	61.6 - 159.4
Xylene	3.38	mg/Kg	1	3.00	0.3381	101	64.4 - 155.3

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
Benzene	1.12	mg/Kg	1	1.00	< 0.00100	112	58.6 - 165.2	5	20
Toluene	1.13	mg/Kg	1	1.00	< 0.00100	113	64.2 - 153.8	2	20
Ethylbenzene	1.15	mg/Kg	1	1.00	< 0.00110	115	61.6 - 159.4	2	20
Xylene	3.43	mg/Kg	1	3.00	0.3381	103	64.4 - 155.3	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
Trifluorotoluene (TFT)	0.993	1.03	mg/Kg	1	1	99	103	76 - 127.9
4-Bromofluorobenzene (4-BFB)	0.898	0.884	mg/Kg	1	1	90	88	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 190269

QC Batch: Prep Batch:

57722 49309

Date Analyzed:

2009-03-17

QC Preparation: 2009-03-17 Analyzed By: ME

Prepared By: ME

	MS			Spike	Matrix		Rec .
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.81	m mg/Kg	1	10.0	< 0.482	78	12.8 - 175.2

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	-1	9.84	mg/Kg	1	10.0	< 0.482	98	12.8 - 175.2	23	20

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

continued ...

¹MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

2002-10286

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Work Order: 9031332 34 Junction to Lea Station Page Number: 17 of 19

New Mexico

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec.
Trifluorotoluene (TFT)	1.01	1.11	mg/Kg	1	1	101	111	60.8 - 132.1
4-Bromofluorobenzene (4-BFB)	0.821	0.827	mg/Kg	1	1	82	83	31.3 - 161.7

Matrix Spike (MS-1) Spiked Sample: 190226

QC Batch: 57723

Date Analyzed:

2009-03-17

Analyzed By: LD

Prep Batch: 49284

QC Preparation: 2009-03-17

Prepared By: LD

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
DRO	370	mg/Kg	1	250	162	83	35.2 - 167.1

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	367	mg/Kg	1	250	162	82	35.2 - 167.1	1	20

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

	MS	MSD		*	Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	97.6	96.5	mg/Kg	1	100	98	96	34.5 - 178.4

Standard (ICV-1)

QC Batch: 57721

Date Analyzed: 2009-03-17

Analyzed By: ME

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.104	104	85 - 115	2009-03-17
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-17
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-17
Xylene		mg/Kg	0.300	0.316	105	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57721

Date Analyzed: 2009-03-17

Analyzed By: ME

2002-10286

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Work Order: 9031332 34 Junction to Lea Station Page Number: 18 of 19

New Mexico

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	2009-03-17
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2009-03-17
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2009-03-17
Xylene		m mg/Kg	0.300	0.318	106	85 - 115	2009-03-17

Standard (CCV-2)

QC Batch: 57721

Date Analyzed: 2009-03-17

Analyzed By: ME

_	-	TT 4:	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.104	104	85 - 115	2009-03-17
Toluene		mg/Kg	0.100	0.110	110	85 - 115	2009-03-17
Ethylbenzene		mg/Kg	0.100	0.105	105	85 - 115	2009-03-17
Xylene		mg/Kg	0.300	0.314	105	85 - 115	2009-03-17

Standard (ICV-1)

QC Batch: 57722

Date Analyzed: 2009-03-17

Analyzed By: ME

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.06	106	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57722

Date Analyzed: 2009-03-17

Analyzed By: ME

			\mathbf{CCVs}	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.944	94	85 - 115	2009-03-17

Standard (CCV-2)

QC Batch: 57722

Date Analyzed: 2009-03-17

Analyzed By: ME

Report Date: March 18, 2009 2002-10286

Work Order: 9031332 34 Junction to Lea Station Page Number: 19 of 19 New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.895	90	85 - 115	2009-03-17

Standard (CCV-1)

QC Batch: 57723

Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	\mathbf{CCVs}	\mathbf{CCVs}	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	249	100	85 - 115	2009-03-17

Standard (CCV-2)

QC Batch: 57723

Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	\mathbf{CCVs}	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	250	100	85 - 115	2009-03-17

Standard (CCV-3)

QC Batch: 57723

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Date Analyzed: 2009-03-17

Analyzed By: LD

			CCVs	CCVs	CCVs	Percent	
			${f True}$	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	242	97	85 - 115	2009-03-17

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TraceAnalysis, Inc.

6701 Aberdeen Avenue, Sulte 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298

5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-5301 Fax (432) 689-6313

ш East Sunset Rd.

