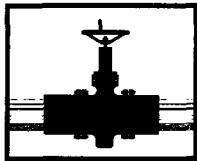


**AP - OJ2**

**STAGE 1 & 2  
WORKPLANS**

**DATE:**

**Feb. 2005**



**PLAINS**  
MARKETING, L.P.

February 7, 2005

Mr. Ed Martin  
New Mexico Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

AP-12

RECEIVED  
FEB 8 2005

Per .....

Re: Plains All American Site Restoration Work Plan  
and Proposed Soil Closure Strategy  
TNM 98-05B Release Site  
Section 26, T21S, R37E  
Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your approval a Site Restoration Work Plan and Proposed Soil Closure Strategy, dated February 2005, for the TNM 98-05B release site located in the Section 26, T21S, and R37E in Lea County, New Mexico. The Site Restoration Work Plan and Proposed Soil Closure Strategy details site activities conducted to date and future activities for remediation and closure of the site.

Should you have any questions or comments, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds  
Remediation Coordinator  
Plains All American



# SITE RESTORATION WORK PLAN AND PROPOSED CLOSURE STRATEGY

**TNM 98-05B**  
**Section 26, Township 21 South, Range 37 East**  
**Lea County, New Mexico**  
**Plains EMS Number: TNM-98-05B**

**Volume 1 of 2**



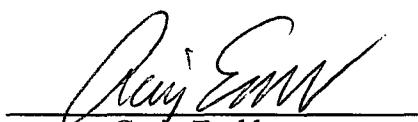
Prepared For:

**Plains Marketing, L.P.**  
333 Clay Street, Suite 1600  
Houston, Texas 77002

Prepared By:

**NOVA Safety and Environmental**  
2057 Commerce Street  
Midland, Texas 79703

**February 2005**

  
\_\_\_\_\_  
Craig Eschberger  
Geologist/Senior Project Manager

  
\_\_\_\_\_  
Todd K. Choban  
Director of Technical Service

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## **1.0 INTRODUCTION**

NOVA Safety and Environmental (NOVA) is pleased to submit this Site Restoration Work Plan and Proposed Closure Strategy to Plains Pipeline, L.P. (Plains) outlining proposed corrective actions at the TNM 98-05B (also known as TNM 98-05) crude oil release site and ultimate request for closure of soil issues at the site. The site, formerly operated by Enron Oil Trading and Transportation (EOTT) who became Link, is now owned by Plains. Section 3.0 of this Site Restoration Work Plan and Closure Strategy summarizes investigative and remedial activities performed at the site and presents the findings of these activities. Based on the results of these activities, Section 4.0 proposes a work plan that summarizes corrective actions and closure strategy of soil and groundwater issues at the site.

The site is located approximately two miles northeast of the town of Eunice, New Mexico in Section 26, Township 21 South, Range 37 East (FIGURE 1). The release occurred on February 4, 1998. An estimated 49 barrels of crude oil was released from a Texas -New Mexico 6" pipeline, of which approximately three barrels were recovered during the emergency response activities. The release was attributed to external corrosion of the pipeline.

Remedial actions conducted at the above referenced site are in accordance with General Work Plan for Remediation of Link Pipeline Spills, Leaks and Releases in New Mexico (GWPR) approved by NMOCD on August 1, 2000. The GWPR was developed to ensure consistency of response and closure at all Link release sites. The overall closure strategy for this site is consistent with the strategy outlined in the approved GWPR.

## **2.0 NEW MEXICO OIL CONSERVATION DIVISION - SITE CLASSIFICATION**

Groundwater at this site occurs between 40 and 45 feet below ground surface (bgs) as evidenced by 10 monitor wells installed at the site. These site conditions result in 20-points assigned to the site (based on the NMOCD Site Ranking Criteria).

The distance to a possible water source (<1,000 feet) or private domestic water source (<200 feet) from the leak source is not clear, consequently a score of 20 points will be assigned to a yes answered under the well head protection criteria.

There are no down gradient surface water bodies located within 1,000 feet of the site. These site conditions result in no points assigned to the site as a result of this criterion.

The NMOCD guidelines indicate that the site would have a Ranking Score of 40 points. The soil action levels for a site with a score greater than 19 points as determined by the *Guidelines for Remediation of Leaks, Spills and Releases* (NMOCD, 1993) are as follows: Benzene - 10 ppm, BTEX - 50 ppm and TPH - 100 ppm. According to the WQCC regulatory limits groundwater action levels are as follows: Benzene – 0.01 mg/l, Toluene – 0.75 mg/l, Ethylbenzene – 0.75 mg/l, and Total Xylenes – 0.62 mg/l.

### **3.0 SUMMARY OF FIELD ACTIVITIES**

In summary, field activities have included a shallow soil investigation utilizing a Geo-Probe® soil boring machine, a deeper soil investigation utilizing a drilling rig, excavation of crude oil affected soils and a groundwater investigation whereby 10 monitor wells were installed at the site. Each activity is discussed in the following subsections.

#### **3.1 Geo-Probe® Shallow Soil Investigation**

A Geo-Probe® investigation was performed at the site in April 2000 to initially assess oil impacted soils. The Geo-Probe® points were advanced to refusal at an average depth of 13 feet bgs. FIGURE 2 displays the location of Geo-Probe® borings and other site details. In summary, the analytical results of boring terminus soil samples collected near the leak source (GP-7, GP-10 and GP-11) indicated TPH concentrations above regulatory guidelines at 13 feet bgs. All other soil boring soil sample data exhibited TPH concentrations below regulatory clean up levels at 13 feet bgs. TABLE I displays the analytical results of laboratory analyzed soil samples obtained during the Geo-Probe® investigation. The certified laboratory reports are provided in APPENDIX A.

#### **3.2 Deeper Soil Investigation**

In June 2001, three deeper soil borings were advanced to the capillary fringe zone ranging from 40 to 46 feet below ground surface (bgs). Ten to eleven soil samples from each soil boring were submitted for laboratory analysis of TPH. The soil samples were obtained from a depth range of surface to approximately 45 feet bgs. FIGURE 2 displays the location of the deeper soil borings and other site details. In summary, all soil samples submitted for laboratory analysis exhibited TPH concentrations below regulatory clean up levels. TABLE 2 displays the analytical results of the soil samples obtained from the three deeper soil borings. The certified laboratory reports are provided in APPENDIX A.

In June 2001, five monitor wells (MW-1 through MW-5) were initially installed to assess soil and ground water conditions at the site. Five additional monitor wells (MW-6 through MW-10) were installed in April 2002. FIGURE 2 displays the locations of the ten monitor wells. In summary, a total of 10 to 12 soil samples from the bore holes of MW-1 through MW-5 were submitted for laboratory analysis of TPH. In addition, BTEX analysis was performed on the soil samples from MW-1. Two soil samples from the bore holes of MW-6 through MW-10 were submitted for laboratory analysis of BTEX and TPH. The analytical results indicate all soil samples submitted to the laboratory exhibited TPH and BTEX concentrations below regulatory guidelines with the exception of the upper three (surface to 12 feet bgs) soil samples collected from the MW-1 borehole. Soil samples below 12 feet exhibited BTEX and TPH concentrations below regulatory guidelines. The analytical results of soil samples obtained from monitor well drilling activities are presented in TABLE 3. The certified laboratory reports are provided in APPENDIX A.

### **3.3 Excavation Activities**

Based on the analytical results of soil samples obtained from the Geo-Probe® bore holes, deeper soil borings and monitor well bore holes, excavation of crude oil impacted soils began in September 2001. Approximately 1,800 cubic yards (cy) of impacted soil was excavated and stockpiled on site. The excavation was completed to a depth of approximately 15 feet bgs. Soil samples were obtained from the walls of the excavation in November 2002 and a composite floor sample (15 feet) was obtained in April 2003. FIGURE 3 displays the excavation boundaries, confirmation soil sample locations, stockpiles and other site details. In summary, the analytical results indicate that the east and west walls exhibit TPH and BTEX concentrations below regulatory cleanup levels. However, the north and south wall samples exhibited TPH concentrations of 206 mg/kg and 5,681 mg/kg, respectively. The floor composite soil sample obtained in April 2003 exhibited a TPH concentration of 253 mg/Kg. The analytical results are presented in TABLE 3. The certified laboratory reports are provided in APPENDIX A.

The excavated soil was stockpiled at two onsite locations and due to landowner request was not spread and aerated. The stockpiles (West stockpile and East stockpile) were sampled in May 2002 and exhibited TPH concentrations of 1,975 mg/kg and 3,220 mg/kg, respectively. On August 23, 2004, one soil sample from the western stockpile and eight soil samples from the eastern soil stockpile were obtained for laboratory analysis of BTEX. The east stockpile was divided into eight grid cells (A through H). Soil samples were obtained by auguring approximately three feet into each grid cell on the stockpile. Soil samples from the east stockpile are identified as ESP-A through ESP-H and the soil sample obtained from the west stockpile is identified as WSP. FIGURE 3 displays the grid cell identification for the stockpile soil samples. In summary, all stockpile samples obtained on November 26, 2004 exhibited BTEX concentrations below regulatory guidelines. TPH concentrations were also below regulatory guidelines with the exception of ESP-G, which exhibited a TPH concentration of 109 mg/Kg. The analytical results of the stockpile soil samples are presented in TABLE 4. The certified laboratory reports are provided in APPENDIX A.

### **3.4 Groundwater Assessment**

Based on groundwater gauging activities performed during each groundwater sampling event, the groundwater gradient is determined to be to the southeast. FIGURE 3 displays the locations of the monitor wells and groundwater gradient on November 30, 2004. TABLE 5 displays the historical (BTEX) analytical results of groundwater samples obtained from each well, during each quarterly sampling event, as well as the New Mexico groundwater clean up standards. The certified laboratory reports are provided in APPENDIX A.

In summary, monitor wells MW-1, MW-2 and MW-5 have been sampled on a quarterly basis from near completion date to November 30, 2004 and are the only three monitor wells that have exhibited any concentration of benzene since completion of all wells. Based on the historical groundwater analytical results, sampling frequency reduction was approved by the NMOCD in a letter dated April 28, 2004 and signed by Ed Martin granting that MW-3 and MW-4 be sampled on an annual basis. After installation of five additional monitor wells

(April 2004) with analytical results indicating that the additional wells did not contain detectable hydrocarbon concentrations, the groundwater sampling reduction request (annual basis) was amended in May 2004 to include MW-6 through MW-10. Monitor wells MW-3, MW-4, MW-6, MW-7, MW-8, MW-9 and MW-10 have consistently exhibited benzene, toluene, ethylbenzene and xylene (BTEX) concentrations below laboratory detection limits.

Historic concentrations of benzene detected in MW-1, MW-2 and MW-5 are summarized below.

- Benzene concentrations above regulatory guidelines were detected in MW-1 in the first two sampling events (June and September, 2001) followed by seven sampling events indicating benzene concentrations below regulatory guidelines (October 2001 to May 2003). Benzene concentrations slightly above 0.01 mg/L were detected in the August 2003 and February 2004 quarterly sampling events, followed by two consecutive sampling events indicating benzene concentrations well below regulatory clean up levels. The latest quarterly sampling event performed on November 30, 2004 indicated that MW-1 exhibited a benzene concentration above regulatory cleanup levels at 0.252 mg/L.
- Benzene concentrations above regulatory standards were detected in MW-2 during the first six quarterly sampling events (June 2001 to September 2002), followed by nine successive quarterly sampling events (November 2002 to November 2004) indicating benzene concentrations were below regulatory standards.
- Benzene concentrations above regulatory standards were detected in MW-5 during the first seven quarterly sampling events (June 2001 to November 2002), followed by seven successive quarterly sampling events (February 2002 to August 2004) indicating benzene concentrations were below regulatory standards. The latest quarterly sampling event performed on November 30, 2004 indicated that MW-5 exhibited a benzene concentration slightly above regulatory cleanup levels at 0.0121 mg/L.

3

#### **4.0 SUPPLEMENTAL WORK PLAN**

The remediation work plan, as outlined in this document, will serve as a Supplement to the *General Work Plan for Remediation of EOTT Pipeline Spills, Leaks and Releases in New Mexico* (GWPR) approved by NMOCD on August 1, 2000. The GWPR was developed to ensure consistency of response and closure at all EOTT release sites. Closure of the soils issue at this site will include additional excavation and backfilling the excavation with the excavated soils, currently stockpiled on site. The following sections summarize proposed corrective actions to facilitate closure of soil and groundwater issues at the site.

#### **4.1 Soil Closure Strategy**

Based on the analytical results of the excavation wall and floor soil samples obtained in November 2002 and April 2003 respectively, Plains proposes to mobilize an excavator to the site and remove additional soil from the north wall, south wall and floor of the excavation. Confirmation grab soil samples from each of the proposed excavated areas will be submitted for laboratory analysis of TPH by EPA Method 8015 Modified GRO/DRO and BTEX analysis using EPA Method 8021B. If the analytical results confirm that the excavation walls and floor exhibit TPH and BTEX concentrations below regulatory guidelines, then Plains proposes to back fill the excavation with the stockpiled excavated soil. The soil proposed to be excavated from the north and south walls and from the floor of the excavation will be segregated and will be blended with clean soil and placed in the excavation last so that it can aerate/remediate. Once the excavation is backfilled, one final composite soil sample will be collected and analyzed for BTEX and TPH. If the sample results are below NMOCD criteria, Plains will proceed with site restoration activities. If soil sample results are above NMOCD criteria, Plains will till the upper one-foot of backfill monthly and resample until soil meets NMOCD criteria. Upon completion of backfilling activities, the topography will be graded to original contours and the construction affected areas of the site will be re-seeded with grass/vegetation acceptable to the landowner.

#### **4.2 Groundwater Closure Strategy**

Based on the historical analytical results of groundwater samples collected from 10 monitor wells located at up gradient, cross gradient and down gradient locations around the leak source, Plains request that the NMOCD grant approval to a Groundwater Closure Strategy Plan as outlined below.

- Plains respectfully requests that monitor wells MW-6 through MW-10 (previously approved for annual groundwater sampling) be plugged and abandoned. This request is based on the analytical results of nine successive quarterly sampling events (May 2002 to November 2004), indicating non-detection concentrations of BTEX in the referenced wells. Additionally, three of the wells (MW-7, MW-8 and MW-9) are located up gradient of the leak source and two wells (MW-6 and MW-10) are located in cross gradient positions of the leak source. Monitor wells will be plugged by a licensed Water Well Driller and per the specifications of the State of New Mexico (FIGURE 4).
- The remaining five monitor wells (MW-1, MW-2, MW-3, MW-5 and MW-4) will continue to be sampled on a quarterly basis.
- Plains proposes that a final request for groundwater closure be granted after eight successive quarterly groundwater sampling events (as per NMOCD rule 19.15.1.19) indicate that all remaining monitor wells exhibit hydrocarbon concentrations below regulatory guidelines.

## **5.0 SITE CLOSURE REQUEST**

Plains is prepared to begin field activities and perform the corrective actions summarized in the supplemental work plan, upon review and approval of the work plan by the NMOCD. Upon completion of the field activities summarized in this closure strategy plan, Plains will submit a Soil Closure Report to the NMOCD, documenting the results of confirmation soil samples, final topography restoration and monitor well plugging activities. In this report, Plains will request that the NMOCD grant closure to soil issues at the site. A groundwater closure report will follow after eight successive quarterly groundwater sampling events have demonstrated that hydrocarbon concentrations are below regulatory guidelines.

## **6.0 QA/QC PROCEDURES**

### **6.1 Soil Sampling**

Soil samples were obtained utilizing single-use, disposable, latex gloves. Representative soil samples were divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample was placed in a disposable sample bag. The bag was labeled and sealed for headspace analysis using a photoionization detector (PID) calibrated to a 100-ppm isobutylene standard. Each sample was allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample was placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity to limit the amount of headspace present. Each container was labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler was sealed for shipment to the laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

Soil samples were delivered to ELOT, in Midland, Texas for BTEX and TPH analyses using the methods described below. All samples were analyzed within approved holding times following the collection date.

- BTEX concentrations in accordance with EPA Method 8021B/5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO;

Results of laboratory analysis of the soil samples are summarized in Table 1, and the laboratory reports are provided as Appendix A.

### **6.2 Decontamination of Equipment**

Soil sampling tools such as small hand shovels were washed with Liqui-Nox® detergent and rinsed with distilled water between collection of soil samples.

### **6.3     Laboratory Protocol**

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

### **7.0     LIMITATIONS**

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

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

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

## **DISTRIBUTION**

Copy 1 to: Ed Martin  
New Mexico Energy, Minerals and Natural Resources  
Oil Conservation Division  
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Santa Fe, NM 87505

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Hobbs, New Mexico 88240

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COPY NO.: \_\_\_\_\_

# Tables

**TABLE 1**  
**TPH CONCENTRATIONS FROM GEO-PROBE - SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Method EPA 8015M		
		GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
		<b>Regulatory Levels</b>		
GP1 001 4'	04/11/00	<10	<10	<10
GP1 002 7'	04/11/00	<10	<10	<10
GP1 003 10'	04/11/00	<10	<10	<10
GP1 004 13'	04/11/00	<10	<10	<10
GP2 001 4'	04/11/00	<10	<10	<10
GP2 002 7'	04/11/00	<10	<10	<10
GP2 003 10'	04/11/00	<10	<10	<10
GP2 004 13'	04/11/00	<10	<10	<10
GP2 005 16'	04/11/00	<10	<10	<10
GP3 001 4'	04/11/00	<10	<10	<10
GP3 002 7'	04/11/00	<10	<10	<10
GP3 003 10'	04/11/00	<10	<10	<10
GP3 004 13'	04/11/00	<10	<10	<10
GP3 005 16'	04/11/00	<10	<10	<10
GP4 001 4	04/11/00	<10	<10	<10
GP4 002 7'	04/11/00	<10	<10	<10
GP4 003 10'	04/11/00	<10	<10	<10
GP4 004 13'	04/11/00	<10	<10	<10
GP4 005 16'	04/11/00	<10	<10	<10
GP4 006 17.5'	04/11/00	<10	<10	<10
GP5 001 4'	04/11/00	<10	<10	<10
GP5 002 7'	04/11/00	<10	<10	<10
GP5 003 10'	04/11/00	<10	<10	<10
GP5 004 13'	04/11/00	<10	<10	<10
GP5 005 16'	04/11/00	<10	<10	<10
GP5 006 17.5'	04/11/00	<10	<10	<10
GP6 001 4'	04/11/00	43	<10	43
GP6 002 7'	04/11/00	10944	15918	<b>26,862</b>
GP6 003 10'	04/11/00	1231	2673	<b>3,904</b>
GP6 004 13'	04/11/00	<10	89	89
GP7 001 4'	04/11/00	3732	6777	<b>10,509</b>
GP7 002 7'	04/11/00	4996	9368	<b>14,364</b>
GP7 003 10'	04/11/00	3246	4762	<b>8,008</b>
GP7 004 13'	04/11/00	1778	3649	<b>5,427</b>
GP8 001 4'	04/11/00	<10	98	98
GP8 002 7'	04/11/00	<10	50	50
GP8 003 10'	04/11/00	<10	26	26
GP8 004 13'	04/11/00	<10	<10	<10
GP9 001 4'	04/12/00	<10	<10	<10
GP9 002 7'	04/12/00	<10	<10	<10
GP9 003 10'	04/12/00	<10	<10	<10
GP9 004 13'	04/12/00	<10	<10	<10

**TABLE 1**  
**TPH CONCENTRATIONS FROM GEO-PROBE - SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Method EPA 8015M		
		GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
		<b>Regulatory Levels</b>		
GP10 001 4'	04/12/00	5357	12582	17,939
GP10 002 7'	04/12/00	3110	6536	9,646
GP10 003 10'	04/12/00	2774	4489	7,263
GP10 004 13'	04/12/00	84	762	846
GP11 001 4'	04/12/00	5025	9095	14,120
GP11 002 7'	04/12/00	3399	6924	10,323
GP11 003 10'	04/12/00	728	1945	2,673
GP11 004 13'	04/12/00	986	2419	3,405
GP12 001 4'	04/12/00	<10	70	70
GP12 002 7'	04/12/00	<10	<10	<10
GP12 003 10'	04/12/00	<10	<10	<10
GP12 004 13'	04/12/00	<10	<10	<10
GP13 001 4'	04/12/00	<10	<10	<10
GP13 002 7'	04/12/00	<10	<10	<10
GP13 003 10'	04/12/00	<10	<10	<10
GP13 004 13'	04/12/00	<10	<10	<10
GP14 001 4'	04/12/00	<10	<10	<10
GP14 002 7'	04/12/00	<10	<10	<10
GP14 003 10'	04/12/00	<10	<10	<10
GP14 004 13'	04/12/00	<10	<10	<10
GP15 001 4'	04/12/00	<10	<10	<10
GP15 002 7'	04/12/00	<10	<10	<10
GP15 003 10'	04/12/00	<10	<10	<10
GP15 004 13'	04/12/00	<10	<10	<10
GP16 001 4'	04/12/00	<10	<10	<10
GP16 002 7'	04/12/00	<10	<10	<10
GP16 003 10'	04/12/00	<10	<10	<10
GP16 004 13'	04/12/00	<10	<10	<10

**TABLE 2**  
**TPH CONCENTRATIONS FROM SOIL BORINGS**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Method EPA 8015M		
		GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
<b>Regulatory Levels</b>				<b>100 mg/Kg</b>
SB - 1 (0-2')	06/14/01	<1.3	<50	<50
SB - 1 (5-7')	06/14/01	<1.3	<50	<50
SB - 1 (10-12')	06/14/01	<1.3	<50	<50
SB - 1 (15-17')	06/14/01	<1.3	<50	<50
SB - 1 (20-22')	06/14/01	<1.0	<50	<50
SB - 1 (25-27')	06/14/01	<1.0	<50	<50
SB - 1 (30-32')	06/14/01	<1.0	<50	<50
SB - 1 (35-37')	06/14/01	<1.0	<50	<50
SB - 1 (40-42')	06/14/01	<1.0	<50	<50
SB - 1 (44-46')	06/14/01	<1.0	<50	<50
SB - 2 (0-2')	06/14/01	<1.0	<50	<50
SB - 2 (5-7')	06/14/01	<1.0	<50	<50
SB - 2 (10-12')	06/14/01	<1.0	<50	<50
SB - 2 (15-17')	06/14/01	<1.0	<50	<50
SB - 2 (20-22')	06/14/01	<1.3	<50	<50
SB - 2 (25-27')	06/14/01	<1.3	<50	<50
SB - 2 (30-32')	06/14/01	<1.3	<50	<50
SB - 2 (35-37')	06/14/01	<1.3	<50	<50
SB - 2 (40-42')	06/14/01	<1.3	<50	<50
SB - 2 (43')	06/14/01	<1.3	<50	<50
SB - 2 (45')	06/14/03	<1.3	<50	<50
SB - 3 (0-2')	06/14/01	<1.3	<50	<50
SB - 3 (5-7')	06/14/01	<1.3	<50	<50
SB - 3 (10-12')	06/14/01	<1.3	<50	<50
SB - 3 (15-17')	06/14/01	<1.3	<50	<50
SB - 3 (20-22')	06/14/01	<1.3	<50	<50
SB - 3 (25-27')	06/14/01	<1.3	<50	<50
SB - 3 (30-32')	06/14/01	<1.3	<50	<50
SB - 3 (35-37')	06/14/01	<1.3	<50	<50
SB - 3 (40-42')	06/14/01	<1.3	<50	<50
SB - 3 (43-45')	06/14/01	<1.3	<50	<50

**CONCENTRATIONS OF BTEX AND TPH IN MONITOR WELL - SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA 8015M		
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O-XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
<b>Regulatory Levels</b>									
MW - 1 (0-2')	06/12/01	-	-	-	-	-	9.67	6460	6,470
MW - 1 (5-7')	06/12/01	5.519	103.8	104.3	142.73	356.349	1584	1650	3,234
MW - 1 (10-12')	06/12/01	2.495	65.135	67.093	114.85	249.573	1259	384	1,643
MW - 1 (15-17')	06/12/01	<0.013	0.0261	0.0474	0.214	0.2875	7.57	<50	8
MW - 1 (20-22')	06/12/01	<0.013	0.0144	0.0143	0.1311	0.1598	6.56	<50	7
MW - 1 (25-27')	06/12/01	<0.013	<0.013	0.022	0.0599	0.0819	3.94	52	56
MW - 1 (30-32')	06/12/01	<0.013	0.017	0.0466	0.1377	0.2013	4.62	<50	5
MW - 1 (35-37')	06/12/01	<0.025	0.0304	0.074	0.212	0.3164	7.14	<50	7
MW - 1 (40-42')	06/12/01	<0.025	<0.025	<0.025	0.0785	0.0785	5.43	70	75
MW - 1 (45-47')	06/12/01	-	-	-	-	-	<1.3	<50	1
MW - 1 (50-52')	06/12/01	-	-	-	-	-	1.62	<50	2
MW - 2 (0-2')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (5-7')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (10-12')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (15-17')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (20-22')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (25-27')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (30-32')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (35-37')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (40-42')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (45-47')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 2 (50-52')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (0-2')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (5-7')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (10-12')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (15-17')	06/13/01	-	-	-	-	-	<1.3	<50	<50

**TABLE 3**

**CONCENTRATIONS OF BTEX AND TPH IN MONITOR WELL - SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA 8015M		
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O-XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
<b>Regulatory Levels</b>									
MW - 3 (20-22')	06/13/01	-	-	-	-	50 (mg/Kg)	<1.3	<50	<50
MW - 3 (25-27')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (30-32')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (35-37')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (40-42')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (45-47')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (50-52')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 3 (55-56')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (0-2')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (5-7')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (10-12')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (15-17')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (20-22')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (25-27')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (30-32')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (35-37')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (40-42')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (45-47')	06/13/01	-	-	-	-	-	<1.3	<50	<50
MW - 4 (50-52')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (0-2')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (5-7')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (10-12')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (15-17')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (20-22')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (25-27')	06/14/01	-	-	-	-	-	<1.3	<50	<50
MW - 5 (30-32')	06/14/01	-	-	-	-	-	<1.3	<50	<50

TABLE 3

**CONCENTRATIONS OF BTEX AND TPH IN MONITOR WELL - SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA 8015M		
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O-XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
<b>Regulatory Levels</b>									
MW - 5 (35-37')	06/14/01	-	-	-	-	50 (mg/Kg)	<1.3	<50	<50
MW - 5 (40-42')	06/14/01	-	-	-	-	50 (mg/Kg)	<1.3	<50	<50
MW - 5 (43-44')	06/14/01	<0.013	<0.013	<0.013	<0.013	50 (mg/Kg)	<1.3	<50	<50
MW - 6 (38-40')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 6 (43-45')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 7 (38-40')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 7 (43-45')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 8 (33-35')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 8 (43-45')	04/23/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 9 (23-25')	04/24/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 9 (43-45')	04/24/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 10 (33-35')	04/24/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50
MW - 10 (43-45')	04/24/02	<0.020	<0.020	<0.020	<0.020	50 (mg/Kg)	<1.3	<50	<50

**TABLE 4**  
**CONCENTRATIONS OF BTEX AND TPH IN EXCAVATION SOIL SAMPLES**  
**TNM 98-05B**  
**Plains Marketing, L.P.**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015B		
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P,O-XYLENES	TOTAL BTEX	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
		(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
<b>Regulatory Levels</b>									
Excavation Walls	05/08/02	<0.025	0.266	0.275	492	492.541	711	896	1,607
Excavation Btm	05/08/02	<0.025	0.028	<0.025	58.2	58.228	<10.0	35.3	35
Stockpile East	05/08/02	<0.025	0.026	0.243	513	513.269	1540	1680	3,220
Stockpile West	05/08/02	<0.025	0.178	0.137	318	318.315	895	1080	1,975
Excavations S. Wall	11/14/02	<0.025	0.885	7.46	11.4	19.745	781	4900	5,681
Excavation N. Wall	11/14/02	<0.025	0.112	0.136	0.248	20.8	186	207	207
Excavation W. Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10
Excavation E. Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10
Excavation Btm. Comp.	04/16/03	<0.025	<0.025	0.044	0.106	0.15	21.1	232	253
ESP-A	11/26/2004	<0.01	0.0634	<0.01	0.0114	0.0748	<50	<1.0	<50
ESP-B	11/26/2004	<0.01	0.199	0.0117	<0.01	0.2107	<50	<1.0	<50
ESP-C	11/26/2004	<0.01	0.26	<0.01	0.0105	0.275	<50	<1.0	<50
ESP-D	11/26/2004	<0.01	0.114	<0.01	<0.01	0.114	<50	<1.0	<50
ESP-E	11/26/2004	<0.01	0.0835	<0.01	<0.01	0.0835	<50	<1.0	<50
ESP-F	11/26/2004	<0.050	0.258	<0.050	<0.050	0.258	<50	<5.0	<50
ESP-H	11/26/2004	<0.10	0.56	<0.10	<0.10	0.56	109	<10.0	109
ESP-H	11/26/2004	<0.01	0.0626	<0.01	0.0164	0.079	<50	<1.0	<50
WSP	11/26/2004	<0.050	0.297	<0.050	<0.050	0.297	73.9	<5.0	73.9

**TABLE 5**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER**

PLAINS MARKETING, L.P.  
 TNM 98-05B  
 LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
New Mexico BTEX Clean up Standards for Groundwater		0.01 mg/L	0.75 mg/L	0.75 mg/L	Total Xylenes 0.62 mg/L	
MW-1 through MW-5 completed June 2001						
MW - 1	06/20/01	0.067	0.017	<0.005	0.018	
	09/04/01	0.030	0.010	0.001	0.002	0.008
	10/25/01	0.002	0.006	0.001	0.002	0.001
	01/28/02	0.004	0.002	<0.001	<0.001	0.002
	05/06/02	0.004	0.004	<0.001	<0.001	0.002
	09/17/02	0.008	<0.001	<0.001	<0.001	0.003
	11/13/02	0.007	<0.001	<0.001	0.001	0.003
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	0.003	<0.001	<0.001	<0.001	<0.001
	08/15/03	0.014	0.010	0.011	0.019	0.005
	11/07/03	0.008	0.002	0.006	0.010	0.003
	02/04/04	0.030	0.008	0.010	0.019	0.007
	05/04/04	0.00973	0.00428	0.00821	0.0142	0.00391
	08/23/04	0.00469	<0.001	0.00572	0.00689	0.00219
	11/30/04	0.252	<0.001	0.121		0.026
MW - 2	06/20/01	0.119	0.091	0.005		
	09/04/01	0.437	0.339	0.029	0.052	0.013
	10/25/01	0.018	0.019	0.002	0.004	0.001
	01/28/02	0.011	0.008	<0.001	0.003	0.001
	05/06/02	0.017	0.011	<0.001	<0.002	<0.001
	09/17/02	0.024	0.011	0.001	0.003	0.001
	11/13/02	0.006	0.004	<0.001	0.001	<0.001
	02/04/03	0.002	0.002	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	<0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	05/04/04	0.00145	<0.001	<0.001	<0.002	<0.001
	08/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.005	<0.005	<0.005		<0.005
MW - 3	06/20/01	0.008	<0.005	<0.005		<0.005
	09/04/01	0.009	0.005	<0.001	<0.001	<0.001
	10/25/01	0.003	0.002	<0.001	<0.001	<0.001
	01/28/02	0.002	0.001	<0.001	<0.001	<0.001
	05/06/02	0.003	0.001	<0.001	<0.001	<0.001
	09/17/02	0.004	0.001	<0.001	<0.001	<0.001
	11/13/02	0.003	0.001	<0.001	0.001	<0.001
	02/04/03	0.002	<0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	<0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.005	<0.005	<0.005		<0.005
MW - 4	06/20/01	<0.005	<0.005	<0.005		<0.005
	09/04/01	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/01	<0.001	<0.001	<0.001	<0.001	<0.001

**TABLE 5**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER**

PLAINS MARKETING, L.P.

TNM 98-05B

LEA COUNTY, NEW MEXICO

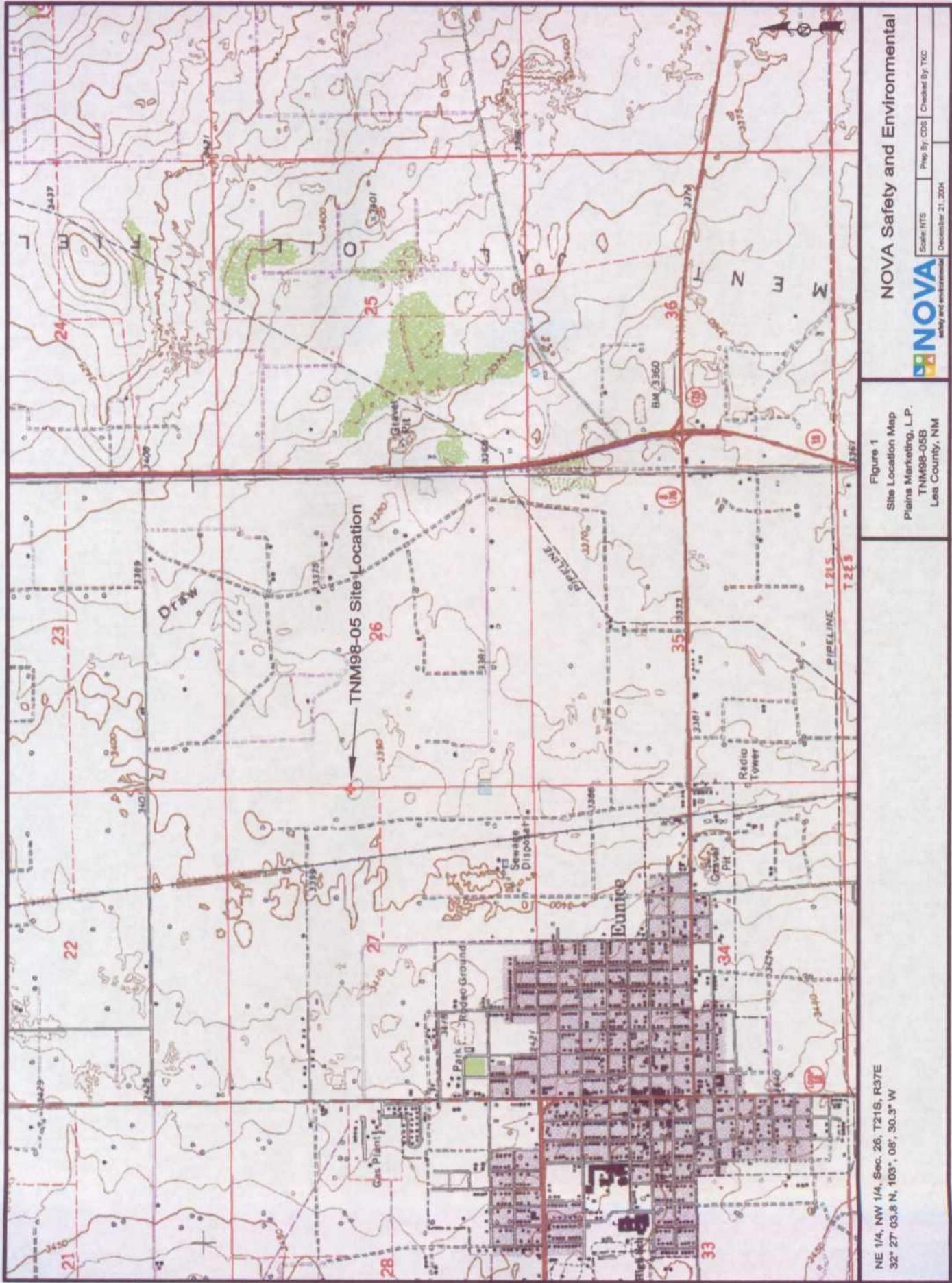
SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	<i>o</i> - XYLENE
New Mexico BTEX Clean up Standards for Groundwater		0.01 mg/L	0.75 mg/L	0.75 mg/L	Total Xylenes 0.62 mg/L	
	01/28/02	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/02	<0.001	<0.001	<0.001	<0.001	<0.001
	09/17/02	<0.001	<0.001	<0.001	<0.001	<0.001
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	<0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.005	<0.005	<0.005	<0.005	
MW - 5	06/20/01	0.071	0.058	<0.005	0.008	
	09/04/01	0.023	0.017	0.004	0.010	0.001
	10/25/01	0.020	0.011	<0.001	0.003	<0.001
	01/28/02	0.055	0.031	0.001	0.005	0.002
	05/06/02	0.065	0.035	0.001	0.005	0.004
	09/17/02	0.031	0.014	0.001	0.002	0.002
	11/13/02	0.013	0.006	<0.001	0.001	<0.001
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	0.004	<0.001	<0.001	<0.001	<0.001
	08/15/03	0.006	<0.001	<0.001	0.002	<0.001
	11/07/03	0.001	<0.001	<0.001	0.008	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	05/04/04	0.00358	<0.001	<0.001	<0.002	<0.001
	08/23/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	0.0121	<0.001	<0.001	0.0029	
MW-6 through MW-10 completed April 2002						
MW - 6	05/06/02	0.001	0.001	<0.001	<0.001	<0.001
	09/17/02	0.006	0.002	<0.001	<0.001	<0.001
	11/13/02	0.005	0.001	<0.001	<0.001	<0.001
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	0.003	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.001	<0.001	<0.001	<0.001	
MW - 7	05/06/02	0.002	0.002	<0.001	<0.001	<0.001
	09/17/02	0.004	0.002	<0.001	<0.001	<0.001
	11/13/02	0.004	0.002	<0.001	<0.001	<0.001
	02/04/03	0.002	0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.001	<0.001	<0.001	<0.001	
MW - 8	05/06/02	0.004	0.004	<0.001	<0.001	<0.001
	09/17/02	0.001	<0.001	<0.001	<0.001	<0.001
	11/13/02	0.003	0.002	<0.001	<0.001	<0.001

**TABLE 5**  
**CONCENTRATIONS OF BTEX IN GROUNDWATER**

PLAINS MARKETING, L.P.  
 TNM 98-05B  
 LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLEMES	o - XYLEMES
New Mexico BTEX Clean up Standards for Groundwater		0.01 mg/L	0.75 mg/L	0.75 mg/L	Total Xylenes 0.62 mg/L	
	02/04/03	0.008	0.005	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	0.003	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	0.001	<0.001	<0.001	<0.001	
MW - 9	05/06/02	<0.001	<0.001	<0.001	<0.001	<0.001
	09/17/02	<0.001	<0.001	<0.001	<0.001	<0.001
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	<0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.001	<0.001	<0.001	<0.001	
MW - 10	05/06/02	<0.001	<0.001	<0.001	<0.001	<0.001
	09/17/02	<0.001	<0.001	<0.001	<0.001	<0.001
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
	02/04/03	<0.001	<0.001	<0.001	<0.001	<0.001
	05/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
	08/15/03	<0.001	<0.001	<0.001	<0.001	<0.001
	11/07/03	<0.001	<0.001	<0.001	<0.002	<0.001
	02/04/04	<0.001	<0.001	<0.001	<0.002	<0.001
	11/30/04	<0.005	<0.005	<0.005	<0.005	

## Figures



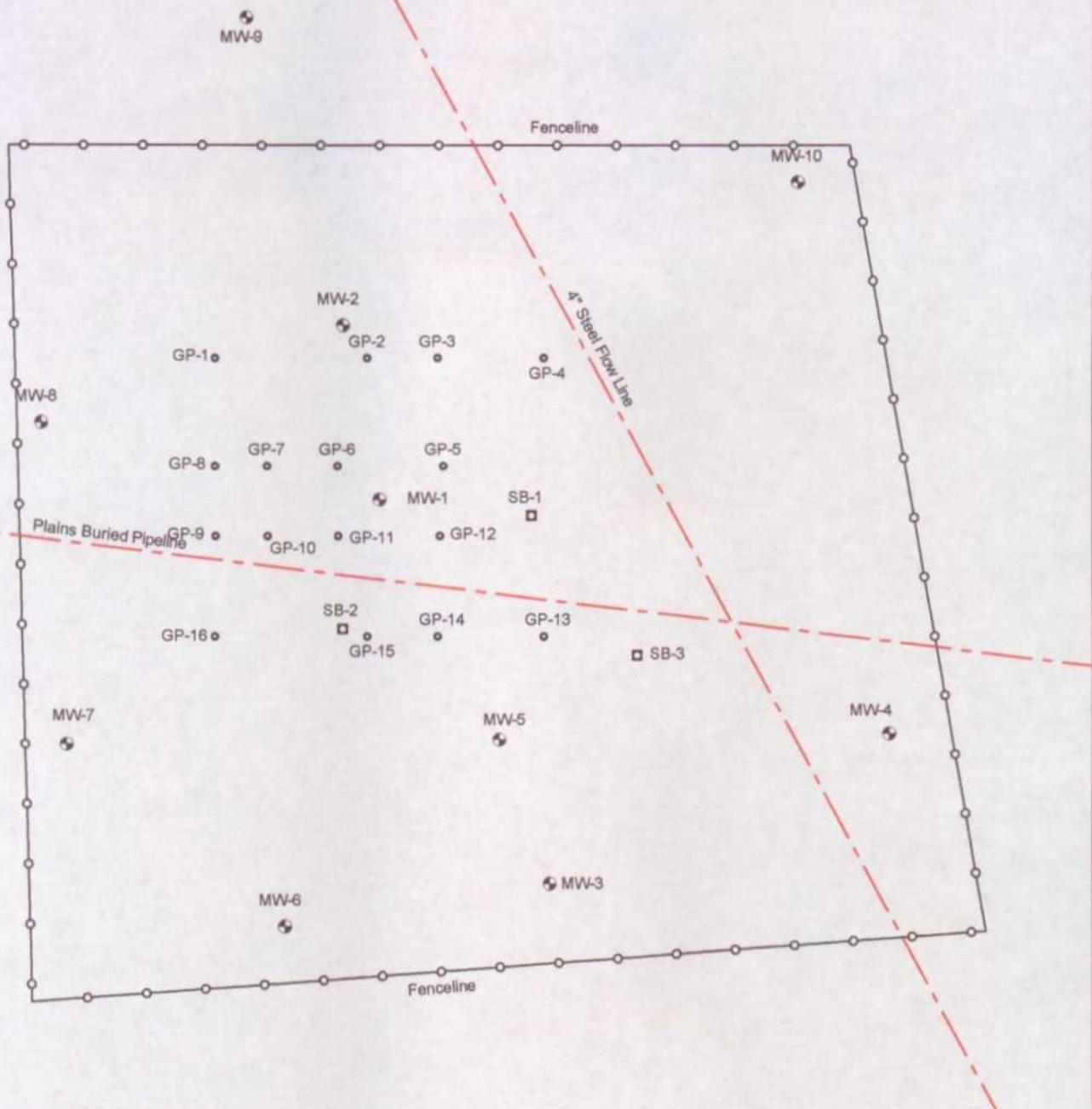
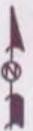
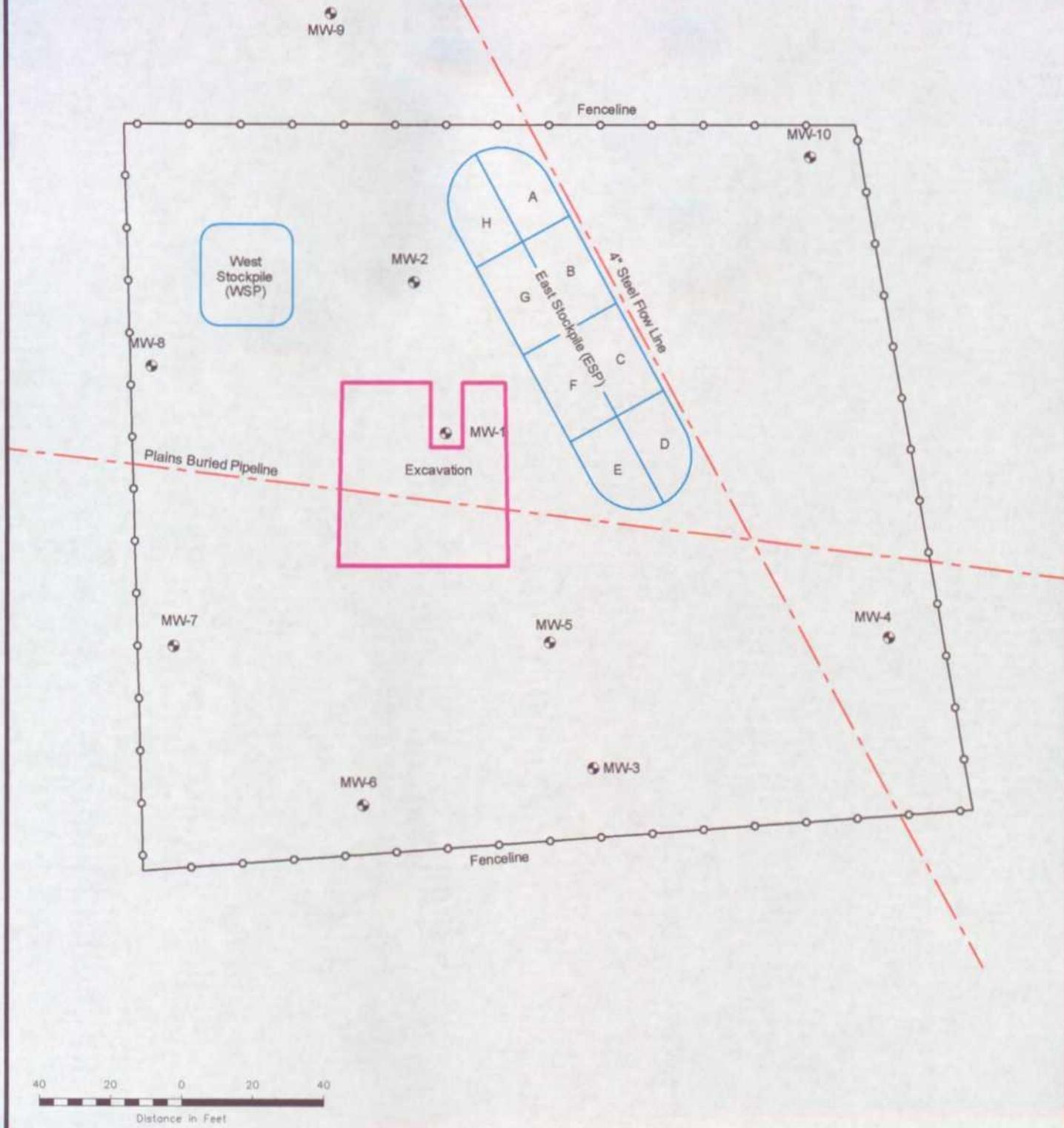