El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180 Ft. Worth. Texas 76116 Tel (817) 201-5260 Fax (817) 560-4336

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Hold Turn Around Time if different from standard 1017 JO Circle or Specify Method No. Check If Special Reporting Limits Are Needed Dry Weight Basis Required TRRP Report Required ANALYSIS REQUEST Moisture Content Hq ,2ST ,GOB Pesticides 8081A / 608 **LCB.**2 8085 \ 608 GC/MS Semi. Vol. 8270C / 625 REMARKS GC/WS A91 8560B / 624 **BCI** TCLP Pesticides TCLP Semi Volatiles TCLP Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg Total Metals Ag As Ba Cd Ct Pb Se Hg 6010B/200.7 PAH 8270C / 625 × TPH 8015 GRO / DROY TVHC TPH 418.1 / TX1005 / TX1005 Ext(C35) 8TEX 8021B 9602 / 8260B / 624 又 Temp°c: 8021B / 602 / 8260B / 624 **BATM** Temp° 000 2 383 3 200 145 150 **DQ** 名がた SAMPLING **TIME** Time: 13/09 Junction to LEA Hat Recursaville Phonetrain **DATE** Date: PRESERVATIVE NONE METHOD ICE Z Signature: HOBN Company: OS^zH HNO3 Phone #: HCI E-mail: Fax #: Received by: SCUDGE MATRIX Received by Received by ЯIA ZOIF **NATER** email: lab@traceanalysis.com Volume / Amount Time: # CONTAINERS Date: Rounsay, 11e #2002-10286 FIELD CODE Company Sompany (Street, City, Zip) NOUR 55-76 3 55-26 A 55-26C 135-201 SS-27A Ø -276 - 2.7 55-27 Relinquished by: Contact Person: Company Name: \approx AB USE ON IX nvoice to roject # Address

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O.

1 Carl Carrier #

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APPENDIX B: Photographic Documentation

(b)

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Photographic Documentation

Client: Plains Marketing, L.P.

Location: Lea County, New Mexico

Project Name: 34 Junction to Lea Station

Photographer: Mike Holmes

Photograph No. 1

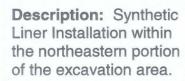
Direction: Northwest



Description: View of the synthetic Liner Installation within the northwest portion of the excavation area.

Photograph No. 2

Direction: Northeast







Photographic Documentation

Client: Plains Marketing, L.P.

Location: Lea County, New Mexico

Project Name: 34 Junction to Lea Station

Photographer: Mike Holmes

Photograph No. 3

Direction: East

Description: Synthetic Liner Installation within the eastern portion of the excavation area.



Photograph No. 4

Direction: Southeast

Description: Synthetic Liner Installation within the southeastern portion of the excavation area.





Photographic Documentation

Client: Plains Marketing, L.P.

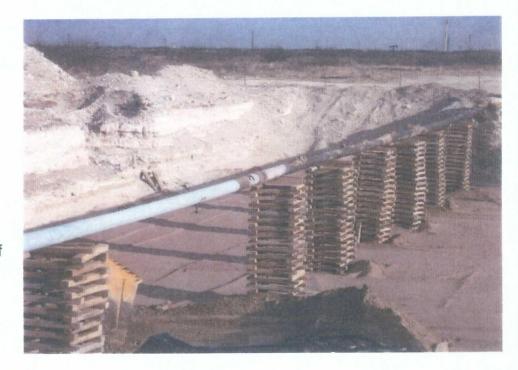
Location: Lea County, New Mexico

Project Name: 34 Junction to Lea Station

Photographer: Mike Holmes

Photograph No. 5

Direction: Northwest



Description: Installation of liner

cushion sand within northwestern portion of

excavation.

Photograph No. 6

Direction: North



Description: Installation of liner cushion sand within central portion of excavation.

APPENDIX C: Notification of Release and Corrective Action (Form C-141)

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

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State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Revised March 17, 1999
Submit 2 Copies to appropriate

Form C-141

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

Release Notification and Corrective Action ☐ Final Report **OPERATOR** ☐ Initial Report Name of Company Contact Frank Hernandez **EOTT Energy LLC** Telephone No. Address PO Box 1660 5805 East Highway 80 Midland, Texas 79702 915.638.3799 Facility Type Facility Name Juction JCT 34 Line to Lea #2002-10286 10" Steel Pipeline Mineral Owner Lease No. Surface Owner Deck Estate **LOCATION OF RELEASE** Feet from the North/South Line Feet from the East/West Line Unit Letter Section Township Range County: Lea 21 21 **T20S** Lat. 32 32' 20.828"N Lon. 103 15' 38.480"W R37E NATURE OF RELEASE Volume of Release Type of Release Volume Recovered 300 bbls:barrels 190 bbls barrels Crude Oil Source of Release Date and Hour of Occurrence Date and Hour of Discovery 8" Steel Pipeline 11-06-02 @ 11:00 AM 11-6-02 @ 4:00 PM If YES, To Whom? Was Immediate Notice Given? Paul Sheelev By Whom? Date and Hour Pat McCasland, EPI 11-07-02 @ 6:30 AM Was a Watercourse Reached? Yes No If YES, Volume Impacting the Watercourse. If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Pipe repair clamp installed. Describe Area Affected and Cleanup Action Taken.* Site will be delineated and a remediation plan developed. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state; or local laws and/or regulations. OIL CONSERVATION DIVISION Howell Inwe Signature: Approved by District Supervisor: Printed Name: Frank Hernandez

Approval Date:

Conditions of Approval:

Expiration Date:

Attached |

Phone: 915.638.3799

Title: District Environmental Supervisor

^{*} Attach Additional Sheets If Necessary

Hansen, Edward J., EMNRD

From:

Jason Henry [JHenry@paalp.com] Thursday, October 22, 2009 8:22 AM

Sent:

Hansen, Edward J., EMNRD

Subject:

Re-seeding documentation for Plains Junction 34 to Lea Station site (1R-0386)

Attachments:

Junction 34 to Lea Reeseeding 06-16-09.jpg; Jct. 34 to Lea Seed tag.pdf

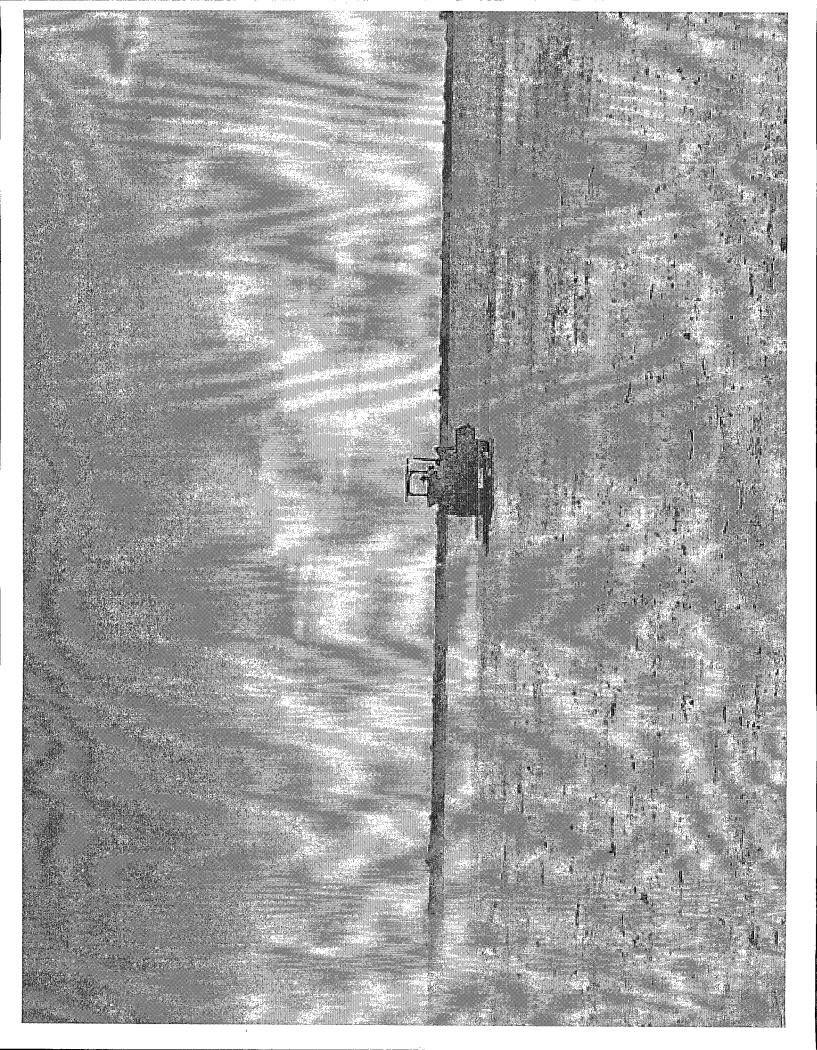
Ed.

Basin Environmental personnel re-seeded the Junction 34 to Lea Station site on 06/16/2009 with BLM #2 seed mix as per landowner request. I have attached a copy of the seed tag and a photograph that was taken during re-seeding activities at the site.

Please let me know if you have any questions or need more information.

Thank you, Jason Henry 575-441-1099

This inbound email has been scanned for malicious software and transmitted safely to you using Webroot Email Security.



Curtis & Curtis Seed Clovis, NM 88101 Phone: \$73-762-4759 4500 N. Prince

1-2 Acre Bag @ 22.12 Bulk Pound Bags BLM #2 FLUFFY SEED BOX MIX Basin Environmental

	Lot# M-8498						i	•	•	
							Germ &	Lest	Total PLS	
	Item	Origin	aln	Purity Germ	Germ	Dorment	Dormant	Date	Date Pounds	1
	Sand Bluestem Woodward		\$ B	19.88%	39.00%	34.00% 93.00%	93.00%	01/08	15.00	;
	Little Bluestem		Oklahoma	58.71%	62.00%	58.71% 62.00% 15.00% 77.00%	77.00%	01/08	25.00	
,	Not Stated									
	Other Crop:	00.95%	There !	Are 1 Bag	There Are 1 Bag For This Mix	11x	Total E	Total Bulk Pounds: 55.30	ds: 555.30	
	Weed Seed:		This B.	ng Weighs	22.12 Bulk	Pomoda				
1	Inert Matter: 20.60%		Use th	is bag for ;	Use this bag for 2 Acres					
										ı

10/18/5008 It:03 EVX