Figure 2  
Site Detail Map  
GeoProbe, Soil Boring &  
Monitor Well Locations  
Plains Marketing, L.P.  
TNM98-06B  
Lea County, NM

NOVA Safety and Environmental



Scale: 1" = 40' Prep By: CS Checked By: TKC  
December 22, 2004



Legend:

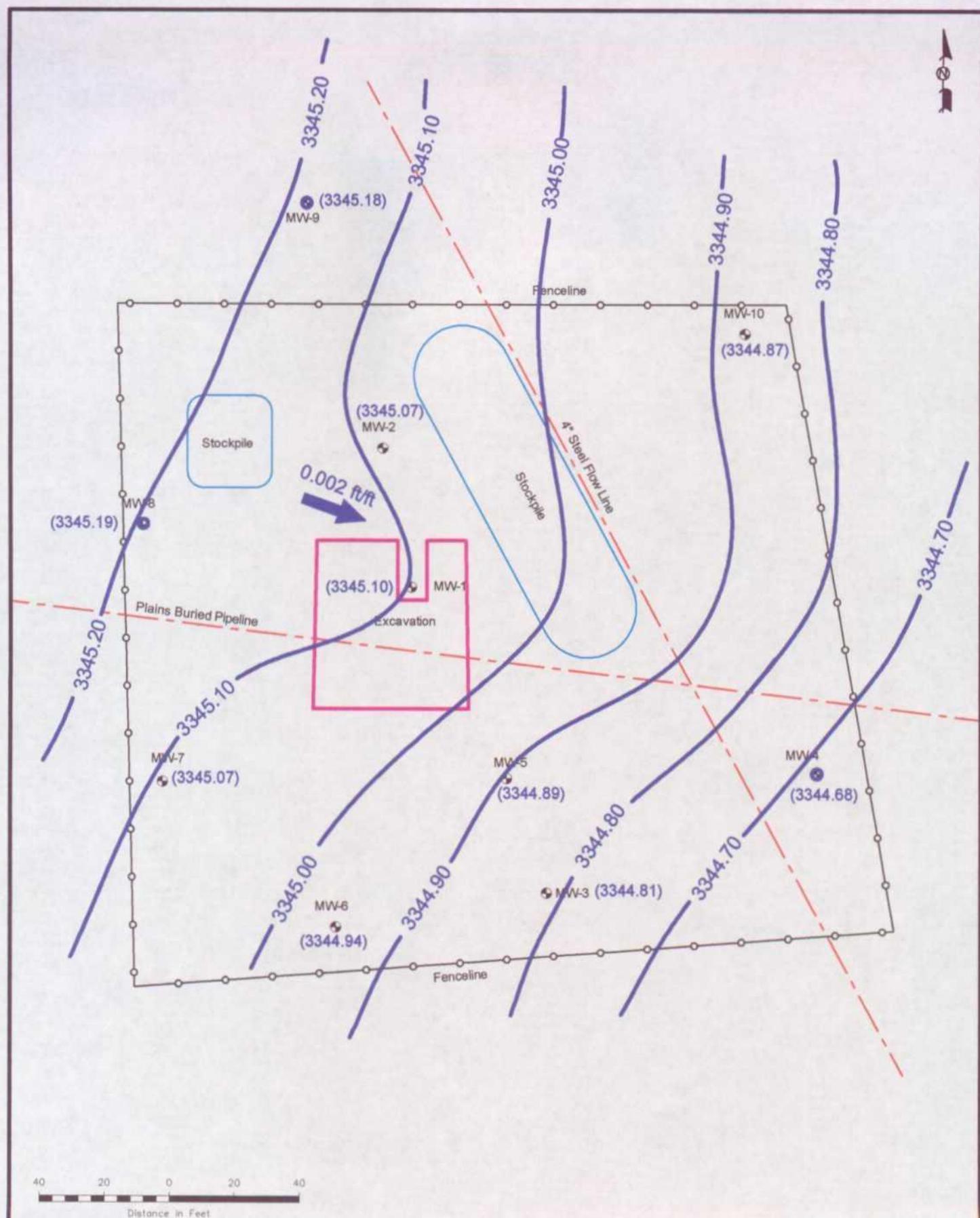
- Monitor Well Location
- Fence

Figure 3  
Site Details  
Excavation and Stockpiles  
Plains Marketing, L.P.  
TNM98-05B  
Lee County, NM

NOVA Safety and Environmental



Scale: 1" = 40' Prep By: CDS Checked By: TAC  
December 21, 2004



second:

 Pipeline  
Monitor Well Location  
Fence

 Groundwater Gradient Direction & Magnitude  
(3344.47) Groundwater Elevation In Feet

### Excavation

**Figure 4**  
**Inferred Groundwater**

Gradient (11/30/04)  
Plains Marketing, L.P.  
TNM98-05B  
Lea County, NM

NOVA Safety and Environmental



Scale: 1" x 40'      Prep By: DPM      Checked By: CE  
February 2, 2006

## Appendices

Appendix A:  
Soil Laboratory Reports

# TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9   Lubbock, Texas 79424   800•378•1296   806•794•1296   FAX 806•794•1298  
 155 McCutcheon, Suite H   El Paso, Texas 79932   888•588•3443   915•585•3443   FAX 915•585•4944  
 E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

Ken Dutton  
 ETGI  
 2540 W. Marland  
 Hobbs, NM

Report Date: July 5, 2001

Order ID Number: A01061812

Project Number: EOT 2056C  
 Project Name: TNM 98-05  
 Project Location: Lea County, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
173497	MW-1 0'-2'	Soil	6/12/01	13:40	6/16/01
173498	MW-1 5'-7'	Soil	6/12/01	14:00	6/16/01
173499	MW-1 10'-12'	Soil	6/12/01	14:10	6/16/01
173500	MW-1 15'-17'	Soil	6/12/01	14:20	6/16/01
173501	MW-1 20'-22'	Soil	6/12/01	14:45	6/16/01
173502	MW-1 25'-27'	Soil	6/12/01	14:55	6/16/01
173503	MW-1 30'-32'	Soil	6/12/01	15:00	6/16/01
173504	MW-1 35'-37'	Soil	6/12/01	15:08	6/16/01
173505	MW-1 40'-42'	Soil	6/12/01	15:15	6/16/01
173506	MW-1 45-47	Soil	6/12/01	15:20	6/16/01
173507	MW-1 50-52	Soil	6/12/01	15:25	6/16/01
173508	MW-2 0-2'	Soil	6/13/01	7:45	6/16/01
173509	MW-2 5'-7'	Soil	6/13/01	7:57	6/16/01
173510	MW-2 10'-12'	Soil	6/13/01	8:05	6/16/01
173511	MW-2 15'-17'	Soil	6/13/01	8:15	6/16/01
173512	MW-2 20'-22'	Soil	6/13/01	8:25	6/16/01
173513	MW-2 25'-27'	Soil	6/13/01	8:35	6/16/01
173514	MW-2 30'-32'	Soil	6/13/01	8:47	6/16/01
173515	MW-2 35'-37'	Soil	6/13/01	9:00	6/16/01
173516	MW-2 40'-42'	Soil	6/13/01	9:17	6/16/01
173517	MW-2 45'-47'	Soil	6/13/01	9:30	6/16/01
173518	MW-2 50'-52'	Soil	6/13/01	9:38	6/16/01
173519	MW-3 0'-2'	Soil	6/13/01	10:15	6/16/01
173520	MW-3 5'-7'	Soil	6/13/01	10:20	6/16/01
173521	MW-3 10'-12'	Soil	6/13/01	10:25	6/16/01
173522	MW-3 15'-17'	Soil	6/13/01	10:40	6/16/01
173523	MW-3 20'-22'	Soil	6/13/01	10:50	6/16/01
173524	MW-3 25'-27'	Soil	6/13/01	10:59	6/16/01
173525	MW-3 30'-32'	Soil	6/13/01	11:10	6/16/01
173526	MW-3 35'-37'	Soil	6/13/01	11:25	6/16/01
173527	MW-3 40'-42'	Soil	6/13/01	11:42	6/16/01
173528	MW-3 45'-47'	Soil	6/13/01	12:00	6/16/01
173529	MW-3 50'-52'	Soil	6/13/01	12:17	6/16/01
173530	MW-3 55'-56'	Soil	6/13/01	12:27	6/16/01

Continued ...

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
173531	MW-4 0'-2'	Soil	6/13/01	13:30	6/16/01
173532	MW-4 5'-7'	Soil	6/13/01	13:37	6/16/01
173533	MW-4 10'-12'	Soil	6/13/01	13:50	6/16/01
173534	MW-4 15'-17'	Soil	6/13/01	14:00	6/16/01
173535	MW-4 20'-22'	Soil	6/13/01	14:10	6/16/01
173536	MW-4 25'-27'	Soil	6/13/01	14:20	6/16/01
173537	MW-4 30-32'	Soil	6/13/01	14:27	6/16/01
173538	MW-4 35'-37'	Soil	6/13/01	14:40	6/16/01
173539	MW-4 40'-42'	Soil	6/13/01	14:45	6/16/01
173540	MW-4 45'-47'	Soil	6/13/01	15:00	6/16/01
173541	MW-4 50'-52'	Soil	6/14/01	15:10	6/16/01
173542	MW-5 0'-2'	Soil	6/14/01	8:00	6/16/01
173543	MW-5 5'-7'	Soil	6/14/01	8:10	6/16/01
173544	MW-5 10'-12'	Soil	6/14/01	8:25	6/16/01
173545	MW-5 15'-17'	Soil	6/14/01	8:30	6/16/01
173546	MW-5 20'-22'	Soil	6/14/01	8:38	6/16/01
173547	MW-5 25-27	Soil	6/14/01	8:45	6/16/01
173548	MW-5 30'-32'	Soil	6/14/01	8:52	6/16/01
173549	MW-5 35'-37'	Soil	6/14/01	9:00	6/16/01
173550	MW-5 40'-42'	Soil	6/14/01	9:10	6/16/01
173551	MW-5 43-44'	Soil	6/12/01	9:15	6/16/01
173552	SB-1 0'-2'	Soil	6/14/01	10:00	6/16/01
173553	SB-1 5'-7'	Soil	6/14/01	10:05	6/16/01
173554	SB-1 10'-12'	Soil	6/14/01	10:10	6/16/01
173555	SB-1 15'-17'	Soil	6/14/01	10:25	6/16/01
173556	SB-1 20'-22'	Soil	6/14/01	10:32	6/16/01
173557	SB-1 25'-27'	Soil	6/14/01	10:40	6/16/01
173558	SB-1 30'-32'	Soil	6/14/01	10:52	6/16/01
173559	SB-1 35-37	Soil	6/14/01	11:00	6/16/01
173560	SB-1 40-42	Soil	6/14/01	11:10	6/16/01
173561	SB-1 44'-46'	Soil	6/14/01	11:20	6/16/01
173562	SB-2 0'-2'	Soil	6/14/01	12:00	6/16/01
173563	SB-2 5'-7'	Soil	6/14/01	12:05	6/16/01
173564	SB-2 10'-12'	Soil	6/14/01	12:10	6/16/01
173565	SB-2 15'-17'	Soil	6/14/01	12:20	6/16/01
173566	SB-2 20'-22'	Soil	6/14/01	12:29	6/16/01
173567	SB-2 25'-27'	Soil	6/14/01	12:40	6/16/01
173568	SB-2 30'-32'	Soil	6/14/01	12:50	6/16/01
173569	SB-2 35-37	Soil	6/14/01	13:00	6/16/01
173570	SB-2 40-42	Soil	6/14/01	13:07	6/16/01
173571	SB-2 43'	Soil	6/14/01	13:12	6/16/01
173572	SB-2 45'	Soil	6/14/01	13:18	6/16/01
173573	SB-3 0'-2'	Soil	6/14/01	13:45	6/16/01
173574	SB-3 5-7	Soil	6/14/01	13:50	6/16/01
173575	SB-3 10-12	Soil	6/14/01	13:55	6/16/01
173576	SB-3 15'-17'	Soil	6/14/01	14:04	6/16/01
173577	SB-3 20-22'	Soil	6/14/01	14:15	6/16/01
173578	SB-3 25'-27'	Soil	6/14/01	14:27	6/16/01
173579	SB-3 30'-32'	Soil	6/14/01	14:40	6/16/01
173580	SB-3 35'-37'	Soil	6/14/01	14:54	6/16/01
173581	SB-3 40'-42'	Soil	6/14/01	15:00	6/16/01
173582	SB-3 45'	Soil	6/14/01	15:09	6/16/01

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 68 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



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Dr. Blair Leftwich, Director

## Analytical Report

Sample: 173497 - MW-1 0'-2'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		6460	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		1180	mg/Kg	5	250	94	70 - 130

Sample: 173497 - MW-1 0'-2'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		9.67	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	13	0.10	89	70 - 130
4-BFB	1	1.75	mg/Kg	13	0.10	135	70 - 130

Sample: 173498 - MW-1 5'-7'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC12050 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: E 5035 Prep Batch: PB10592 Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		5.519	mg/Kg	100	0.001
Toluene		103.8	mg/Kg	100	0.001
Ethylbenzene		104.3	mg/Kg	100	0.001
M,P,O-Xylene		142.73	mg/Kg	100	0.001
Total BTEX		356.35	mg/Kg	100	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		41.6	mg/Kg	100	0.10	410	72 - 128
4-BFB	2	134	mg/Kg	100	0.10	1340	72 - 128

Sample: 173498 - MW-1 5'-7'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

<sup>1</sup>SURROGATE OUT OF LIMITS DUE TO PEAK INTERFERENCE

<sup>2</sup>SURROGATE OUT OF LIMITS DUE TO PEAK INTERFERENCE

Report Date: July 5, 2001  
EOT 2056C

Order Number: A01061812  
TNM 98-05

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Lea County,NM

Param	Flag	Result	Units	Dilution	RDL
DRO		1650	mg/Kg	2	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		518	mg/Kg	2	250	103	70 - 130

Sample: 173498 - MW-1 5'-7'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12172      Date Analyzed: 6/21/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10318      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1584	mg/Kg	100	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	3	41.6	mg/Kg	100	0.10	416	70 - 130
4-BFB	4	134	mg/Kg	100	0.10	1340	70 - 130

Sample: 173499 - MW-1 10'-12'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12050      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10592      Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		2.495	mg/Kg	100	0.001
Toluene		65.135	mg/Kg	100	0.001
Ethylbenzene		67.093	mg/Kg	100	0.001
M,P,O-Xylene		114.85	mg/Kg	100	0.001
Total BTEX		249.573	mg/Kg	100	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		40.4	mg/Kg	100	0.10	40	72 - 128
4-BFB	5	147	mg/Kg	100	0.10	1470	72 - 128

Sample: 173499 - MW-1 10'-12'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12027      Date Analyzed: 6/18/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10297      Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		384	mg/Kg	1	50

<sup>3</sup>SURROGATE OUT OF LIMITS DUE TO MATRIX

<sup>4</sup>SURROGATE OUT OF LIMITS DUE TO PEAK INTERFERENCE

<sup>5</sup>SURROGATE OUT OF LIMITS DUE TO PEAK INTERFERENCE

Report Date: July 5, 2001  
EOT 2056C

Order Number: A01061812  
TNM 98-05

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Lea County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	6	320	mg/Kg	1	250	128	70 - 130

Sample: 173499 - MW-1 10'-12'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12172      Date Analyzed: 6/21/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10318      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1259	mg/Kg	100	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	7	40.4	mg/Kg	100	0.10	404	70 - 130
4-BFB	8	147	mg/Kg	100	0.10	1470	70 - 130

Sample: 173500 - MW-1 15'-17'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12050      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10592      Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.013	mg/Kg	13	0.001
Toluene		0.0261	mg/Kg	13	0.001
Ethylbenzene		0.0474	mg/Kg	13	0.001
M,P,O-Xylene		0.214	mg/Kg	13	0.001
Total BTEX		0.2875	mg/Kg	13	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.22	mg/Kg	13	0.10	92	72 - 128
4-BFB		1.37	mg/Kg	13	0.10	100	72 - 128

Sample: 173500 - MW-1 15'-17'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12027      Date Analyzed: 6/18/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10297      Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		238	mg/Kg	1	250	95	70 - 130

<sup>6</sup>MATRIX INTERFERENCE ON SURROGATE RECOVERY

<sup>7</sup>SURROGATE OUT OF LIMITS DUE TO MATRIX

<sup>8</sup>SURROGATE OUT OF LIMITS DUE TO PEAK INTERFERENCE

Report Date: July 5, 2001  
EOT 2056C

Order Number: A01061812  
TNM 98-05

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Lea County, NM

Sample: 173500 - MW-1 15'-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		7.57	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.22	mg/Kg	13	0.10	93	70 - 130
4-BFB		1.37	mg/Kg	13	0.10	105	70 - 130

Sample: 173501 - MW-1 20'-22'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC12050 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: E 5035 Prep Batch: PB10592 Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.013	mg/Kg	13	0.001
Toluene		0.0144	mg/Kg	13	0.001
Ethylbenzene		0.0143	mg/Kg	13	0.001
M,P,O-Xylene		0.1311	mg/Kg	13	0.001
Total BTEX		0.1598	mg/Kg	13	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	91	72 - 128
4-BFB		1.28	mg/Kg	13	0.10	99	72 - 128

Sample: 173501 - MW-1 20'-22'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		242	mg/Kg	1	250	96	70 - 130

Sample: 173501 - MW-1 20'-22'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		6.56	mg/Kg	13	0.10

Report Date: July 5, 2001  
EOT 2056C

Order Number: A01061812  
TNM 98-05

Page Number: 8 of 68  
Lea County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173502 - MW-1 25'-27'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12050      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10592      Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.013	mg/Kg	13	0.001
Toluene		<0.013	mg/Kg	13	0.001
Ethylbenzene		0.022	mg/Kg	13	0.001
M,P,O-Xylene		0.0599	mg/Kg	13	0.001
Total BTEX		0.0819	mg/Kg	13	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	88	72 - 128
4-BFB		1.35	mg/Kg	13	0.10	102	72 - 128

Sample: 173502 - MW-1 25'-27'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12027      Date Analyzed: 6/18/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10297      Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		52	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		245	mg/Kg	1	250	98	70 - 130

Sample: 173502 - MW-1 25'-27'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12172      Date Analyzed: 6/21/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10318      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		3.94	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.35	mg/Kg	13	0.10	103	70 - 130

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Sample: 173503 - MW-1 30'-32'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12050      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10592      Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.013	mg/Kg	13	0.001
Toluene		0.017	mg/Kg	13	0.001
Ethylbenzene		0.0466	mg/Kg	13	0.001
M,P,O-Xylene		0.1377	mg/Kg	13	0.001
Total BTEX		0.2013	mg/Kg	13	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	13	0.10	87	72 - 128
4-BFB		1.29	mg/Kg	13	0.10	99	72 - 128

Sample: 173503 - MW-1 30'-32'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12027      Date Analyzed: 6/18/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10297      Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		239	mg/Kg	1	250	95	70 - 130

Sample: 173503 - MW-1 30'-32'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12172      Date Analyzed: 6/21/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10318      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		4.62	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.29	mg/Kg	13	0.10	99	70 - 130

Sample: 173504 - MW-1 35'-37'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12050      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10592      Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.025	mg/Kg	25	0.001
Toluene		0.0304	mg/Kg	25	0.001
Ethylbenzene		0.074	mg/Kg	25	0.001

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...Continued Sample: 173504 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		0.212	mg/Kg	25	0.001
Total BTEX		0.3164	mg/Kg	25	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		2.15	mg/Kg	25	0.10	88	72 - 128
4-BFB		2.54	mg/Kg	25	0.10	101	72 - 128

Sample: 173504 - MW-1 35'-37'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		270	mg/Kg	1	250	108	70 - 130

Sample: 173504 - MW-1 35'-37'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		7.14	mg/Kg	25	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		2.15	mg/Kg	25	0.10	86	70 - 130
4-BFB		2.54	mg/Kg	25	0.10	101	70 - 130

Sample: 173505 - MW-1 40'-42'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC12050 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: E 5035 Prep Batch: PB10592 Date Prepared: 6/21/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.025	mg/Kg	25	0.001
Toluene		<0.025	mg/Kg	25	0.001
Ethylbenzene		<0.025	mg/Kg	25	0.001
M,P,O-Xylene		0.0786	mg/Kg	25	0.001
Total BTEX		0.0786	mg/Kg	25	0.001

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		2.18	mg/Kg	25	0.10	88	72 - 128
4-BFB		2.5	mg/Kg	25	0.10	100	72 - 128

Sample: 173505 - MW-1 40'-42'  
Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		70	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		261	mg/Kg	1	250	104	70 - 130

Sample: 173505 - MW-1 40'-42'  
Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		5.43	mg/Kg	25	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		2.18	mg/Kg	25	0.10	87	70 - 130
4-BFB		2.5	mg/Kg	25	0.10	100	70 - 130

Sample: 173506 - MW-1 45-47  
Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		250	mg/Kg	1	250	100	70 - 130

Sample: 173506 - MW-1 45-47  
Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	13	0.10	76	70 - 130
4-BFB		1.2	mg/Kg	13	0.10	92	70 - 130

**Sample: 173507 - MW-1 50-52**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		280	mg/Kg	1	250	112	70 - 130

**Sample: 173507 - MW-1 50-52**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		1.62	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

**Sample: 173508 - MW-2 0-2'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		249	mg/Kg	1	250	99	70 - 130

**Sample: 173508 - MW-2 0-2'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173509 - MW-2 5'-7'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		257	mg/Kg	1	250	102	70 - 130

Sample: 173509 - MW-2 5'-7'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.02	mg/Kg	13	0.10	78	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173510 - MW-2 10'-12'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		241	mg/Kg	1	250	96	70 - 130

Sample: 173510 - MW-2 10'-12'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.06	mg/Kg	13	0.10	81	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173511 - MW-2 15'-17'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		247	mg/Kg	1	250	98	70 - 130

Sample: 173511 - MW-2 15'-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173512 - MW-2 20'-22'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		269	mg/Kg	1	250	107	70 - 130

Sample: 173512 - MW-2 20'-22'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.976	mg/Kg	13	0.10	75	70 - 130
4-BFB		1.19	mg/Kg	13	0.10	91	70 - 130

**Sample: 173513 - MW-2 25'-27'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		236	mg/Kg	1	250	94	70 - 130

**Sample: 173513 - MW-2 25'-27'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	94	70 - 130

**Sample: 173514 - MW-2 30'-32'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		240	mg/Kg	1	250	96	70 - 130

**Sample: 173514 - MW-2 30'-32'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	13	0.10	80	70 - 130
4-BFB		1.2	mg/Kg	13	0.10	92	70 - 130

Sample: 173515 - MW-2 35'-37'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12027 Date Analyzed: 6/18/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10297 Date Prepared: 6/18/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		238	mg/Kg	1	250	95	70 - 130

Sample: 173515 - MW-2 35'-37'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12172 Date Analyzed: 6/21/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10318 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.08	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173516 - MW-2 40'-42'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		261	mg/Kg	1	250	104	70 - 130

Sample: 173516 - MW-2 40'-42'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	94	70 - 130

**Sample: 173517 - MW-2 45'-47'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		235	mg/Kg	1	250	94	70 - 130

**Sample: 173517 - MW-2 45'-47'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	95	70 - 130

**Sample: 173518 - MW-2 50'-52'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		235	mg/Kg	1	250	94	70 - 130

**Sample: 173518 - MW-2 50'-52'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	93	70 - 130

Sample: 173519 - MW-3 0'-2'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		234	mg/Kg	1	250	93	70 - 130

Sample: 173519 - MW-3 0'-2'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	13	0.10	80	70 - 130
4-BFB		1.18	mg/Kg	13	0.10	90	70 - 130

Sample: 173520 - MW-3 5'-7'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		235	mg/Kg	1	250	94	70 - 130

Sample: 173520 - MW-3 5'-7'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173521 - MW-3 10'-12'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		238	mg/Kg	1	250	95	70 - 130

Sample: 173521 - MW-3 10'-12'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	13	0.10	88	70 - 130
4-BFB		1.32	mg/Kg	13	0.10	101	70 - 130

Sample: 173522 - MW-3 15'-17'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		211	mg/Kg	1	250	84	70 - 130

Sample: 173522 - MW-3 15'-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.31	mg/Kg	13	0.10	100	70 - 130

**Sample: 173523 - MW-3 20'-22'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		186	mg/Kg	1	250	74	70 - 130

**Sample: 173523 - MW-3 20'-22'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	13	0.10	76	70 - 130
4-BFB		1.17	mg/Kg	13	0.10	90	70 - 130

**Sample: 173524 - MW-3 25'-27'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		225	mg/Kg	1	250	90	70 - 130

**Sample: 173524 - MW-3 25'-27'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.17	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.25	mg/Kg	13	0.10	96	70 - 130

**Sample: 173525 - MW-3 30'-32'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		248	mg/Kg	1	250	99	70 - 130

**Sample: 173525 - MW-3 30'-32'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.18	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.3	mg/Kg	13	0.10	100	70 - 130

**Sample: 173526 - MW-3 35'-37'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		244	mg/Kg	1	250	97	70 - 130

**Sample: 173526 - MW-3 35'-37'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	95	70 - 130

Sample: 173527 - MW-3 40'-42'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		266	mg/Kg	1	250	106	70 - 130

Sample: 173527 - MW-3 40'-42'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	13	0.10	88	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	94	70 - 130

Sample: 173528 - MW-3 45'-47'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		226	mg/Kg	1	250	90	70 - 130

Sample: 173528 - MW-3 45'-47'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	94	70 - 130

Sample: 173529 - MW-3 50'-52'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		236	mg/Kg	1	250	94	70 - 130

Sample: 173529 - MW-3 50'-52'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173530 - MW-3 55'-56'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		232	mg/Kg	1	250	92	70 - 130

Sample: 173530 - MW-3 55'-56'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.19	mg/Kg	13	0.10	91	70 - 130

**Sample: 173531 - MW-4 0'-2'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		181	mg/Kg	1	250	72	70 - 130

**Sample: 173531 - MW-4 0'-2'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.08	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.18	mg/Kg	13	0.10	90	70 - 130

**Sample: 173532 - MW-4 5'-7'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	9	160	mg/Kg	1	250	64	70 - 130

<sup>9</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENTS

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Sample: 173532 - MW-4 5'-7'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12052      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10319      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.2	mg/Kg	13	0.10	92	70 - 130
4-BFB		1.41	mg/Kg	13	0.10	108	70 - 130

Sample: 173533 - MW-4 10'-12'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12071      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10328      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		240	mg/Kg	1	250	96	70 - 130

Sample: 173533 - MW-4 10'-12'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12052      Date Analyzed: 6/19/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10319      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173534 - MW-4 15'-17'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12071      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10328      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		230	mg/Kg	1	250	92	70 - 130

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Sample: 173534 - MW-4 15'-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.31	mg/Kg	13	0.10	100	70 - 130

Sample: 173535 - MW-4 20'-22'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12071 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10328 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		237	mg/Kg	1	250	94	70 - 130

Sample: 173535 - MW-4 20'-22'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12052 Date Analyzed: 6/19/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10319 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.29	mg/Kg	13	0.10	99	70 - 130

Sample: 173536 - MW-4 25'-27'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12072 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10329 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		232	mg/Kg	1	250	92	70 - 130

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Sample: 173536 - MW-4 25'-27'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173537 - MW-4 30-32'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		268	mg/Kg	1	250	107	70 - 130

Sample: 173537 - MW-4 30-32'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.06	mg/Kg	13	0.10	81	70 - 130
4-BFB		1.16	mg/Kg	13	0.10	89	70 - 130

Sample: 173538 - MW-4 35'-37'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		211	mg/Kg	1	250	84	70 - 130

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Sample: 173538 - MW-4 35'-37'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.07	mg/Kg	13	0.10	82	70 - 130
4-BFB		1.18	mg/Kg	13	0.10	90	70 - 130

Sample: 173539 - MW-4 40'-42'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		212	mg/Kg	1	250	84	70 - 130

Sample: 173539 - MW-4 40'-42'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	13	0.10	80	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	93	70 - 130

Sample: 173540 - MW-4 45'-47'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		228	mg/Kg	1	250	91	70 - 130

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Sample: 173540 - MW-4 45'-47'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173541 - MW-4 50'-52'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		235	mg/Kg	1	250	94	70 - 130

Sample: 173541 - MW-4 50'-52'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.08	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	93	70 - 130

Sample: 173542 - MW-5 0'-2'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		287	mg/Kg	1	250	114	70 - 130

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Sample: 173542 - MW-5 0'-2'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.3	mg/Kg	13	0.10	100	70 - 130

Sample: 173543 - MW-5 5'-7'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		294	mg/Kg	1	250	117	70 - 130

Sample: 173543 - MW-5 5'-7'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173544 - MW-5 10'-12'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	10	166	mg/Kg	1	250	66	70 - 130

<sup>10</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENTS

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Sample: 173544 - MW-5 10'-12'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.21	mg/Kg	13	0.10	93	70 - 130

Sample: 173545 - MW-5 15'-17'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		192	mg/Kg	1	250	76	70 - 130

Sample: 173545 - MW-5 15'-17'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0841	mg/Kg	13	0.10	84	70 - 130
4-BFB		0.0953	mg/Kg	13	0.10	95	70 - 130

Sample: 173546 - MW-5 20'-22'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		198	mg/Kg	1	250	79	70 - 130

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Sample: 173546 - MW-5 20'-22'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173547 - MW-5 25-27

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		177	mg/Kg	1	250	70	70 - 130

Sample: 173547 - MW-5 25-27

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.16	mg/Kg	13	0.10	89	70 - 130

Sample: 173548 - MW-5 30'-32'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	II	170	mg/Kg	1	250	68	70 - 130

<sup>11</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENTS

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Sample: 173548 - MW-5 30'-32'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12188 Date Analyzed: 6/20/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10317 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.23	mg/Kg	13	0.10	94	70 - 130

Sample: 173549 - MW-5 35'-37'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12072 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10329 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		190	mg/Kg	1	250	76	70 - 130

Sample: 173549 - MW-5 35'-37'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12188 Date Analyzed: 6/20/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10317 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173550 - MW-5 40'-42'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12072 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10329 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	12	142	mg/Kg	1	250	56	70 - 130

<sup>12</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENTS

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Sample: 173550 - MW-5 40'-42'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.25	mg/Kg	13	0.10	96	70 - 130

Sample: 173551 - MW-5 43-44'

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC12392      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: E 5035      Prep Batch: PB10603      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.013	mg/Kg	13	0.001
Toluene		<0.013	mg/Kg	13	0.001
Ethylbenzene		<0.013	mg/Kg	13	0.001
M,P,O-Xylene		<0.013	mg/Kg	13	0.001
Total BTEX		<0.013	mg/Kg	13	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.36	mg/Kg	1	0.10	104	72 - 128
4-BFB		1.21	mg/Kg	1	0.10	93	72 - 128

Sample: 173551 - MW-5 43-44'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		197	mg/Kg	1	250	78	70 - 130

Sample: 173551 - MW-5 43-44'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.17	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.21	mg/Kg	13	0.10	93	70 - 130

**Sample: 173552 - SB-1 0'-2'**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		181	mg/Kg	1	250	72	70 - 130

**Sample: 173552 - SB-1 0'-2'**

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.19	mg/Kg	13	0.10	91	70 - 130
4-BFB		1.29	mg/Kg	13	0.10	99	70 - 130

**Sample: 173553 - SB-1 5'-7'**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12072      Date Analyzed: 6/19/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10329      Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>13</sup>	171	mg/Kg	1	250	68	70 - 130

**Sample: 173553 - SB-1 5'-7'**

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12188      Date Analyzed: 6/20/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10317      Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.08	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.14	mg/Kg	13	0.10	87	70 - 130

Sample: 173554 - SB-1 10'-12'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12072 Date Analyzed: 6/19/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10329 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		244	mg/Kg	1	250	97	70 - 130

Sample: 173554 - SB-1 10'-12'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12188 Date Analyzed: 6/20/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10317 Date Prepared: 6/19/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.18	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173555 - SB-1 15-17'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12081 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10336 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		185	mg/Kg	1	250	74	70 - 130

Sample: 173555 - SB-1 15-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12188 Date Analyzed: 6/20/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10317 Date Prepared: 6/19/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0896	mg/Kg	13	0.10	89	70 - 130
4-BFB		0.1	mg/Kg	13	0.10	100	70 - 130

**Sample: 173556 - SB-1 20'-22'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12081 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10336 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		232	mg/Kg	1	250	92	70 - 130

**Sample: 173556 - SB-1 20'-22'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12271 Date Analyzed: 6/26/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10494 Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.389	mg/Kg	10	0.10	77	70 - 130
4-BFB	<sup>14</sup>	0.312	mg/Kg	10	0.10	62	70 - 130

**Sample: 173557 - SB-1 25'-27'**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12081 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10336 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>15</sup>	173	mg/Kg	1	250	69	70 - 130

<sup>14</sup>Elevated reporting limits due to use of 100ppm surrogate.

<sup>15</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

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Sample: 173557 - SB-1 25'-27'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.363	mg/Kg	10	0.10	72	70 - 130
4-BFB		0.366	mg/Kg	10	0.10	73	70 - 130

Sample: 173558 - SB-1 30'-32'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		201	mg/Kg	1	250	80	70 - 130

Sample: 173558 - SB-1 30'-32'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.352	mg/Kg	10	0.10	70	70 - 130
4-BFB		0.361	mg/Kg	10	0.10	72	70 - 130

Sample: 173559 - SB-1 35-37

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		186	mg/Kg	1	250	74	70 - 130

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Sample: 173559 - SB-1 35-37

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.383	mg/Kg	10	0.10	76	70 - 130
4-BFB		0.352	mg/Kg	10	0.10	70	70 - 130

Sample: 173560 - SB-1 40-42

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		219	mg/Kg	1	250	87	70 - 130

Sample: 173560 - SB-1 40-42

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.398	mg/Kg	10	0.10	79	70 - 130
4-BFB	<sup>16</sup>	0.326	mg/Kg	10	0.10	65	70 - 130

Sample: 173561 - SB-1 44'-46'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		195	mg/Kg	1	250	78	70 - 130

<sup>16</sup>Elevated reporting limits due to use of 100ppm surrogate.

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Sample: 173561 - SB-1 44'-46'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	<sup>17</sup>	0.347	mg/Kg	10	0.10	69	70 - 130
4-BFB		0.35	mg/Kg	10	0.10	70	70 - 130

Sample: 173562 - SB-2 0'-2'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>18</sup>	166	mg/Kg	1	250	66	70 - 130

Sample: 173562 - SB-2 0'-2'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.358	mg/Kg	10	0.10	72	70 - 130
4-BFB	<sup>19</sup>	0.338	mg/Kg	10	0.10	68	70 - 130

Sample: 173563 - SB-2 5'-7'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

<sup>17</sup>Elevated reporting limits due to use of 100ppm surrogate.

<sup>18</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

<sup>19</sup>Elevated reporting limits due to use of 100ppm surrogate.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		179	mg/Kg	1	250	71	70 - 130

Sample: 173563 - SB-2 5'-7'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.376	mg/Kg	10	0.10	75	70 - 130
4-BFB		0.365	mg/Kg	10	0.10	73	70 - 130

Sample: 173564 - SB-2 10'-12'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		193	mg/Kg	1	250	77	70 - 130

Sample: 173564 - SB-2 10'-12'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.875	mg/Kg	10	0.10	88	70 - 130
4-BFB		1	mg/Kg	10	0.10	100	70 - 130

Sample: 173565 - SB-2 15'-17'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		271	mg/Kg	1	250	108	70 - 130

Sample: 173565 - SB-2 15'-17'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12271      Date Analyzed: 6/26/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10494      Date Prepared: 6/26/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.763	mg/Kg	10	0.10	76	70 - 130
4-BFB		0.782	mg/Kg	10	0.10	78	70 - 130

Sample: 173566 - SB-2 20'-22'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		243	mg/Kg	1	250	97	70 - 130

Sample: 173566 - SB-2 20'-22'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.18	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.37	mg/Kg	13	0.10	105	70 - 130

Sample: 173567 - SB-2 25'-27'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		188	mg/Kg	1	250	75	70 - 130

Sample: 173567 - SB-2 25'-27'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	13	0.10	89	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173568 - SB-2 30'-32'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	20	162	mg/Kg	1	250	64	70 - 130

Sample: 173568 - SB-2 30'-32'

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

Sample: 173569 - SB-2 35-37

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

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Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		196	mg/Kg	1	250	78	70 - 130

Sample: 173569 - SB-2 35-37

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.18	mg/Kg	13	0.10	90	70 - 130
4-BFB		1.32	mg/Kg	13	0.10	101	70 - 130

Sample: 173570 - SB-2 40-42

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		206	mg/Kg	1	250	82	70 - 130

Sample: 173570 - SB-2 40-42

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.21	mg/Kg	13	0.10	93	70 - 130

Sample: 173571 - SB-2 43'

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

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Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		193	mg/Kg	1	250	77	70 - 130

**Sample: 173571 - SB-2 43'**

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.21	mg/Kg	13	0.10	93	70 - 130
4-BFB		1.3	mg/Kg	13	0.10	100	70 - 130

**Sample: 173572 - SB-2 45'**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		191	mg/Kg	1	250	76	70 - 130

**Sample: 173572 - SB-2 45'**

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC12189      Date Analyzed: 6/22/01  
Analyst: CG      Preparation Method: 5035      Prep Batch: PB10421      Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	13	0.10	88	70 - 130
4-BFB		1.28	mg/Kg	13	0.10	98	70 - 130

**Sample: 173573 - SB-3 0'-2'**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC12081      Date Analyzed: 6/20/01  
Analyst: JJ      Preparation Method: 3550 B      Prep Batch: PB10336      Date Prepared: 6/20/01

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Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		191	mg/Kg	1	250	76	70 - 130

**Sample: 173573 - SB-3 0'-2'**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	13	0.10	88	70 - 130
4-BFB		1.25	mg/Kg	13	0.10	96	70 - 130

**Sample: 173574 - SB-3 5-7**

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12081 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10336 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	21	155	mg/Kg	1	250	62	70 - 130

**Sample: 173574 - SB-3 5-7**

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.2	mg/Kg	13	0.10	92	70 - 130

<sup>21</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

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Sample: 173575 - SB-3 10-12

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>22</sup>	128	mg/Kg	1	250	51	70 - 130

Sample: 173575 - SB-3 10-12

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	13	0.10	88	70 - 130
4-BFB		1.38	mg/Kg	13	0.10	106	70 - 130

Sample: 173576 - SB-3 15'-17'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>23</sup>	172	mg/Kg	1	250	68	70 - 130

Sample: 173576 - SB-3 15'-17'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	13	0.10	83	70 - 130

Continued ...

<sup>22</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

<sup>23</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173577 - SB-3 20-22'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane	<sup>24</sup>	169	mg/Kg	1	250	67	70 - 130

Sample: 173577 - SB-3 20-22'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173578 - SB-3 25'-27'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		197	mg/Kg	1	250	78	70 - 130

Sample: 173578 - SB-3 25'-27'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

<sup>24</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	93	70 - 130

Sample: 173579 - SB-3 30'-32'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		213	mg/Kg	1	250	85	70 - 130

Sample: 173579 - SB-3 30'-32'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.1	mg/Kg	13	0.10	84	70 - 130
4-BFB		1.18	mg/Kg	13	0.10	90	70 - 130

Sample: 173580 - SB-3 35'-37'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		230	mg/Kg	1	250	92	70 - 130

Sample: 173580 - SB-3 35'-37'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	13	0.10	83	70 - 130
4-BFB		1.24	mg/Kg	13	0.10	95	70 - 130

Sample: 173581 - SB-3 40'-42'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		194	mg/Kg	1	250	77	70 - 130

Sample: 173581 - SB-3 40'-42'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.26	mg/Kg	13	0.10	96	70 - 130

Sample: 173582 - SB-3 45'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC12082 Date Analyzed: 6/20/01  
Analyst: JJ Preparation Method: 3550 B Prep Batch: PB10337 Date Prepared: 6/20/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		184	mg/Kg	1	250	73	70 - 130

Sample: 173582 - SB-3 45'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC12189 Date Analyzed: 6/22/01  
Analyst: CG Preparation Method: 5035 Prep Batch: PB10421 Date Prepared: 6/22/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.3	mg/Kg	13	0.10

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.12	mg/Kg	13	0.10	86	70 - 130
4-BFB		1.22	mg/Kg	13	0.10	93	70 - 130

## Quality Control Report Method Blank

Method Blank      QCBatch: QC12027

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		<0	mg/Kg	1	250	100	70 - 130

Method Blank      QCBatch: QC12050

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.013	mg/Kg	0.001
Toluene		<0.013	mg/Kg	0.001
Ethylbenzene		<0.013	mg/Kg	0.001
M,P,O-Xylene		<0.013	mg/Kg	0.001
Total BTEX		<0.013	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	88	72 - 128
4-BFB		1.29	mg/Kg	13	0.10	99	72 - 128

Method Blank      QCBatch: QC12052

Param	Flag	Results	Units	Reporting Limit
GRO		1.77	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.07	mg/Kg	13	0.10	82	70 - 130
4-BFB		1.32	mg/Kg	13	0.10	101	70 - 130

Method Blank      QCBatch: QC12071

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		<0	mg/Kg	1	250	89	70 - 130

Method Blank      QCBatch: QC12072

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		<0	mg/Kg	1	250	90	70 - 130

Method Blank      QCBatch: QC12081

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		<0	mg/Kg	1	250	91	70 - 130

Method Blank      QCBatch: QC12082

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		<0	mg/Kg	1	250	85	70 - 130

Method Blank      QCBatch: QC12172

Param	Flag	Results	Units	Reporting Limit
GRO		1.77	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	13	0.10	87	70 - 130
4-BFB		1.29	mg/Kg	13	0.10	99	70 - 130

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Method Blank      QCBatch: QC12188

Param	Flag	Results	Units	Reporting Limit
GRO		1.77	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	13	0.10	85	70 - 130
4-BFB		1.29	mg/Kg	13	0.10	99	70 - 130

Method Blank      QCBatch: QC12189

Param	Flag	Results	Units	Reporting Limit
GRO		1.77	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.23	mg/Kg	13	0.10	94	70 - 130
4-BFB		1.4	mg/Kg	13	0.10	107	70 - 130

Method Blank      QCBatch: QC12271

Param	Flag	Results	Units	Reporting Limit
GRO		1.77	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.975	mg/Kg	10	0.10	97	70 - 130
4-BFB		1.04	mg/Kg	10	0.10	104	70 - 130

Method Blank      QCBatch: QC12392

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.013	mg/Kg	0.001
Toluene		<0.013	mg/Kg	0.001
Ethylbenzene		<0.013	mg/Kg	0.001
M,P,O-Xylene		<0.013	mg/Kg	0.001
Total BTEX		<0.013	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.24	mg/Kg	13	0.10	95	72 - 128

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		1.16	mg/Kg	13	0.10	89	72 - 128

## Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes      QCBatch: QC12027

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
	DRO	290			250				70 - 130	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Octane	285	253	mg/Kg	1	250	114	101	70 - 130

Laboratory Control Spikes      QCBatch: QC12050

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.26	1.29	mg/Kg	1	0.10	<0.013	1260	2	80 - 120	20
Benzene	1.26	1.28	mg/Kg	1	0.10	<0.013	1260	1	80 - 120	20
Toluene	1.2	1.23	mg/Kg	1	0.10	<0.013	1200	2	80 - 120	20
Ethylbenzene	1.21	1.23	mg/Kg	1	0.10	<0.013	1210	1	80 - 120	20
M,P,O-Xylene	3.63	3.68	mg/Kg	1	0.30	<0.013	1210	1	80 - 120	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.31	1.29	mg/Kg	13	0.10	100	99	72 - 128
4-BFB	1.21	1.22	mg/Kg	13	0.10	92	94	72 - 128

Laboratory Control Spikes      QCBatch: QC12052

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	12.4	12	mg/Kg	13	1	1.77	93	3	70 - 130	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.095	0.0984	mg/Kg	13	0.10	95	98	70 - 130
4-BFB	0.0989	0.099	mg/Kg	13	0.10	98	99	70 - 130

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Laboratory Control Spikes

QCBatch: QC12071

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount				Limit	
DRO	290	290	mg/Kg	1	250	<50	101	11	70 - 130	20

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

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
n-Octane	Result	Result			Amount	% Rec	% Rec	Limits
n-Octane	210	205	mg/Kg	1	250	84	82	70 - 130

Laboratory Control Spikes

QCBatch: QC12072

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
Param	Result	Result			Amount				Limit	
DRO	290	290	mg/Kg	1	250	<50	112	2	70 - 130	20

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

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
Surrogate	Result	Result			Amount	% Rec	% Rec	Limits
n-Octane	235	236	mg/Kg	1	250	94	94	70 - 130

Laboratory Control Spikes

QCBatch: QC12081

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
Param	Result	Result			Amount				Limit	
DRO	290	290	mg/Kg	1	250	<50	102	4	70 - 130	20

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

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
Surrogate	Result	Result			Amount	% Rec	% Rec	Limits
n-Octane	204	210	mg/Kg	1	250	81	84	70 - 130

Laboratory Control Spikes

QCBatch: QC12082

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
Param	Result	Result			Amount				Limit	
DRO	290	290	mg/Kg	1	250	<50	104	1	70 - 130	20

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

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
Surrogate	Result	Result			Amount	% Rec	% Rec	Limits
n-Octane	210	222	mg/Kg	1	250	84	88	70 - 130

Laboratory Control Spikes

QCBatch: QC12172

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	12.4	12	mg/Kg	13	1	1.77	102	1	70 - 130	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.101	0.0999	mg/Kg	1	0.10	101	99	70 - 130
4-BFB	0.104	0.1054	mg/Kg	1	0.10	104	105	70 - 130

Laboratory Control Spikes

QCBatch: QC12188

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	12.4	12	mg/Kg	13	1	1.77	94	3	70 - 130	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0835	0.1051	mg/Kg	13	0.10	83	105	70 - 130
4-BFB	0.0972	0.0999	mg/Kg	13	0.10	97	99	70 - 130

Laboratory Control Spikes

QCBatch: QC12189

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	12.4	12	mg/Kg	13	1	1.77	96	2	70 - 130	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0861	0.0858	mg/Kg	13	0.10	86	85	70 - 130
4-BFB	0.098	0.0996	mg/Kg	13	0.10	98	99	70 - 130

Laboratory Control Spikes

QCBatch: QC12271

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	12.4	12	mg/Kg	10	1	1.77	83	1	70 - 130	20

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

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Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0877	0.0861	mg/Kg	10	0.10	87	86	70 - 130
4-BFB	0.0961	0.0948	mg/Kg	10	0.10	96	94	70 - 130

Laboratory Control Spikes      QCBatch: QC12392

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.25	1.31	mg/Kg	13	0.10	<0.013	96	4	80 - 120	20
Benzene	1.23	1.28	mg/Kg	13	0.10	<0.013	94	3	80 - 120	20
Toluene	1.16	1.22	mg/Kg	13	0.10	<0.013	89	5	80 - 120	20
Ethylbenzene	1.17	1.23	mg/Kg	13	0.10	<0.013	90	4	80 - 120	20
M,P,O-Xylene	3.55	3.7	mg/Kg	13	0.30	<0.013	91	4	80 - 120	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	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.26	1.29	mg/Kg	13	0.10	96	99	72 - 128
4-BFB	1.2	1.23	mg/Kg	13	0.10	92	94	72 - 128

**Quality Control Report**  
**Matrix Spikes and Duplicate Spikes**

Matrix Spikes      QCBatch: QC12027

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	< 50	< 50	mg/Kg	1	250	<50	122	11	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Octane	255	236	mg/Kg	1	250	102	94	70 - 130

Matrix Spikes      QCBatch: QC12050

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	1.44	1.5	mg/Kg	13	0.10	<0.013	107	4	80 - 120	20
Toluene	1.49	1.5	mg/Kg	13	0.10	<0.013	108	0	80 - 120	20
Ethylbenzene	2.3	2.28	mg/Kg	13	0.10	1.03	98	1	80 - 120	20
M,P,O-Xylene	6.02	6.03	mg/Kg	13	0.30	2.17	99	0	80 - 120	20

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

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Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.5	1.56	mg/Kg	13	0.10	115	120	72 - 128
4-BFB	1.28	1.63	mg/Kg	13	0.10	98	123	72 - 128

Matrix Spikes      QCBatch: QC12052

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	2.95	2.46	mg/Kg	13	0.10	<1.3	226	13	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.1	1.14	mg/Kg	13	0.10	84	87	70 - 130
4-BFB	1.28	1.28	mg/Kg	13	0.10	98	98	70 - 130

Matrix Spikes      QCBatch: QC12071

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	< 50	< 50	mg/Kg	1	250	<50	105	0	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Octane	234	236	mg/Kg	1	250	93	94	70 - 130

Matrix Spikes      QCBatch: QC12072

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	< 50	< 50	mg/Kg	1	250	<50	104	2	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Octane	218	216	mg/Kg	1	250	87	86	70 - 130

Matrix Spikes      QCBatch: QC12081

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Param	MS	MSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount					
DRO	< 50	< 50	mg/Kg	1	250	<50	83	1	70 - 130	20

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

Surrogate	MS	MSD	Units	Dilution	Spike	MS	MSD	Recovery
	Result	Result			Amount			
n-Octane	190	178	mg/Kg	1	250	76	71	70 - 130

Matrix Spikes      QCBatch: QC12082

Param	MS	MSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount					
DRO	< 50	< 50	mg/Kg	1	250	<50	71	4	70 - 130	20

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

Surrogate	MS	MSD	Units	Dilution	Spike	MS	MSD	Recovery
	Result	Result			Amount			
n-Octane	<sup>25</sup> 157	<sup>26</sup> 159	mg/Kg	1	250	62	63	70 - 130

Matrix Spikes      QCBatch: QC12172

Param	MS	MSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount					
GRO	2.95	2.46	mg/Kg	13	1	6.56	164	15	70 - 130	20

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

Surrogate	MS	MSD	Units	Dilution	Spike	MS	MSD	Recovery
	Result	Result			Amount			
TFT	1.17	1.14	mg/Kg	13	0.10	90	87	70 - 130
4-BFB	1.24	1.25	mg/Kg	13	0.10	95	96	70 - 130

Matrix Spikes      QCBatch: QC12188

Param	MS	MSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount					
GRO	2.95	2.46	mg/Kg	13	0.10	<1.3	226	5	70 - 130	20

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

<sup>25</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

<sup>26</sup>LOW SURROGATE RECOVERY DUE TO METHOD SAMPLING REQUIREMENT

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Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.06	1.11	mg/Kg	13	0.10	81	85	70 - 130
4-BFB	1.18	1.2	mg/Kg	13	0.10	90	92	70 - 130

Matrix Spikes      QCBatch: QC12189

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	2.95	2.46	mg/Kg	13	1	<1.3	226	1	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.35	1.36	mg/Kg	13	0.10	103	104	70 - 130
4-BFB	1.25	1.27	mg/Kg	13	0.10	96	97	70 - 130

Matrix Spikes      QCBatch: QC12271

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	4.13	4.39	mg/Kg	10	1	<1	41	6	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	<sup>27</sup> 0.0566	<sup>28</sup> 0.0556	mg/Kg	10	0.10	56	55	70 - 130
4-BFB	<sup>29</sup> 0.0648	<sup>30</sup> 0.0692	mg/Kg	10	0.10	64	69	70 - 130

### Quality Control Report Continuing Calibration Verification Standards

CCV (1)      QCBatch: QC12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	256	102	75 - 125	6/18/01
n-Octane		mg/Kg	250	245	98	75 - 125	6/18/01

<sup>27</sup>Elevated reporting limits due to use of 100ppm surrogate.

<sup>28</sup>Elevated reporting limits due to use of 100ppm surrogate.

<sup>29</sup>Elevated reporting limits due to use of 100ppm surrogate.

<sup>30</sup>Elevated reporting limits due to use of 100ppm surrogate.

CCV (2) QCBatch: QC12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	108	75 - 125	6/18/01
n-Octane		mg/Kg	250	246	98	75 - 125	6/18/01

CCV (3) QCBatch: QC12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	277	110	75 - 125	6/18/01
n-Octane		mg/Kg	250	243	97	75 - 125	6/18/01

ICV (1) QCBatch: QC12027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	278	111	75 - 125	6/18/01
n-Octane		mg/Kg	250	247	98	75 - 125	6/18/01

CCV (1) QCBatch: QC12050

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.106	106	85 - 115	6/19/01
Benzene		mg/Kg	0.10	0.104	104	85 - 115	6/19/01
Toluene		mg/Kg	0.10	0.104	104	85 - 115	6/19/01
Ethylbenzene		mg/Kg	0.10	0.103	103	85 - 115	6/19/01
M,P,O-Xylene		mg/Kg	0.30	0.308	102	85 - 115	6/19/01

ICV (1) QCBatch: QC12050

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.0989	98	85 - 115	6/19/01
Benzene		mg/Kg	0.10	0.0985	98	85 - 115	6/19/01
Toluene		mg/Kg	0.10	0.0953	95	85 - 115	6/19/01
Ethylbenzene		mg/Kg	0.10	0.0958	95	85 - 115	6/19/01
M,P,O-Xylene		mg/Kg	0.30	0.284	94	85 - 115	6/19/01

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CCV (1) QCBatch: QC12052

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9335	93	75 - 125	6/19/01

CCV (2) QCBatch: QC12052

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9606	96	75 - 125	6/19/01

ICV (1) QCBatch: QC12052

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9314	93	75 - 125	6/19/01

CCV (1) QCBatch: QC12071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	268	107	75 - 125	6/19/01
n-Octane		mg/Kg	250	242	96	75 - 125	6/19/01

CCV (2) QCBatch: QC12071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	103	75 - 125	6/19/01
n-Octane		mg/Kg	250	238	95	75 - 125	6/19/01

CCV (3) QCBatch: QC12071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	101	75 - 125	6/19/01
n-Octane		mg/Kg	250	239	95	75 - 125	6/19/01

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ICV (1) QCBatch: QC12071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	103	75 - 125	6/19/01
n-Octane		mg/Kg	250	234	93	75 - 125	6/19/01

CCV (1) QCBatch: QC12072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	270	108	75 - 125	6/19/01
n-Octane		mg/Kg	250	250	100	75 - 125	6/19/01

CCV (2) QCBatch: QC12072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	276	110	75 - 125	6/19/01
n-Octane		mg/Kg	250	256	102	75 - 125	6/19/01

CCV (3) QCBatch: QC12072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	283	113	75 - 125	6/19/01
n-Octane		mg/Kg	250	234	93	75 - 125	6/19/01

ICV (1) QCBatch: QC12072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	275	110	75 - 125	6/19/01
n-Octane		mg/Kg	250	242	96	75 - 125	6/19/01

CCV (1) QCBatch: QC12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	6/20/01

Continued ...

...Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
n-Octane		mg/Kg	250	220	88	75 - 125	6/20/01

CCV (2) QCBatch: QC12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	103	75 - 125	6/20/01
n-Octane		mg/Kg	250	242	96	75 - 125	6/20/01

CCV (3) QCBatch: QC12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	262	104	75 - 125	6/20/01
n-Octane		mg/Kg	250	216	86	75 - 125	6/20/01

ICV (1) QCBatch: QC12081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	256	102	75 - 125	6/20/01
n-Octane		mg/Kg	250	220	88	75 - 125	6/20/01

CCV (1) QCBatch: QC12082

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	277	110	75 - 125	6/20/01
n-Octane		mg/Kg	250	227	90	75 - 125	6/20/01

CCV (2) QCBatch: QC12082

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	261	104	75 - 125	6/20/01
n-Octane		mg/Kg	250	241	96	75 - 125	6/20/01

ICV (1) QCBatch: QC12082

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	6/20/01
n-Octane		mg/Kg	250	224	89	75 - 125	6/20/01

CCV (1) QCBatch: QC12172

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.89	89	75 - 125	6/21/01

CCV (2) QCBatch: QC12172

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9314	93	75 - 125	6/21/01

ICV (1) QCBatch: QC12172

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.906	90	75 - 125	6/21/01

CCV (1) QCBatch: QC12188

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.8725	87	75 - 125	6/20/01

CCV (2) QCBatch: QC12188

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.8782	87	75 - 125	6/20/01

ICV (1) QCBatch: QC12188

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.99	99	75 - 125	6/20/01

CCV (1) QCBatch: QC12189

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.01	101	75 - 125	6/22/01

CCV (2) QCBatch: QC12189

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9785	97	75 - 125	6/22/01

ICV (1) QCBatch: QC12189

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9198	91	75 - 125	6/22/01

CCV (1) QCBatch: QC12271

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.877	87	75 - 125	6/26/01

CCV (2) QCBatch: QC12271

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.951	95	75 - 125	6/26/01

ICV (1) QCBatch: QC12271

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EOT 2056C

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TNM 98-05

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.905	90	75 - 125	6/26/01

CCV (1) QCBatch: QC12392

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.096	96	85 - 115	6/20/01
Benzene		mg/Kg	0.10	0.095	95	85 - 115	6/20/01
Toluene		mg/Kg	0.10	0.0904	90	85 - 115	6/20/01
Ethylbenzene		mg/Kg	0.10	0.0892	89	85 - 115	6/20/01
M,P,O-Xylene		mg/Kg	0.30	0.2667	88	85 - 115	6/20/01

ICV (1) QCBatch: QC12392

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.0968	96	85 - 115	6/20/01
Benzene		mg/Kg	0.10	0.0962	96	85 - 115	6/20/01
Toluene		mg/Kg	0.10	0.091	91	85 - 115	6/20/01
Ethylbenzene		mg/Kg	0.10	0.0915	91	85 - 115	6/20/01
M,P,O-Xylene		mg/Kg	0.30	0.273	91	85 - 115	6/20/01

173497-583

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# TraceAnalysis, Inc.

101 Aberdeen Avenue, Ste. 9  
 Lubbock, Texas 79424  
 Tel (806) 794-1296  
 Fax (806) 794-1298  
 1 (800) 378-1296

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Lab Order ID # A01061812  
 Tel (915) 585-3443  
 Fax (915) 585-4944  
 1 (888) 588-3443

Phone Name: Ergo J  
 Street, City, Zip: 2540 N Marano Hlls NM 87501

Fax #: 505 393-4721

### ANALYSIS REQUEST

(Circle or Specify Method No.)

Hold	Turn Around Time if different from standard
BOD, TSS, PH	Pesticides B081A/608
PCBs 8082/608	GCMs Semi. Vol. 8270C/625
GCMs Vol. 8260B/624	GCMs Vol. 8260B/625
RCI	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 8270C	TPH 8270C
BTEx 8021B/602	BTEx 8021B/602
MTEB 8021B/602	MTEB 8021B/602
	TPH 8270C 8015 D20/602

### REMARKS:

1/5

### LAB USE

ONLYDate: 1/15/01Time: 1733Received by: C. H. BiggsDate: 1-15-01Time: 1733Quaranteed by: TraceAnalysis, Inc. Date: 1/15/01 Time: 1733Received at Laboratory by: C. H. BiggsDate: 1/15/01Time: 1733

Check If Special Reporting  
 Limits Are Needed

Headspace  
 Log-in Review

Temp

Inact. Y/N

Date: 1/15/01

Time: 1733

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

Carrier # MA





11 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (806) 378-1296

# TraceAnalysis, Inc.

155 Mc Culloch Suite H  
El Paso, Texas 79932  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (986) 586-3443

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Phone #:	505 393-9882	LAB Order ID #:	740106112											
Fax #:	505 252-4201													
Sampled from above)	<u>Eddy</u>	Project Name:	<u>TM 98-05</u>											
ct #:	<u>EOT 2056C</u>	Sampler Signature:	<u>Trace</u>											
ct Location:	<u>Eddy County, NM</u>													
AB #	FIELD CODE	# CONTAINERS	VOLUME/AMOUNT	WATER	SOL	AIR	SLUDGE	MATRIX	PRESERVATIVE METHOD	SAMPLING	DATE	TIME		REMARKS:
3 USE ONLY														
1530	MW 3 55-56'	1	402		X									
31	MW 4 0-2'													
32	MW 4 5-7'													
33	MW 4 10-12'													
34	MW 4 15-17'													
35	MW 4 20-22'													
36	MW 4 25-27'													
37	MW 4 30-32'													
38	MW 4 35-37'													
39	MW 4 40-42'													
40	MW 4 45-47'													
Inquished by:	Date:	Time:	Received by:	Date:	Time:	LAB USE ONLY								
Inquished by:	Date:	Time:	Received by:	Date:	Time:	Inact	Y / N							
Inquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:	Headspace	Y / N							
Inquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:	Log In Review	Y / N							
Initial of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.														
Check If Special Reporting Limits Are Needed <input type="checkbox"/>														
Carrier # _____														

01 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 794-1294  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1298

# TraceAnalysis, Inc.

pany Name: E.T.G.I.

Address: 2540 W Makland HBSR 88240

act Person: Ken Dunton

ce to:  
Referent from above) EO IT

ct #: 607 2952 C

ct Location: Lea County, NM

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

## CHAIN-OFF-CUSTODY AND ANALYSIS REQUEST

401061812

LAB Order ID #

### ANALYSIS REQUEST

(Circle or Specify Method No.)

Turn Around Time if different from standard

Hold

BOD, TSS, PH

Pesticides B081A/608

PCBs 8082/608

GC/MS Semi. Vol. 8270C/625

GC/MS Vol. 8260B/624

RCI

TCLP Pesticides

TCLP Semi Volatiles

TCLP Volatiles

Total Metals Ag As Ba Cd Cr Pb Se Hg

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCPL Volatiles

TCPL Semi Volatiles

TCPL Pesticides

TCPL Volatiles

PCBs 8082/608

GC/MS Semi. Vol. 8270C/625

GC/MS Vol. 8260B/624

RCI

TCLP Pesticides

TCLP Semi Volatiles

TCLP Volatiles

Total Metals Ag As Ba Cd Cr Pb Se Hg

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCPL Volatiles

TCPL Semi Volatiles

TCPL Pesticides

TCPL Volatiles

PCBs 8082/608

GC/MS Semi. Vol. 8270C/625

GC/MS Vol. 8260B/624

RCI

TCLP Pesticides

TCLP Semi Volatiles

TCLP Volatiles

Total Metals Ag As Ba Cd Cr Pb Se Hg

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

TPH 4005 ~~4005~~ 8015 DR0/625

PAH 8270C

MTE 8021B/602

BTEx 8021B/602

# TraceAnalysis, Inc.

01 Aberdeen Avenue, Ste. 9  
 Lubbock, Texas 794-1294  
 Tel (806) 794-1296  
 Fax (806) 794-1298  
 1 (800) 378-1296

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Analyst ID # Aholae/18/2Sample Name: C. T. G. E.Address: 540 W MARSHAL ST STE 100City: LubbockState: TXZip: 79401Phone #: (505) 392-4882Fax #: (606) 392-4701Date Sampled: 8/25/05Project Name: 7/11/05Date Received: 8/25/05Sampler Signature: Jane CaseDate Analyzed: 8/25/05Analyst Signature: Jane CaseDate Disposed: 8/25/05Disposal Method: LandfillDate Shipped: 8/25/05Shipment Method: UPSDate Received by Lab: 8/25/05Received by Lab: John H. CaseDate Analyzed: 8/25/05Analyst: John H. CaseDate Disposed: 8/25/05Disposal Method: LandfillDate Shipped: 8/25/05Shipment Method: UPSDate Received by Lab: 8/25/05Received by Lab: John H. CaseDate Analyzed: 8/25/05Analyst: John H. CaseDate Disposed: 8/25/05Disposal Method: LandfillDate Shipped: 8/25/05Shipment Method: UPSDate Received by Lab: 8/25/05Received by Lab: John H. CaseDate Analyzed: 8/25/05Analyst: John H. CaseDate Disposed: 8/25/05Disposal Method: LandfillDate Shipped: 8/25/05Shipment Method: UPSDate Received by Lab: 8/25/05Received by Lab: John H. CaseDate Analyzed: 8/25/05Analyst: John H. CaseDate Disposed: 8/25/05Disposal Method: LandfillDate Shipped: 8/25/05Shipment Method: UPS

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

## ANALYSIS REQUEST

(Circle or Specify Method No.)

Turn Around Time if different from standard

Hold

BOD, TSS, PH

Pesticides 8081A/608

PCBs 8082/608

GC/MS Semi Vol. B270C/625

GC/MS Vol. 8260B/624

RCI

TCP Pesticides

TCP Semi Volatiles

TCP Volatiles

Total Metals Ag As Ba Cd Cr Pb Se Hg

Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007

PAH 8270C

TPH 4-600

BTEx 8021B/602

MTBE 8021B/602

NaOH

H<sub>2</sub>SO<sub>4</sub>HNO<sub>3</sub>

HCl

SLUDGE

AIR

SOIL

WATER

Volume/Amount

# CONTAINERS

MATRIX

PRESERVATIVE

METHOD

SAMPLING

DATE

TIME

ICP

None

Y/00

1000

1005

1010

1025

1032

1040

1052

1100

1110

1120

1200

1200

1200

1200

REMARKS:

**LAB USE****ONLY**

Inact

Y/N

Headspace

Y/N

 Check If Special Reporting  
 Limits Are Needed

Carrier #

901 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1298

# TraceAnalysis, Inc.

155 McCulcheon, Suite H  
El Paso, Texas 79932  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 586-3443

L765

Phone #: 805-392-4882

Fax #: (505) 392-4730

Project Name:

TPH 414-05805 8015 DR0/GC/CD

Fax #:

TIM 98-05

Sampler Signature:

*Jeronia Ladd*

## ANALYSIS REQUEST

(Circle or Specify Method No.)

PCBs 8082/608	GC/MS Semi Vol. 8270C/625	GC/MS Vol. 8260B/624	RCI	TCLP Pesticides	TCLP Semivolatile	TCLP Volatiles	Total Metals Ag As Ba Cd Cr Pb Se Hg	PAH 8270C	TPH 414-05805 8015 DR0/GC/CD	MTEB 8021B/602	BTEx 8021B/602	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	GC/MS Vol. 8260B/624	GC/MS Semi Vol. 8270C/625	Pesticides 8081A/608	BOD, TSS, pH	Hold
---------------	---------------------------	----------------------	-----	-----------------	-------------------	----------------	--------------------------------------	-----------	------------------------------	----------------	----------------	---	----------------------	---------------------------	----------------------	--------------	------

Inquired by:

Date:

Time:

Received by:

Date:

Time:

Received at Laboratory by:

Date:

Time:

Log-in Review

Carrier #

ice to:

ferent from above)

ECT

ect #:

ECT 2052 C

ect Location:

Lea County, NM

ield Code

# CONTAINERS

VOLUME/AMOUNT

MATRIX

SAMPLING

DATE

TIME

PRESERVATIVE

METHOD

SLUDGE

AIR

SOLI

WATER

HCl

HNO<sub>3</sub>

H<sub>2</sub>SO<sub>4</sub>

NaOH

ICE

NONE

TPH 414-05805 8015 DR0/GC/CD

MTEB 8021B/602

BTEx 8021B/602

Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007

TCLP Volatiles

TCLP Semivolatile

TCLP Pesticides

PCBs 8082/608

GC/MS Vol. 8260B/624

GC/MS Semi Vol. 8270C/625

Pesticides 8081A/608

BOD, TSS, pH

Hold

Turn Around Time if different from standard

Page 78 of 78

REMARKS:

## LAB USE

ONLY

Intact Y/N

Headspace Y/N

Temp

Log-In Review

Carrier #

Check If Special Reporting  
Limits Are Needed

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

701 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1296  
1 (800) 378-1296

# TraceAnalysis, Inc.

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

ipany Name: Ergo  
ress: (Street, City, Zip)  
2540 W MARLAND AVE NM

ct Person: Ken Durst  
ice to: (different from above) E011

ct #: 507 20562  
ct Location: El Paso County NM

## CHAIN-OFF-CUSTODY AND ANALYSIS REQUEST

Lab Order ID # A010612

### ANALYSIS REQUEST

(Circle or Specify Method No.)

Hold
Turn Around Time if different from standard
BOD, TSS, PH
Pesticides 8081/A/608
PCBs 8082/B/608
GC/MS Semi. Vol. 8270C/625
GC/MS Vol. 8260B/624
RCI
TCLP Pesticides
TCLP Semivolatiles
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
TPH 406-A-1005 <u>8015-D120-G12</u>
BTEX 8021B/602
MTEB 8021B/602
PAH 8270C

### REMARKS:

### LAB USE ONLY

Inact.

Headspace

Log In Review

Check If Special Reporting  
Limits Are Needed

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

AB #	FIELD CODE	MATRIX	PRESERVATIVE METHOD	SAMPLING TIME	DATE	# CONTAINERS		Volume/Amount	WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	PAH 8270C
						CONTAINER	AMOUNT											
574	SB 3 5-2	1	408	10:14	1/355													
75	SB 3 10-12				1/355													
76	SB -3 15-17				1/404													
77	SB -3 20-22				1/415													
78	SB -3 25-27				1/427													
79	SB -3 30-32				1/441													
80	SB -3 35-37				1/451													
81	SB -3 40-44				1/460													
82	SB -3 45				1/509													
83	du 7111111111	3	402		6/15/1608													

Published by: Shawnae L-1501 1700 Received by: C. Webb-J 1793  
Date: Time: Date: Time: Received by: Date: Time:

Quashed by: / Date: Time: Received at Laboratory by: / Date: Time:

Quashed by: / Date: Time: Received at Laboratory by: / Date: Time:

Carrier #

**AnalySys**  
INC.

Client: Environmental Tech Group  
 Attn: Ken Dutton  
 Address: 2540 W. Marland  
 Hobbs,  
 NM 88240  
 Phone: 505 397-4882 FAX: 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	--	mg/Kg	--	--	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	--		--	--	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	J	10	127.7	116.6	113.3

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Respectfully Submitted,

*Richard Laster*

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL, B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**QnalySinc**

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-6 (38-40')

Report# /Lab ID#: 128674  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	109	50-150	---
p-Terphenyl	8015 mod.	87.9	50-150	---
1,2-Dichloroethane-d4	8260b	79.8	65-115	---
Toluene-d8	8260b	76.1	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 7840408  
(512) 444-5896 • FAX (512) 447-4766

## Exceptions Report:

Report #/Lab ID#: 128674 Matrix: soil  
Client: Environmental Tech Group Attn: Ken Dutton  
Project ID: TNM-98-05  
Sample Name: MW-6 (38-40)

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

### Sample Bottles & Preservation

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

### J flag Discussion

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:

**AnalySys**

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
 2209 N. Padre Island Dr., Corpus Christi, TX 78408  
 (512) 444-5896 • FAX (512) 447-4766

**Client:** Environmental Tech Group  
**Attn:** Ken Dutton  
**Address:** 2540 W. Marland  
 Hobbs,  
 NM 88240  
**Phone:** 505 397-4882    **FAX:** 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.
TPH by GC (as diesel-ext)	--	---	---	--	04/29/02	3540
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.
Volatile organics-8260b/BTEX	---	---	---	05/01/02	8260b	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b

**QUALITY ASSURANCE DATA<sup>1</sup>**

	Data	Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
	---	---	9.2	108.7	87.1	108.9
	---	---	---	---	---	---
	5	99.7	99.7	76.6	76.6	101
	---	---	---	---	---	---
	11.9	116.2	116.2	106	106	101.3
	1.6	88.8	88.8	94.5	94.5	91.2
	2.6	94.3	94.3	100.5	100.5	96.7
	1.6	87.8	87.8	93.2	93.2	90.5
	10	127.7	127.7	116.6	116.6	113.3

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL, B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

*Richard Laster*  
Richard Laster

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Respectfully Submitted,

**EnvironS**  
Inc.

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-048  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-6 (43-45')

Report# /Lab ID#: 128675  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod. 8015 mod.	105 79.7	50-150 50-150	---
p-Terphenyl				---
1,2-Dichloroethane-d4	8260b	78.1	65-115	---
Toluene-d8	8260b	82.2	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

## Exceptions Report:

Report #/Lab ID#: 128675	Matrix: soil
Client: Environmental Tech Group	Attn: Ken Dutton
Project ID: TNM-98-05	
Sample Name: MW-6 (43-45)	

### Sample Temperature/Condition $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is  $\leq 6^{\circ}\text{C}$ . Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

### Sample Bottles & Preservation

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

### J flag Discussion

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fraction noise.)

### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:

Client: Environmental Tech Group  
 Attn: Ken Dutton  
 Address: 2540 W. Marland  
 Hobbs,  
 NM 88240  
 Phone: 505 397-4882 FAX: 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	---	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---	---	---	---	05/01/02	8260b	---	---	---	---	---
Benzene	>20	µg/Kg	20	<20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	>20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	>20	µg/Kg	20	<20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	>20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	>20	µg/Kg	20	<20	05/01/02	8260b	J	10	127.7	116.6	113.3

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Respectfully Submitted,

*Richard Laster*  
 Richard Laster

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**Environmental Services**

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-08  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-7 (3840')

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	101	50-150	---
p-Terphenyl	8015 mod.	82.5	50-150	---
1,2-Dichloroethane-d4	8260b	81.8	65-115	---
Toluene-d8	8260b	82.3	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Report# / Lab ID#: 128676  
Sample Matrix: soil

## Exceptions Report:

Report #/Lab ID#:128676	Matrix: soil
Client: Environmental Tech Group	Attn: Ken Dutton
Project ID: TNM-98-05	
Sample Name: MW-7 (38-40)	

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

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### J flag Discussion

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### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**AnalySys Inc.**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78408  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton  
Address: 2540 W. Maryland  
Hobbs,  
Phone: 505 397-4882 FAX: 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	mg/Kg	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---	µg/Kg	---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	J	10	127.7	116.6	113.3

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Respectfully Submitted,

*Richard Laster*

Richard Laster

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**Environmental Sciences Inc.**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-008  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-7 (43-45)

Report# /Lab ID#: 128677  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod. 8015 mod.	96.7 74.4	50-150 50-150	---
p-Terphenyl				---
1,2-Dichloroethane-d4	8260b	78.4	65-115	---
Toluene-d8	8260b	79.7	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

## Exceptions Report:

Report #/Lab ID#: 128677	Matrix: soil	Attn: Ken Dutton
Client: Environmental Tech Group		
Project ID: TNM-98-05		
Sample Name: MW-7 (43-45')		

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

### Sample Bottles & Preservation

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

### J flag Discussion

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg., the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:

**AnalySys**  
Inc.

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
 2209 N. Padre Island Dr., Corpus Christi, TX 78408  
 (512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
 Attn: Ken Dutton  
 Address: 2540 W. Marland  
 Hobbs,  
 NM 88240  
 Phone: 505 397-4882 FAX: 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	---	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---		---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	>20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	<20	µg/Kg	20	>20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	<20	µg/Kg	20	>20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	<20	µg/Kg	20	>20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	<20	µg/Kg	20	>20	05/01/02	8260b	J	10	127.7	116.6	113.3

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*Richard Laster*

Richard Laster

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Report#Lab ID#: 128678	Report Date: 05/03/02
Project ID: TNM-98-05	
Sample Name: MW-8 (33-35')	
Sample Matrix: soil	
Date Received: 04/26/2002	Time: 10:30
Date Sampled: 04/23/2002	Time: 15:02

**QUALITY ASSURANCE DATA<sup>1</sup>**

# FINAL YIELDS INC.

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-0408  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-8 (33-35')

Report# /Lab ID#: 128678  
Sample Matrix: soil

## REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	101	50-150	---
p-Terphenyl	8015 mod.	80.3	50-150	---
1,2-Dichloroethane-d4	8260b	99.2	65-115	---
Toluene-d8	8260b	103	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

## Exceptions Report:

Report #/Lab ID#: 128678	Matrix: soil
Client: Environmental Tech Group	Attn: Ken Dutton
Project ID: TNM-98-05	
Sample Name: MW-8 (33-35)	

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

### Sample Bottles & Preservation

- Sample received in appropriate container(s) and appear to be appropriately preserved.
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### J flag Discussion

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Client:** Environmental Tech Group  
**Attn:** Ken Dutton  
**Address:** 2540 W. Maryland  
 Hobbs,  
 NM 88240  
**Phone:** 505 397-4882 **FAX:** 505 397-4701

**REPORT OF ANALYSIS**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	---	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---	---	---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	J	10	127.7	116.6	113.3

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Respectfully Submitted,

*Richard Laster*  
Richard Laster

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**Environmental Services**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78040-0408  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-8 (43-45')

Report# / Lab ID #: 128679  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	108	50-150	---
p-Terphenyl	8015 mod.	83.8	50-150	---
1,2-Dichloroethane-d4	8260b	78	65-115	---
Toluene-d8	8260b	72.4	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

## Exceptions Report:

Report #/Lab ID#: 128679	Matrix: soil	Attn: Ken Dutton
Client: Environmental Tech Group		
Project ID: TNM-98-05		
Sample Name: MW-8 (43.45)		

### Sample Temperature/Condition <=6°C

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### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Tohuene	J	See J-flag discussion above.

Notes:

Client: Environmental Tech Group  
 Attn: Ken Dutton  
 Address: 2540 W. Maryland  
 Hobbs,  
 NM 88240  
 Phone: 505 397-4882 FAX: 505 397-4701

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	---	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---		---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	11.9	116.2	106	101.3
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	88.8	94.5	91.2
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	---	2.6	94.3	100.5	96.7
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	1.6	87.8	93.2	90.5
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	---	10	127.7	116.6	113.3

#### QUALITY ASSURANCE DATA<sup>1</sup>

Report# /Lab ID#: 128680	Report Date: 05/03/02
Project ID: TNM-98-05	
Sample Name: MW-9 (23-25')	
Sample Matrix: soil	
Date Received: 04/26/2002	Time: 10:30
Date Sampled: 04/24/2002	Time: 09:10

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Respectfully Submitted,

*Richard Laster*  
 Richard Laster

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**Environmental Services**

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-088  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-9 (23-25)

Report# /Lab ID#: 128680  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	106	50-150	---
p-Terphenyl	8015 mod.	85.3	50-150	---
1,2-Dichloroethane-d4	8260b	104	65-115	---
Toluene-d8	8260b	108	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

**REPORT OF ANALYSIS**

<b>Client:</b>	Environmental Tech Group
<b>Attn:</b>	Ken Dutton
<b>Address:</b>	2540 W. Maryland
	Hobbs,
<b>Phone:</b>	505 397-4882 <b>FAX:</b> 505 397-4701

Report#/ <b>Lab ID#:</b> 128681	<b>Report Date:</b> 05/03/02
<b>Project ID:</b> TNM-98-05	
<b>Sample Name:</b> MW-9 (43-45)	
<b>Sample Matrix:</b> soil	
<b>Date Received:</b> 04/26/2002	<b>Time:</b> 10:30
<b>Date Sampled:</b> 04/24/2002	<b>Time:</b> 09:30

#### QUALITY ASSURANCE DATA<sup>1</sup>

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	9.2	108.7	87.1	108.9
TPH by GC (as diesel-ext)	---	mg/Kg	---	---	04/29/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/29/02	8015 mod.	---	5	99.7	76.6	101
Volatile organics-8260b/BTEX	---		---	---	05/01/02	8260b	---	---	---	---	---
Benzene	>20	µg/Kg	20	<20	05/01/02	8260b	---	8	84.1	93.2	83.6
Ethylbenzene	>20	µg/Kg	20	<20	05/01/02	8260b	---	5.4	97.9	97.8	100.6
m,p-Xylenes	>20	µg/Kg	20	<20	05/01/02	8260b	---	4.4	102.5	94.7	106.8
o-Xylene	>20	µg/Kg	20	<20	05/01/02	8260b	---	6.3	100.8	96.6	103.1
Toluene	>20	µg/Kg	20	<20	05/01/02	8260b	---	10.5	85	83.4	87

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Richard Laster

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**Final YSIS**

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2209 N. Padre Island Dr., Corpus Christi, TX 78404-08  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-9 (43-45')

Report# /Lab ID#: 128681  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	91.9	50-150	---
p-Terphenyl	8015 mod.	76.3	50-150	---
1,2-Dichloroethane-d4	8260b	113	65-115	---
Toluene-d8	8260b	118	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

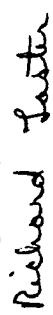
**Client:** Environmental Tech Group  
**Attn:** Ken Dutton  
**Address:** 2540 W. Marland  
 Hobbs,  
 NM 88240  
**Phone:** 505 397-4882      **FAX:** 505 397-4701

REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/30/02	8015 mod.	---	0.8	103.8	109	80
TPH by GC (as diesel-ext)	---	---	---	---	04/30/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/30/02	8015 mod.	---	8.5	95.2	100.3	75.7
Volatile organics-8260b/BTEX	---	µg/Kg	---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	8	84.1	93.2	83.6
Ethylbenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	5.4	97.9	97.8	100.6
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	J	4.4	102.5	94.7	106.8
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	6.3	100.8	96.6	103.1
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	---	10.5	85	83.4	87

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

  
 Richard Laster  
 Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent(%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent(%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**Final Syntec**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-048  
(512) 444-5896 • FAX (512) 447-4766

Report# / Lab ID#: 128682  
Sample Matrix: soil

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-10 (33-35')

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	104	50-150	---
p-Terphenyl	8015 mod.	70.1	50-150	---
1,2-Dichloroethane-d4	8260b	115	65-115	---
Toluene-d8	8260b	117	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

## Exceptions Report:

Report #/Lab ID#: 128682	Matrix: soil	Attn: Ken Dutton
Client: Environmental Tech Group		
Project ID: TNM-98-05		
Sample Name: MW-10 (33-35")		

### Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

### Sample Bottles & Preservation

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

### J flag Discussion

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

### Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
m,p-Xylenes	J	See J-flag discussion above.

Notes:

**AnalySys**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78408  
(512) 444-5896 • FAX (512) 447-4766

**Client:** Environmental Tech Group  
**Attn:** Ken Dutton  
**Address:** 2540 W. Maryland  
 Hobbs, NM 88240  
**Phone:** 505 397-4882 **FAX:** 505 397-4701

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
TPH by GC (as diesel)	<5	mg/Kg	5	<5	04/30/02	8015 mod.	---	0.8	103.8	109	80
TPH by GC (as diesel-ext)	--	---	--	--	04/30/02	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	04/30/02	8015 mod.	---	8.5	95.2	100.3	75.7
Volatile organics-8260b/BTEX	---	---	---	---	05/01/02	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	8	84.1	93.2	83.6
Ethybenzene	<20	µg/Kg	20	<20	05/01/02	8260b	---	5.4	97.9	97.8	100.6
m,p-Xylenes	<20	µg/Kg	20	<20	05/01/02	8260b	---	4.4	102.5	94.7	106.8
o-Xylene	<20	µg/Kg	20	<20	05/01/02	8260b	---	6.3	100.8	96.6	103.1
Toluene	<20	µg/Kg	20	<20	05/01/02	8260b	---	10.5	85	83.4	87

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*  
Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or PDS recoveries exceed advisory limits. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**ENCL 4545**

4221 Freidrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78404-08  
(512) 444-5896 • FAX (512) 447-4766

Client: Environmental Tech Group  
Attn: Ken Dutton

Project ID: TNM-98-05  
Sample Name: MW-10 (43-45')

Report#/Lab ID#: 128683  
Sample Matrix: soil

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	801.5 mod.	101	50-150	---
p-Terphenyl	801.5 mod.	69.7	50-150	---
1,2-Dichloroethane-d4	8260b	112	65-115	---
Toluene-d8	8260b	116	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

# CHAIN-OF-CUSTODY

Send Reports To:

Company Name E&I  
Address 2540 W MARLAND  
City HOUSTON State TX Zip 77040

ATTN: KEN DUNTON

Phone (713) 452-4522 Fax (713) 452-4701

Rush Status (must be confirmed with lab mgr.):

Project Name/PC#: TNM-98-05 Sampler: ROBERT EDDISON

Bill to (if different):

Company Name E&I  
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

ATTN: \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

Rush Status (must be confirmed with lab mgr.):

Project Name/PC#: TNM-98-05 Sampler: ROBERT EDDISON

4221 Friedrich Lane, Suite 190, Austin, TX 78744

Phone: (512) 444-5896

Fax: (512) 447-4766

Analyses Requested (1)  
Please attach explanatory information as required

Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water/Waste	Lab I.D. # (Lab only)	Comments
MW-6(38-40')	4/23/02	10:20	1	X		128674	X
MW-6(43-45')	4/23/02	10:25	1	X		128675	X
MW-7(38-40')	4/23/02	13:12	1	X		128676	X
MW-7(43-45')	4/23/02	13:23	1	X		128677	X
MW-8(33-35')	4/23/02	15:02	1	X		128678	X
MW-8(43-45')	4/23/02	15:07	1	X		128679	X
MW-9(23-25')	4/24/02	09:46	1	X		128680	X
MW-9(43-45')	4/24/02	09:36	1	X		128681	X
MW-10(33-35')	4/24/02	12:46	1	X		128682	X
MW-10(43-45')	4/24/02	12:53	1	X		128683	X

(unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MNL).PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollutants on ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Temp: 0.0 C

Sample Relinquished By			Sample Received By		
Name	Affiliation	Date	Name	Affiliation	Date
<u>E&amp;I</u>	<u>E&amp;I</u>	<u>4-25-02</u>	<u>Robert Eddison</u>	<u>AnalySys Inc.</u>	<u>4/26/02</u>

[Rendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

# **ANALYTICAL REPORT**

**Prepared for:**

**Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240**

**Project: TNM 98-05  
Order#: G0203315  
Report Date: 05/13/2002**

**Certificates  
US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240  
505/397/4701

Order#: G0203315  
Project: EOT 2056C  
Project Name: TNM 98-05  
Location: Eunice, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

Lab ID:	Sample :	Matrix:	Date / Time	Date / Time	Container	Preservative
			Collected	Received		
0203315-01	Excavation Walls	Soil	5/8/02 15:30	5/9/02 10:30	4 oz glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			
0203315-02	Excavation Bottom	Soil	5/8/02 15:45	5/9/02 10:30	4 oz glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			
0203315-03	Stockpile East	Soil	5/8/02 16:00	5/9/02 10:30	4 oz glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			
0203315-04	Stockpile West	Soil	5/8/02 16:20	5/9/02 10:30	4 oz glass	Ice
	<u>Lab Testing:</u>		Rejected: No	Temp: 0 C		
			8015M			
			8021B/5030 BTEX			

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0203315  
Project: EOT 2056C  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0203315-01  
Sample ID: Excavation Walls

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	896	10.0
GRO, C6-C12	711	10.0
TOTAL, C6-C35	1607	10.0

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>		5/9/02 22:00	1	25	CK	8021B

Parameter	Result μg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	275	25.0
Toluene	266	25.0
p/m-Xylene	492	25.0
o-Xylene	310	25.0

Lab ID: 0203315-02  
Sample ID: Excavation Bottom

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	35.3	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	35.3	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 4

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0203315  
Project: EOT 2056C  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0203315-02  
Sample ID: Excavation Bottom

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	27.7	25.0
p/m-Xylene	58.2	25.0
o-Xylene	<25.0	25.0

Lab ID: 0203315-03  
Sample ID: Stockpile East

### 8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	1680	10.0
GRO, C6-C12	1540	10.0
TOTAL, C6-C35	3220	10.0

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0203315  
Project: EOT 2056C  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0203315-03  
Sample ID: Stockpile East

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 22:44	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	243	25.0
Toluene	26.4	25.0
p/m-Xylene	513	25.0
o-Xylene	277	25.0

Lab ID: 0203315-04  
Sample ID: Stockpile West

### 8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	1080	10.0
GRO, C6-C12	895	10.0
TOTAL, C6-C35	1975	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 3 of 4

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0203315  
Project: EOT 2056C  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0203315-04  
Sample ID: Stockpile West

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0001667-02		5/9/02 23:06	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	137	25.0
Toluene	178	25.0
p/m-Xylene	318	25.0
o-Xylene	140	25.0

Approval: *Cele D Keene 5/13/02*  
Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Sandra Biezugbe, Lab Tech.  
Sara Molina, Lab Tech.

Date

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 4 of 4

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0203315

BLANK	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001644-02			<10.0		
MS	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203314-01	0	952	1170	122.9%	
MSD	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203314-01	0	952	1010	106.1%	14.7%
SRM	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001644-05		1000	1140	114.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

**8021B/5030 BTEX**

Order#: G0203315

<b>BLANK</b>	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene- $\mu\text{g}/\text{kg}$		0001667-02			<25.0		
Ethylbenzene- $\mu\text{g}/\text{kg}$		0001667-02			<25.0		
Toluene- $\mu\text{g}/\text{kg}$		0001667-02			<25.0		
p/m-Xylene- $\mu\text{g}/\text{kg}$		0001667-02			<25.0		
o-Xylene- $\mu\text{g}/\text{kg}$		0001667-02			<25.0		
<b>MS</b>	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	107	107.%	
Ethylbenzene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	110	110.%	
Toluene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	108	108.%	
p/m-Xylene- $\mu\text{g}/\text{kg}$		0203305-01	0	200	228	114.%	
o-Xylene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	109	109.%	
<b>MSD</b>	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	106	106.%	0.9%
Ethylbenzene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	108	108.%	1.8%
Toluene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	107	107.%	0.9%
p/m-Xylene- $\mu\text{g}/\text{kg}$		0203305-01	0	200	226	113.%	0.9%
o-Xylene- $\mu\text{g}/\text{kg}$		0203305-01	0	100	108	108.%	0.9%
<b>SRM</b>	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene- $\mu\text{g}/\text{kg}$		0001667-05		100	112	112.%	
Ethylbenzene- $\mu\text{g}/\text{kg}$		0001667-05		100	112	112.%	
Toluene- $\mu\text{g}/\text{kg}$		0001667-05		100	114	114.%	
p/m-Xylene- $\mu\text{g}/\text{kg}$		0001667-05		200	229	114.5%	
o-Xylene- $\mu\text{g}/\text{kg}$		0001667-05		100	110	110.%	



For Us  
4600 West Wall  
Midland, TX 79701  
Tel (915) 522-1133  
Fax (915) 520-4371

**For Use On EOTT ENERGY CORP. Projects Only**

East Wall	2540 West Maryland	EOTT ENERGY CORP.
TX 78703	Hobbs, NM 88242	East Business 20
522-1139	Tel (505) 397-4882	TX 78902
520-4310	Fax (505) 397-4701	(915) 687-3400
		(915) 582-2784

**EOT ENERGY CORP.**  
East Business 20  
TX 79702  
(915) 687-3400  
(915) 582-2781

**ANALYSIS REQUEST**  
*(Circle or Specify Method No.)*

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST														
ANALYSIS REQUEST (Circle or Specify Method No.)														
For Use On EOTT ENERGY CORP. Projects Only														
EOTT ENERGY CORP.		5805												
2540 West Maryland		Midland,												
Hobbs, NM 88242		Tel												
Tel (505) 397-4882		TX 79702												
Fax (505) 397-4710		(915) 687-3400												
Fax (915) 520-4310		(915) 582-2781												
Project Manager: <u>Amillie Reynolds</u>		EOTT Leak Number:												
Project Name: <u>TDEM 98-05</u>		ETGI Project Number: <u>EOT 2056C</u>												
Project Location: <u>Junice, NM</u>		Sampler Signature: <u>Amillie Reynolds</u>												
FIELD CODE	# CONTAINERS (Lab Use Only)	WATER Volume/Amount	SOIL	SLUDGE	AIR	HCl	HNO <sub>3</sub>	NaHSO <sub>4</sub>	ICE	NONE	DATE	TIME	SAMPLING	
													MATRIX	PRESERVATION METHOD
00103315-0	<u>Excavation walls</u>	<u>1400</u>	X						X		5-8	1530	X	
	<u>Excavation bottom</u>											1545		
	<u>Stockpile east</u>											1600		
	<u>Stockpile west</u>											1620		
TPH 418.1/TX 100S														
TPH 8015M GRO/DRO														
PAH 8270C (8100 New Mexico only)														
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/T470														
TCLP Metals Ag As Ba Cd Cr Pb Se Hg 6010B/T470														
TCLP Volatiles														
TCLP Semi Volatiles														
Volatile B260B														
Semi Volatiles B270C														
TDS 160.1														
Calcd/Actuals 375.4/325.3														
Circles/Specify Method No.														
REMARKS: <u>Rec O'C</u> <u>Invoice to</u> <u>Fax Results to</u>														
Environmental Technology Group, Inc. Environmental Consulting & Remediation Services	Relinquished by: <u>Amillie Reynolds</u>	Date: <u>Sept 2002</u>	Time: <u>1030</u>	Received by:	Date:	Time:								
	Relinquished by: <u>Amillie Reynolds</u>	Date: <u>Sept 2002</u>	Time: <u>1030</u>	Received at Lab by: <u>John Mennella</u>	Date: <u>5-9-2</u>	Time: <u>1030</u>								

# **ANALYTICAL REPORT**

**Prepared for:**

**Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240**

**Project:** TNM 98-05  
**PO#:** EO2056  
**Order#:** G0205067  
**Report Date:** 11/22/2002

**Certificates**  
**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240  
505/397/4701

Order#: G0205067  
Project: EO2056  
Project Name: TNM 98-05  
Location: Eunice, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	Date / Time		Date / Time		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0205067-01	Excavation S. Side Wall Comp	SOIL	11/14/02 16:09	11/19/02 17:15	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C			
	8015M						
	8021B/5030 BTEX						
0205067-02	Excavation N. Side Wall Comp	SOIL	11/14/02 16:01	11/19/02 17:15	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C			
	8015M						
	8021B/5030 BTEX						
0205067-03	Excavation W. Side Wall Comp	SOIL	11/14/02 13:48	11/19/02 17:15	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C			
	8015M						
	8021B/5030 BTEX						
0205067-04	Excavation E. Side Wall Comp	SOIL	11/14/02 15:54	11/19/02 17:15	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C			
	8015M						
	8021B/5030 BTEX						

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
 Environmental Technology Group, Inc.  
 2540 W. Marland  
 Hobbs, NM 88240

Order#: G0205067  
 Project: EO2056  
 Project Name: TNM 98-05  
 Location: Eunice, NM

Lab ID: 0205067-01  
 Sample ID: Excavation S. Side Wall Comp

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	781	10.0
DRO, >C12-C35	4,900	10.0
TOTAL, C6-C35	5,681	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	132%	70	130
1-Chlorooctadecane	152%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02 2:01	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	7.46	0.025
Toluene	0.885	0.025
p/m-Xylene	11.4	0.025
o-Xylene	6.04	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	110%	80	120
Bromofluorobenzene	121%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 4

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
 Environmental Technology Group, Inc.  
 2540 W. Marland  
 Hobbs, NM 88240

Order#: G0205067  
 Project: EO2056  
 Project Name: TNM 98-05  
 Location: Eunice, NM

Lab ID: 0205067-02  
 Sample ID: Excavation N. Side Wall Comp

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	20.8	10.0
DRO, >C12-C35	186	10.0
TOTAL, C6-C35	207	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	112%	70	130
1-Chlorooctadecane	109%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02 10:16	1	25	CK	8021B
0003839-02						

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.112	0.025
Toluene	<0.025	0.025
p/m-Xylene	0.136	0.025
o-Xylene	0.072	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	101%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 2 of 4

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0205067  
Project: EO2056  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0205067-03  
Sample ID: Excavation W. Side Wall Comp

### 8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	114%	70	130
1-Chlorooctadecane	112%	70	130

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0003839-02		11/21/02 9:00	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	80	120
Bromofluorobenzene	98%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0205067  
Project: EO2056  
Project Name: TNM 98-05  
Location: Eunice, NM

Lab ID: 0205067-04  
Sample ID: Excavation E. Side Wall Comp

### 8015M

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	110%	70	130
1-Chlorooctadecane	104%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		11/21/02 18:23	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	87%	80	120
Bromofluorobenzene	88%	80	120

*Raland K. Tuttle* 11-22-02  
Approval: Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Sandra Biezugbe, Lab Tech.  
Sara Molina, Lab Tech.

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0205067

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003842-02			<10.0		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003842-03		952	980	102.9%	
<b>CONTROL DUP</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003842-04		952	1070	112.4%	8.8%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003842-05		1000	988	98.8%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205067

<b>BLANK</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0003839-02			<0.025		
Benzene-mg/kg		0003844-02			<0.025		
Ethylbenzene-mg/kg		0003839-02			<0.025		
Ethylbenzene-mg/kg		0003844-02			<0.025		
Toluene-mg/kg		0003839-02			<0.025		
Toluene-mg/kg		0003844-02			<0.025		
p/m-Xylene-mg/kg		0003839-02			<0.025		
p/m-Xylene-mg/kg		0003844-02			<0.025		
o-Xylene-mg/kg		0003839-02			<0.025		
o-Xylene-mg/kg		0003844-02			<0.025		
<b>MS</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0205067-04	0	0.1	0.098	98.%	
Benzene-mg/kg		0205068-01	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg		0205067-04	0	0.1	0.104	104.%	
Ethylbenzene-mg/kg		0205068-01	0	0.1	0.098	98.%	
Toluene-mg/kg		0205067-04	0	0.1	0.101	101.%	
Toluene-mg/kg		0205068-01	0	0.1	0.096	96.%	
p/m-Xylene-mg/kg		0205067-04	0	0.2	0.220	110.%	
p/m-Xylene-mg/kg		0205068-01	0	0.2	0.208	104.%	
o-Xylene-mg/kg		0205067-04	0	0.1	0.105	105.%	
o-Xylene-mg/kg		0205068-01	0	0.1	0.099	99.%	
<b>MSD</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0205067-04	0	0.1	0.096	96.%	2.1%
Benzene-mg/kg		0205068-01	0	0.1	0.094	94.%	2.2%
Ethylbenzene-mg/kg		0205067-04	0	0.1	0.102	102.%	1.9%
Ethylbenzene-mg/kg		0205068-01	0	0.1	0.100	100.%	2.%
Toluene-mg/kg		0205067-04	0	0.1	0.100	100.%	1.%
Toluene-mg/kg		0205068-01	0	0.1	0.097	97.%	1.%
p/m-Xylene-mg/kg		0205067-04	0	0.2	0.217	108.5%	1.4%
p/m-Xylene-mg/kg		0205068-01	0	0.2	0.211	105.5%	1.4%
o-Xylene-mg/kg		0205067-04	0	0.1	0.104	104.%	1.%
o-Xylene-mg/kg		0205068-01	0	0.1	0.100	100.%	1.%
<b>SRM</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0003839-05		0.1	0.094	94.%	
Benzene-mg/kg		0003844-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg		0003839-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg		0003844-05		0.1	0.105	105.%	
Toluene-mg/kg		0003839-05		0.1	0.098	98.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205067

SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Toluene-mg/kg		0003844-05		0.1	0.104	104.%	
p/m-Xylene-mg/kg		0003839-05		0.2	0.212	106.%	
p/m-Xylene-mg/kg		0003844-05		0.2	0.224	112.%	
o-Xylene-mg/kg		0003839-05		0.1	0.100	100.%	
o-Xylene-mg/kg		0003844-05		0.1	0.106	106.%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240

Order#: G0205067

Project: TNM 98-05

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Excavation S. Side	0205067-01	SOIL	11/14/2002	11/19/2002
Excavation N. Side	0205067-02	SOIL	11/14/2002	11/19/2002
Excavation W. Side	0205067-03	SOIL	11/14/2002	11/19/2002
Excavation E. Side	0205067-04	SOIL	11/14/2002	11/19/2002

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0205067-01)

Surrogate recoveries on the 8015 TPH are outside control limits due to matrix interference from coeluting compounds. (0205067-01)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Rulanck Smith Date: 11-22-02  
Environmental Lab of Texas I, Ltd.

# Environmental Lab of Texas, Inc.

12600 West 120 East  
Odessa, Texas 79763

Phone: 915-563-1000  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Connie Edwards

Company Name ERTC

Company Address: 2540 W. Main

City/State/Zip: Odessa, TX 79760

Telephone No: 805-392-4882

Sample Signature: R. Edison

Fax No: 805-392-4701

Project Name: TNM 98-05

Project #: E02056

Project Loc: Edison, NM

PO #:

Sample Signature: Connie Edwards

LAB # (Lab Log Only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative		Matrix	Analyte
					HCl	Total		
205067-01	Excavation S. Side Wall Comp	11-14-02	16:09	1	X			
02	Excavation N. Side Wall Comp	11-14-02	16:01	1	X			
03	Excavation W. Side Wall Comp	11-14-02	1348	1	X			
04	Excavation E. Side Wall Comp	11-14-02	1554	1	X			

Special Instructions:

R. Edison, Inc.  
1450 W. Hwy 111  
P.O. Box 200  
Bartow, FL 33830

Date: 11/19/02 Time: 14:42  
Received by EOT

Date	Time
<u>11-19-02</u>	<u>1715</u>

Sample Container Number: 1  
Temperature Upon Receipt: 20°C  
Laboratory Comment:

# **ANALYTICAL REPORT**

**Prepared for:**

**Camille Reynolds  
Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240**

**Project: TNM 98-05**

**PO#:**

**Order#: G0306301**

**Report Date: 04/22/2003**

**Certificates**

**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

Environmental Technology Group, Inc.  
2540 W. Marland  
Hobbs, NM 88240  
505/397/4701

Order#: G0306301  
Project: EO 2056  
Project Name: TNM 98-05  
Location: Lea County, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	Date / Time		<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0306301-01	Excavation Bottom Comp.	SOIL	4/16/03 14:06	4/18/03 16:34	4 oz glass	Ice
<u>Lab Testing:</u>		Rejected: No		Temp: 6.0 C		/
		8015M				
		8021B/5030 BTEX				

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Camille Reynolds  
 Environmental Technology Group, Inc.  
 2540 W. Marland  
 Hobbs, NM 88240

Order#: G0306301  
 Project: EO 2056  
 Project Name: TNM 98-05  
 Location: Lea County, NM

Lab ID: 0306301-01  
 Sample ID: Excavation Bottom Comp.

**8015M**

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
		4/21/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	21.1	10.0
DRO, >C12-C35	232	10.0
TOTAL, C6-C35	253	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	126%	70	130
1-Chlorooctadecane	119%	70	130

**8021B/5030 BTEX**

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
0005278-02		4/21/03 19:31	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	0.044	0.025
p/m-Xylene	0.106	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	92%	80	120
Bromofluorobenzene	97%	80	120

Approval: *Raland K. Tuttle* 4-22-03  
 Raland K. Tuttle, Lab Director, QA Officer  
 Celey D. Keene, Org. Tech. Director  
 Jeanne McMurrey, Inorg. Tech. Director  
 Sandra Biezugbe, Lab Tech.  
 Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 1

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0306301

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005277-02			<10.0		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005277-03		1000	921	92.1%	
<b>CONTROL DUP</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005277-04		1000	895	89.5%	2.9%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005277-05		1000	765	76.5%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

**8021B/5030 BTEX**

Order#: G0306301

<b>BLANK</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0005278-02			<0.025		
Toluene-mg/kg		0005278-02			<0.025		
Ethylbenzene-mg/kg		0005278-02			<0.025		
p/m-Xylene-mg/kg		0005278-02			<0.025		
o-Xylene-mg/kg		0005278-02			<0.025		
<b>MS</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0306309-02	0	0.1	0.108	108.%	
Toluene-mg/kg		0306309-02	0	0.1	0.105	105.%	
Ethylbenzene-mg/kg		0306309-02	0	0.1	0.102	102.%	
p/m-Xylene-mg/kg		0306309-02	0	0.2	0.211	105.5%	
o-Xylene-mg/kg		0306309-02	0	0.1	0.102	102.%	
<b>MSD</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0306309-02	0	0.1	0.099	99.%	8.7%
Toluene-mg/kg		0306309-02	0	0.1	0.096	96.%	9.%
Ethylbenzene-mg/kg		0306309-02	0	0.1	0.093	93.%	9.2%
p/m-Xylene-mg/kg		0306309-02	0	0.2	0.191	95.5%	10.%
o-Xylene-mg/kg		0306309-02	0	0.1	0.093	93.%	9.2%
<b>SRM</b>	<b>SOIL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-mg/kg		0005278-05		0.1	0.102	102.%	
Toluene-mg/kg		0005278-05		0.1	0.097	97.%	
Ethylbenzene-mg/kg		0005278-05		0.1	0.092	92.%	
p/m-Xylene-mg/kg		0005278-05		0.2	0.189	94.5%	
o-Xylene-mg/kg		0005278-05		0.1	0.092	92.%	



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

ATTN: MR. JESSE TAYLOR

P.O. BOX 4845

MIDLAND, TEXAS 79704

FAX: 915-520-4310

FAX: 505-392-3760

Sample Type: Soil

Sample Condition: Intact/Iced

Project #: EOT1026C

Project Name: TNM 98-05

Project Location: Eunice, N.M.

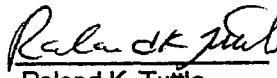
Sampling Date: 04/11/00

Receiving Date: 04/13/00

Analysis Date: 04/17/00

ELT#	FIELD CODE	GRO	DRO
		C6-C10	>C10-C28
		mg/kg	mg/kg
24828	GP1 001 4'	<10	<10
24829	GP1 002 7'	<10	<10
24830	GP1 003 10'	<10	<10
24831	GP1 004 13'	<10	<10
24832	GP2 001 4'	<10	<10
24833	GP2 002 7'	<10	<10
24834	GP2 003 10'	<10	<10
24835	GP2 004 13'	<10	<10
24836	GP2 005 16'	<10	<10
24837	GP3 001 4'	<10	<10
24838	GP3 002 7'	<10	<10
24839	GP3 003 10'	<10	<10
24840	GP3 004 13'	<10	<10
24841	GP3 005 16'	<10	<10
24842	GP4 001 4'	<10	<10
24843	GP4 002 7'	<10	<10
24844	GP4 003 10'	<10	<10
24845	GP4 004 13'	<10	<10
24846	GP4 005 16'	<10	<10
24847	GP4 006 17.5	<10	<10
24848	GP5 001 4'	<10	<10
24849	GP5 002 7'	<10	<10
24850	GP5 003 10'	<10	<10
24851	GP5 004 13'	<10	<10
% INSTRUMENT ACCURACY		91	106
% EXTRACTION ACCURACY		88	104
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

4-20-00  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

ATTN: MR. JESSE TAYLOR

P.O. BOX 4845

MIDLAND, TEXAS 79704

FAX: 915-520-4310

FAX: 505-392-3760

Sample Type: Soil

Sampling Date: 04/11/00

Sample Condition: Intact/Iced

Receiving Date: 04/13/00

Project #: EOT1026C

Analysis Date: 04/18/00

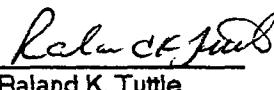
Project Name: TNM 98-05

Project Location: Eunice, N.M.

GRO DRO  
C6-C10 >C10-C28

ELT#	FIELD CODE	mg/kg	mg/kg
24852	GP5 005 16'	<10	<10
24853	GP5 006 17.5'	<10	<10
24854	GP6 001 4'	43	<10
24855	GP6 002 7'	10944	15918
24856	GP6 003 10'	1231	2673
24857	GP6 004 13'	<10	89
24858	GP7 001 4'	3732	6777
24859	GP7 002 7'	4996	9368
24860	GP7 003 10'	3246	4762
24861	GP7 004 13'	1778	3649
24862	GP8 001 4'	<10	98
24863	GP8 002 7'	<10	50
24864	GP8 003 10'	<10	26
24865	GP8 004 13'	<10	<10
24866	GP9 001 4'	<10	<10
24867	GP9 002 7'	<10	<10
24868	GP9 003 10'	<10	<10
24869	GP9 004 13'	<10	<10
24870	GP10 001 4'	5357	12582
24871	GP10 002 7'	3110	6536
24872	GP10 003 10'	2774	4489
24873	GP10 004 13'	84	762
<hr/>			
% INSTRUMENT ACCURACY		88	122
% EXTRACTION ACCURACY		109	122
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

4-20-00  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

ATTN: MR. JESSE TAYLOR  
P.O. BOX 4845  
MIDLAND, TEXAS 79704  
FAX: 915-520-4310  
FAX: 505-392-3760

Sample Type: Soil  
Sample Condition: Intact/Iced  
Project #: EOT1026C  
Project Name: TNM 98-05  
Project Location: Eunice, N.M.

Sampling Date: 04/11/00  
Receiving Date: 04/13/00  
Analysis Date: 04/19/00

ELT#	FIELD CODE	GRO	DRO
		C6-C10	>C10-C28
		mg/kg	mg/kg
24874	GP11 001 4'	5025	9095
24875	GP11 002 7'	3399	6924
24876	GP11 003 10'	728	1945
24877	GP11 004 13'	986	2419
24878	GP12 001 4'	<10	70
24879	GP12 002 7'	<10	<10
24880	GP12 003 10'	<10	<10
24881	GP12 004 13'	<10	<10
24882	GP13 001 4'	<10	<10
24883	GP13 002 7'	<10	<10
24884	GP13 003 10'	<10	<10
24885	GP13 004 13'	<10	<10
24886	GP14 001 4'	<10	<10
24887	GP14 002 7'	<10	<10
24888	GP14 003 10'	<10	<10
24889	GP14 004 13'	<10	<10
24890	GP15 001 4'	<10	<10
24891	GP15 002 7'	<10	<10
24892	GP15 003 10'	<10	<10
24893	GP15 004 13'	<10	<10
24894	GP16 001 4'	<10	<10
24895	GP16 002 7'	<10	<10
24896	GP16 003 10'	<10	<10
24897	GP16 004 13'	<10	<10
% INSTRUMENT ACCURACY		94	106
% EXTRACTION ACCURACY		84	85
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

4-20-00  
Date

**Environmental Lab of Texas, Inc.** 12600 West 1-20 East Odessa, Texas 79763  
 (915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:		ANALYSIS REQUEST									
Jesse Taylor											
Company Name & Address:											
Project #:											
Project Location:											
Sample ID#:											
Project Name:											
TNUM 98-05											
Sampler Signature:											
Project Date:											
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS		VOLUME/AMOUNT	MATRIX	PRESERVATIVE	METHOD	DATE	TIME	REMARKS	
		WATER	AIR							SLUDGE	HCl
24828 GP1 001 4'		402	X			X	X	4/11	X		
24829 GP1 002 7'		402	X			X	X	4/11	X		
24830 GP1 003 10'		402	X			X	X	4/11	X		
24831 GP1 004 13'		402	X			X	X	4/11	X		
24832 GP2 001 4'		402	X			X	X	4/11	X		
24833 GP2 002 1'		402	X			X	X	4/11	X		
24834 GP2 003 10'		402	X			X	X	4/11	X		
24835 GP2 004 13'		402	X			X	X	4/11	X		
24836 GP2 005 16'		402	X			X	X	4/11	X		
24837 GP3 001 4'		402	X			X	X	4/11	X		
24838 GP3 002 7'		402	X			X	X	4/11	X		
Rerigualished by:	Date: 4/13/98	Times: 0855		Received by: <i>John</i>							
Rerigualished by:	Date:	Times:		Received by:							
Rerigualished by:	Date:	Times:		Received by Laboratory:							

**Environmental Lab of Texas, Inc.** 12600 West I-20 East Odessa, Texas 79763  
 (915) 563-1800 FAX (915) 563-1713 CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

ANALYSIS REQUEST									
Project Manager:	Phone #: (915) - 464-9160 FAX #: 305 - 392 - 3740								
Company Name & Address:									
Project #:	Project Name : <u>TNM 98-05</u>								
Project Location:	Sampler Signature: <u>J. J.</u>								
LAB #	FIELD CODE	CONTAINERS			MATERIAL	PRESERVATIVE	SAMPLING	TIME	DATE
(LAB USE ONLY)		VOLUME/AMOUNT	AIR	SOLIDGE	OTHER	ICP	HNO3	4/11	4/11
EUNICE MNL		WATER	SOIL	SLUDGE	OTHER	ICP	HNO3	X	X
24849 623 003 10		4oz	X	X	X	X	X	X	X
24840	GP3 004 13	4oz	X	X	X	X	X	X	X
24841	GP3 005 16	4oz	X	X	X	X	X	X	X
24842	GP4 001 4	4oz	X	X	X	X	X	X	X
24843	GP4 002 7	4oz	X	X	X	X	X	X	X
24844	GP4 003 10	4oz	X	X	X	X	X	X	X
24845	GP4 004 13	4oz	X	X	X	X	X	X	X
24846	GP4 005 16	4oz	X	X	X	X	X	X	X
24847	GP4 006 17 1/2	4oz	X	X	X	X	X	X	X
24848	GP4 001 4	4oz	X	X	X	X	X	X	X
24849	GP4 002 7	4oz	X	X	X	X	X	X	X
RElinquished by:		Date: <u>4/13/00</u>	Times: <u>0855</u>		Received by: <u>Ronald S.</u>		REMARKS: <u>FAX RESULTS</u>		
RElinquished by:		Date: <u></u>	Times: <u></u>		Received by: <u></u>				
RElinquished by:		Date: <u></u>	Times: <u></u>		Received by Laboratory: <u></u>				

**Environmental Lab of Texas, Inc.** 12600 West 1-20 East Odessa, TX 79763  
TELE: 432-1300 FAX: 432-1713 C.I.T. 015-561-1713 CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

(915) 563-1800 FAX (915) 563-1713

כלהן נספחים

Project Manager:		Phone #: 915-464-9104		FAX #: 505-392-3760		ANALYSIS REQUEST	
Company Name & Address:		Project Name:		Sampler Signature:			
ETC		TNM 98-05					
Project #:		Project Location:					
(LA3 USE) ONLY		Eunice, NM					
LA3 #	FIELD CODE	CONTAINERS		PRESERVATIVE METHOD	SAMPLING TIME	DATE	REMARKS
		VOLUME/AMOUNT	WATER				
241850	GP5 - 003	10'	40z	X	X	4/11	
241851	GP5 - 004	13'					
241852	GP5 - 005	16'					
241853	GP5 - 006	17 1/2'					
241854	GP6 - 001	4'					
241855	GP6 - 002	7'					
241856	GP6 - 003	10'					
241857	GP6 - 004	13'					
241858	GP6 - 001	4'					
241859	GP7 - 002	7'					
241860	GP7 - 003	10'					
Requisitioned by:	J. Jimenez	Date:	4/13/00	Time:	0855	Received by:	Paul M. G.
Requisitioned by:		Date:		Time:		Received by:	
Requisitioned by:		Date:		Time:		Received by Laboratory:	

FAX RESULTS ASAP!

**Environmental Lab of Texas, Inc.** 1200 West 12th Street, Dallas, TX 75209  
 CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:		Phone #: 915-644-9144 FAX #: 505-392-3740		ANALYSIS REQUEST			
Company Name & Address:							
Project #:	Project Name :						
EOT 0266	TNM 98-05						
Project Location:	Sampler Signature:						
Fonner, NM	<i>Justine Jan</i>						
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	VOLUME/AMOUNT	PRESERVATIVE	SAMPLING		
				MATRIX	METHOD	DATE	TIME
241841	CPI0-004	13'	4oz	X	X	4/11	4/11
241842	CPI0-001	4'				4/11	
241843	CPI0-002	7'				4/11	
241844	CPI0-003	10'				4/11	
241845	CPI0-004	13'				4/11	
241846	CPI0-001	4'				4/12	
241847	CPI0-002	7'					
241848	CPI0-003	10'					
241849	CPI0-004	13'					
241870	CPI0-001	4'					
241871	CPI0-002	7'					
Reinquished by:		Date:	Times:	Received by:		REMARKS	
<i>Justine Jan</i>		4/13/00	0855	<i>Bruce K. Saylor</i>		FAX RESULTS, ASAP!	
Reinquished by:		Date:	Times:	Received by:			
Reinquished by:		Date:	Times:	Received by Laboratory:			



## ENVIRONMENTAL LAB OF TEXAS, INC. 12600 West 1-20 East Odessa, Texas 79763

(915) 563-1800 FAX (915) 563-1713

## CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

		ANALYSIS REQUEST					
Project Manager:							
Jesse Taylor							
Company Name & Address:							
Project #:	ETC-F						
Project Location:	El Paso, TX						
Sampled By:							
Project Name:	TNM 98-05						
Sampler Signature:	<i>Jesse Jones</i>						
Sample ID:	NNN						
Field Code:							
LAB #	LAB USE ONLY	CONTAINERS	MATRIX	PRESERVATIVE	SAMPLING	DATE	TIME
VOLUME/AMOUNT							
24883	GP13 - 002	1	1/02	X	X	4/12	
24884	GP13 - 003	10'				4/12	
24885	GP13 - 004	13'				4/12	
24886	GP14 - 001	41'				4/12	
24887	GP14 - 002	71'				4/12	
24888	GP14 - 003	10'				4/12	
24889	GP14 - 004	13'				4/12	
24890	GP15 - 001	41'				4/12	
24891	GP15 - 002	71'				4/12	
24892	GP15 - 003	10'				4/12	
24893	GP15 - 004	13'				4/12	
Received by:	<i>Jesse Jones</i>	Date: 4/13/00	Time: 0855	Received by:	<i>John Clark</i>	Date:	Time:
Received by:				Received by:			
Received by:				Received by Laboratory:			
REMARKS	<i>FAX RESULTS ABTP</i>						

**Environmental Lab of Texas, Inc.** 12600 West I-20 East Odessa, Texas 79763

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

(915) 563-1800 FAX (915) 563-1713

Project Manager:

Jesse Taylor

Company Name & Address:

15 TCE

Project #:

LOT 10116  
CPL 10116 - 002

FAX #: 305-3912-3720

Project Location:

Block 11A

Sample Number:

41

Field Code:

402

Phone #: 915-644-9166

ANALYSIS REQUEST

FAX #: 305-3912-3720

Project Name:

TNM 98-05

Sampler Signature:

*Jesse Taylor*

Sample ID:

41

Sample Type:

Soil

Sample Description:

Topsoil

Sample Amount:

402

Volume/Amount:

402

Matrix:

Soil

Preservative:

X

Method:

X

Date:

4/13/00

Time:

0855

Other:

X

ICL:

X

HNO3:

X

TIME:

4/13/00

RCI:

X

TDS:

X

TCLP Semi-Volatiles:

X

TCLP Volatiles:

X

Total Metals Ag As Ba Cd Cr Pb Hg Se:

X

TPH

X

BTEX

X

REMARKS

*FAX RESULTS ASAP!*

Reinquished by:	Date:	Time:	Received by:
<i>Jesse Taylor</i>	4/13/00	0855	<i>Leland Jule</i>
Reinquished by:	Date:	Time:	Received by:
			Received by Laboratory:

## Analytical and Quality Control Report

Craig Eschberger  
Nova Safety & Environmental  
5023 Commerce  
Midland, TX 79703

Report Date: December 7, 2004

Work Order: 4113008

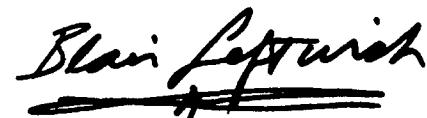
Project Location: Lea County  
Project Name: TNM 98-05  
Project Number: TNM 98-05

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49254	ESP A	soil	2004-11-26	12:00	2004-11-30
49255	ESP B	soil	2004-11-26	12:05	2004-11-30
49256	ESP C	soil	2004-11-26	12:10	2004-11-30
49257	ESP D	soil	2004-11-26	12:15	2004-11-30
49258	ESP E	soil	2004-11-26	12:20	2004-11-30
49259	ESP F	soil	2004-11-26	12:25	2004-11-30
49260	ESP G	soil	2004-11-26	12:30	2004-11-30
49261	ESP H	soil	2004-11-26	12:35	2004-11-30
49262	West SP	soil	2004-11-26	00:00	2004-11-30

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



Dr. Blair Leftwich, Director

## Analytical Report

### Sample: 49254 - ESP A

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0634	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0114	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.844	mg/Kg	10	0.100	84	63.1 - 105

### Sample: 49254 - ESP A

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triaccontane		142	mg/Kg	1	150	95	69.8 - 106.1

### Sample: 49254 - ESP A

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.831	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

### Sample: 49255 - ESP B

Report Date: December 7, 2004  
TNM 98-05

Work Order: 4113008  
TNM 98-05

Page Number: 3 of 18  
Lea County

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.199	mg/Kg	10	0.00100
Ethylbenzene		0.0117	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.819	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.847	mg/Kg	10	0.100	85	63.1 - 105

#### Sample: 49255 - ESP B

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triaccontane	1	171	mg/Kg	1	150	114	69.8 - 106.1

#### Sample: 49255 - ESP B

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.938	mg/Kg	10	0.100	94	0 - 174

#### Sample: 49256 - ESP C

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

<sup>1</sup> Surrogate recovery out of control chart range but within method limits.

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.260	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0105	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.842	mg/Kg	10	0.100	84	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.925	mg/Kg	10	0.100	92	63.1 - 105

### Sample: 49256 - ESP C

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	91	69.8 - 106.1

### Sample: 49256 - ESP C

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.860	mg/Kg	10	0.100	86	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	0 - 174

### Sample: 49257 - ESP D

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 14400	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.114	mg/Kg	10	0.00100

continued ...

sample 49257 continued...

Parameter	Flag	Result	Units	Dilution	RL		
Ethylbenzene		<0.0100	mg/Kg	10	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	10	0.100	80	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.845	mg/Kg	10	0.100	84	63.1 - 105

#### Sample: 49257 - ESP D

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triaccontane		140	mg/Kg	1	150	94	69.8 - 106.1

#### Sample: 49257 - ESP D

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

#### Sample: 49258 - ESP E

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 14400	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0835	mg/Kg	10	0.00100

continued...

sample 49258 continued...

Parameter	Flag	Result	Units	Dilution	RL		
Ethylbenzene		<0.0100	mg/Kg	10	0.00100		
Xylene		<0.0100	mg/Kg	10	0.00100		
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.914	mg/Kg	10	0.100	91	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	10	0.100	91	63.1 - 105

Sample: 49258 - ESP E

Analysis: TPH DRO      Analytical Method: Mod. 8015B      Prep Method: N/A  
QC Batch: 14356      Date Analyzed: 2004-11-30      Analyzed By: BP  
Prep Batch: 12682      Date Prepared: 2004-11-30      Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		139	mg/Kg	1	150	93	69.8 - 106.1

Sample: 49258 - ESP E

Analysis: TPH GRO      Analytical Method: S 8015B      Prep Method: S 5035  
QC Batch: 14401      Date Analyzed: 2004-12-02      Analyzed By: MS  
Prep Batch: 12722      Date Prepared: 2004-12-02      Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.913	mg/Kg	10	0.100	91	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	0 - 174

Sample: 49259 - ESP F

Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
QC Batch: 14400      Date Analyzed: 2004-12-02      Analyzed By: MS  
Prep Batch: 12722      Date Prepared: 2004-12-02      Prepared By: MS

continued...

sample 49259 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	<sup>2</sup>	<0.0500	mg/Kg	50	0.00100
Toluene		0.258	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>3</sup>	0.735	mg/Kg	50	0.100	15	60.1 - 104
4-Bromofluorobenzene (4-BFB)	<sup>4</sup>	0.913	mg/Kg	50	0.100	18	63.1 - 105

#### Sample: 49259 - ESP F

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	86	69.8 - 106.1

#### Sample: 49259 - ESP F

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	<sup>5</sup>	<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.705	mg/Kg	50	0.100	14	0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100	20	0 - 174

#### Sample: 49260 - ESP G

<sup>2</sup>Sample diluted due to surfactant content.

<sup>3</sup>Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>4</sup>Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>5</sup>Sample diluted due to surfactants.

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Analysis: BTEX  
QC Batch: 14435  
Prep Batch: 12753

Analytical Method: S 8021B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	6	<0.100	mg/Kg	100	0.00100
Toluene		0.560	mg/Kg	100	0.00100
Ethylbenzene		<0.100	mg/Kg	100	0.00100
Xylene		<0.100	mg/Kg	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	7	0.715	mg/Kg	100	0.100	7	60.1 - 104
4-Bromofluorobenzene (4-BFB)	8	0.877	mg/Kg	100	0.100	9	63.1 - 105

#### Sample: 49260 - ESP G

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		109	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triaccontane		147	mg/Kg	1	150	98	69.8 - 106.1

#### Sample: 49260 - ESP G

Analysis: TPH GRO  
QC Batch: 14437  
Prep Batch: 12753

Analytical Method: S 8015B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	9	<10.0	mg/Kg	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.680	mg/Kg	100	0.100	7	0 - 160
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	100	0.100	10	0 - 174

#### Sample: 49261 - ESP H

<sup>6</sup>Diluted due to surfactant content.

<sup>7</sup>Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>8</sup>Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>9</sup>Sample diluted due to surfactant content.

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Analysis: BTEX  
QC Batch: 14435  
Prep Batch: 12753

Analytical Method: S 8021B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0626	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0164	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.794	mg/Kg	10	0.100	79	63.1 - 105

#### Sample: 49261 - ESP H

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	69.8 - 106.1

#### Sample: 49261 - ESP H

Analysis: TPH GRO  
QC Batch: 14437  
Prep Batch: 12753

Analytical Method: S 8015B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.26	mg/Kg	10	0.100	126	0 - 160
4-Bromofluorobenzene (4-BFB)		0.894	mg/Kg	10	0.100	89	0 - 174

#### Sample: 49262 - West SP

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene	<sup>10</sup>	<0.0500	mg/Kg	50	0.00100
Toluene		0.297	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>11</sup>	0.823	mg/Kg	50	0.100	16	60.1 - 104
4-Bromofluorobenzene (4-BFB)	<sup>12</sup>	0.915	mg/Kg	50	0.100	18	63.1 - 105

**Sample: 49262 - West SP**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      Prep Method: N/A  
 QC Batch: 14356      Date Analyzed: 2004-11-30      Analyzed By: BP  
 Prep Batch: 12682      Date Prepared: 2004-11-30      Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
DRO		73.9	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	69.8 - 106.1

**Sample: 49262 - West SP**

Analysis: TPH GRO      Analytical Method: S 8015B      Prep Method: S 5035  
 QC Batch: 14401      Date Analyzed: 2004-12-02      Analyzed By: MS  
 Prep Batch: 12722      Date Prepared: 2004-12-02      Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO	<sup>13</sup>	<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.808	mg/Kg	50	0.100	16	0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100	20	0 - 174

**Method Blank (1)    QC Batch: 14356**

Parameter	Flag	Result	Units	RL
DRO		<50.0	mg/Kg	50

<sup>10</sup> Sample diluted due to surfactant content.<sup>11</sup> Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.<sup>12</sup> Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.<sup>13</sup> Sample diluted due to surfactants.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	69.8 - 106.1

**Method Blank (1) QC Batch: 14400**

Parameter	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.001
Toluene		<0.0100	mg/Kg	0.001
Ethylbenzene		<0.0100	mg/Kg	0.001
Xylene		<0.0100	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.716	mg/Kg	10	0.100	72	36.6 - 112

**Method Blank (1) QC Batch: 14401**

Parameter	Flag	Result	Units	RL
GRO		2.11	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.729	mg/Kg	10	0.100	73	50.7 - 113

**Method Blank (1) QC Batch: 14435**

Parameter	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.001
Toluene		<0.0100	mg/Kg	0.001
Ethylbenzene		<0.0100	mg/Kg	0.001
Xylene		<0.0100	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.990	mg/Kg	10	0.100	99	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.698	mg/Kg	10	0.100	70	36.6 - 112

**Method Blank (1) QC Batch: 14437**

Parameter	Flag	Result	Units	RL
GRO		<1.00	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.779	mg/Kg	10	0.100	78	50.7 - 113

Laboratory Control Spike (LCS-1) QC Batch: 14356

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	236	233	mg/Kg	1	250	<12.0	94	1	78.7 - 117.6	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
n-Triacontane	132	128	mg/Kg	1	150	88	85	69.8 - 106.1

Laboratory Control Spike (LCS-1) QC Batch: 14400

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.938	0.969	mg/Kg	10	0.100	<0.0333	94	3	79.8 - 114	9.4
Toluene	0.974	0.978	mg/Kg	10	0.100	<0.0353	97	0	79.7 - 115	7.5
Ethylbenzene	0.993	0.989	mg/Kg	10	0.100	<0.0339	99	0	78.7 - 116	8
Xylene	2.80	2.78	mg/Kg	10	0.300	<0.103	93	1	78.7 - 118	7.9

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)	0.960	1.05	mg/Kg	10	0.100	96	105	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.926	0.944	mg/Kg	10	0.100	93	94	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 14401

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.64	11.3	mg/Kg	10	1.00	<0.381	96	16	72 - 124	21

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)	0.934	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.984	1.02	mg/Kg	10	0.100	98	102	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 14435

continued ...

*control spikes continued...*

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.978	0.956	mg/Kg	10	0.100	<0.0333	98	2	79.8 - 114	9.4
Toluene	0.958	0.937	mg/Kg	10	0.100	<0.0353	96	2	79.7 - 115	7.5
Ethylbenzene	0.990	0.968	mg/Kg	10	0.100	<0.0339	99	2	78.7 - 116	8
Xylene	2.78	2.72	mg/Kg	10	0.300	<0.103	93	2	78.7 - 118	7.9

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)	1.01	0.992	mg/Kg	10	0.100	101	99	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.954	0.933	mg/Kg	10	0.100	95	93	72.2 - 111

**Laboratory Control Spike (LCS-1) QC Batch: 14437**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.55	9.96	mg/Kg	10	1.00	<0.381	96	4	72 - 124	21

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)	0.927	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.994	0.991	mg/Kg	10	0.100	99	99	72.2 - 119

**Matrix Spike (MS-1) QC Batch: 14356 Spiked Sample: 49259**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO <sup>14</sup>	295	253	mg/Kg	1	250	<12.0	118	15	67.7 - 110.5	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane <sup>15</sup>	163	134	mg/Kg	1	150	109	89	69.8 - 106.1

**Matrix Spike (MS-1) QC Batch: 14400 Spiked Sample: 49254**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene <sup>16</sup> <sup>17</sup>	0.818	0.676	mg/Kg	10	0.100	<0.0333	82	19	63.5 - 98.6	12
Toluene	0.889	0.710	mg/Kg	10	0.100	<0.0353	89	22	65.8 - 102	11.4

*continued ...*

<sup>14</sup>Spike recovery out of control chart range but within method limits.

<sup>15</sup>Surrogate recovery out of control chart range but within method limits.

<sup>16</sup>RPD out. LCS/LCSD show the analysis to be in control.

<sup>17</sup>RPD out. LCS/LCSD show the analysis to be in control.

*matrix spikes continued...*

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ethylbenzene	0.891	0.730	mg/Kg	10	0.100	<0.0339	89	20	66.6 - 106	10.5
Xylene	2.52	2.05	mg/Kg	10	0.300	<0.103	84	20	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.859	0.727	mg/Kg	10	0.1	86	73	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.919	0.744	mg/Kg	10	0.1	92	74	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14401 Spiked Sample: 49254

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	12.1	14.2	mg/Kg	10	1.00	<0.381	121	16	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.09	1.43	mg/Kg	10	0.1	109	143	0 - 160
4-Bromofluorobenzene (4-BFB)	1.06	1.02	mg/Kg	10	0.1	106	102	0 - 174

Matrix Spike (MS-1) QC Batch: 14435 Spiked Sample: 49466

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.794	0.839	mg/Kg	10	0.100	<0.0333	79	6	63.5 - 98.6	12
Toluene	0.838	0.852	mg/Kg	10	0.100	<0.0353	83	2	65.8 - 102	11.4
Ethylbenzene	0.891	0.900	mg/Kg	10	0.100	<0.0339	89	1	66.6 - 106	10.5
Xylene	2.52	2.57	mg/Kg	10	0.300	<0.103	84	2	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.853	0.807	mg/Kg	10	0.1	85	81	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.908	0.946	mg/Kg	10	0.1	91	95	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14437 Spiked Sample: 49261

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	11.5	12.2	mg/Kg	10	1.00	0.649	108	6	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.01	1.08	mg/Kg	10	0.1	101	108	0 - 160

*continued...*

*matrix spikes continued ...*

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.960	1.02	mg/Kg	10	0.1	96	102	0 - 174

**Standard (ICV-1)** QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	294	118	75 - 125	2004-11-30

**Standard (CCV-1)** QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	232	93	75 - 125	2004-11-30

**Standard (CCV-2)** QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	230	92	75 - 125	2004-11-30

**Standard (ICV-1)** QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

**Standard (CCV-1)** QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.100	100	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0975	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.288	96	85 - 115	2004-12-02

**Standard (CCV-2)** QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-12-02

Standard (CCV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.04	104	85 - 115	2004-12-02

Standard (CCV-2) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0979	98	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0963	96	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0993	99	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.280	93	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0950	95	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0953	95	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0967	97	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2004-12-03

Standard (ICV-1) QC Batch: 14437

Report Date: December 7, 2004  
TNM 98-05

Work Order: 4113008  
TNM 98-05

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Lea County

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.978	98	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14437

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.992	99	85 - 115	2004-12-03

Page / of /

TraceAnalysis, Inc.		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST				
		155 McCutcheon, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4044 1 (888) 588-3443	LAB Order ID # <u>4113008</u>	Turn Around Time if different from standard <u>Hold</u>		
ANALYSIS REQUEST (Circle or Specify Method No.)						
Company Name: <u>Plains</u>	Phone #: <u></u>					
Address: <u>155 McCutcheon, Suite H El Paso, Texas 79932</u>	Fax #: <u></u>					
Contact Person: <u>Houston</u>						
Invoice to: (If different from above)						
Project #: <u>TNM 98-05</u>	Project Name: <u>TNM 98-05</u>					
Project Location: <u>Lea County</u>	Sampler Signature: <u>S. G.</u>					
LAB # (LAB USE ONLY)	FIELD CODE	SAMPLING				
		MATRIX	PRESERVATIVE METHOD	DATE	TIME	
# CONTAINERS	VOLUME/AMOUNT	SLUDGE	SLUDGE	DATE	TIME	
WATER	AIR	AIR	AIR	<u>12/11</u>	<u>12:00</u>	
S6	ESP C	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:05</u>	
S7	ESP D	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:15</u>	
S8	ESP E	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:20</u>	
S9	ESP F	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:25</u>	
60	ESP G	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:30</u>	
61	ESP H	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:35</u>	
62	West SP	<u>1</u>	<u>1</u>	<u>12/11</u>	<u>12:40</u>	
Relinquished by: <u>Jill G.</u>		Date: <u>11/29/04</u>	Time: <u>1645</u>	Received by: <u>John R. Johnson</u>	Date: <u>11/29/04</u>	Time: <u>1645</u>
Relinquished by: <u>John R. Johnson</u>		Date: <u>11/29/04</u>	Time: <u>1730</u>	Received at Laboratory by: <u>Jill G.</u>	Date: <u>11/30/04</u>	Time: <u>9:13</u>
Relinquished by: <u>John R. Johnson</u>						
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. <u>John R. Johnson</u>						
ORIGINAL COPY						
REMARKS: <i>Please CC - Reports to C Eschberger &amp; Novatruity cc</i>						
<input checked="" type="checkbox"/> Check If Special Reporting <input type="checkbox"/> Limits Are Needed						

## Summary Report

Craig Eschberger  
Nova Safety & Environmental  
5023 Commerce  
Midland, TX 79703

Report Date: December 7, 2004  
Work Order: 4113008

Project Location: Lea County  
Project Name: TNM 98-05  
Project Number: TNM 98-05

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49254	ESP A	soil	2004-11-26	12:00	2004-11-30
49255	ESP B	soil	2004-11-26	12:05	2004-11-30
49256	ESP C	soil	2004-11-26	12:10	2004-11-30
49257	ESP D	soil	2004-11-26	12:15	2004-11-30
49258	ESP E	soil	2004-11-26	12:20	2004-11-30
49259	ESP F	soil	2004-11-26	12:25	2004-11-30
49260	ESP G	soil	2004-11-26	12:30	2004-11-30
49261	ESP H	soil	2004-11-26	12:35	2004-11-30
49262	West SP	soil	2004-11-26	00:00	2004-11-30

Sample - Field Code	BTEX				TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)		
49254 - ESP A	<0.0100	0.0634	<0.0100	0.0114	<50.0	<1.00
49255 - ESP B	<0.0100	0.199	0.0117	<0.0100	<50.0	<1.00
49256 - ESP C	<0.0100	0.260	<0.0100	0.0105	<50.0	<1.00
49257 - ESP D	<0.0100	0.114	<0.0100	<0.0100	<50.0	<1.00
49258 - ESP E	<0.0100	0.0835	<0.0100	<0.0100	<50.0	<1.00
49259 - ESP F	<0.0500	0.258	<0.0500	<0.0500	<50.0	<5.00
49260 - ESP G	<0.100	0.560	<0.100	<0.100	109	<10.0
49261 - ESP H	<0.0100	0.0626	<0.0100	0.0164	<50.0	<1.00
49262 - West SP	<0.0500	0.297	<0.0500	<0.0500	73.9	<5.00

# TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9   Lubbock, Texas 79424   800•378•1296   806•794•1296   FAX 806•794•1298  
155 McCutcheon, Suite H   El Paso, Texas 79932   888•588•3443   915•585•3443   FAX 915•585•4944  
E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

Craig Eschberger  
Nova Safety & Environmental  
5023 Commerce  
Midland, TX 79703

Report Date: December 7, 2004

Work Order: 4113008

Project Location: Lea County  
Project Name: TNM 98-05  
Project Number: TNM 98-05

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49254	ESP A	soil	2004-11-26	12:00	2004-11-30
49255	ESP B	soil	2004-11-26	12:05	2004-11-30
49256	ESP C	soil	2004-11-26	12:10	2004-11-30
49257	ESP D	soil	2004-11-26	12:15	2004-11-30
49258	ESP E	soil	2004-11-26	12:20	2004-11-30
49259	ESP F	soil	2004-11-26	12:25	2004-11-30
49260	ESP G	soil	2004-11-26	12:30	2004-11-30
49261	ESP H	soil	2004-11-26	12:35	2004-11-30
49262	West SP	soil	2004-11-26	00:00	2004-11-30

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



Dr. Blair Leftwich, Director

## Analytical Report

Sample: 49254 - ESP A

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0634	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0114	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.844	mg/Kg	10	0.100	84	63.1 - 105

Sample: 49254 - ESP A

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	95	69.8 - 106.1

Sample: 49254 - ESP A

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.831	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

Sample: 49255 - ESP B

Report Date: December 7, 2004  
TNM 98-05

Work Order: 4113008  
TNM 98-05

Page Number: 3 of 18  
Lea County

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.199	mg/Kg	10	0.00100
Ethylbenzene		0.0117	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.819	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.847	mg/Kg	10	0.100	85	63.1 - 105

#### Sample: 49255 - ESP B

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
r-Triacontane	1	171	mg/Kg	1	150	114	69.8 - 106.1

#### Sample: 49255 - ESP B

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.938	mg/Kg	10	0.100	94	0 - 174

#### Sample: 49256 - ESP C

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

<sup>1</sup>Surrogate recovery out of control chart range but within method limits.

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.260	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0105	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.842	mg/Kg	10	0.100	84	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.925	mg/Kg	10	0.100	92	63.1 - 105

#### Sample: 49256 - ESP C

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	91	69.8 - 106.1

#### Sample: 49256 - ESP C

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.860	mg/Kg	10	0.100	86	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	0 - 174

#### Sample: 49257 - ESP D

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 14400	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.114	mg/Kg	10	0.00100

continued...

*sample 49257 continued . . .*

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100
Surrogate	Flag	Result	Units	Dilution	Spike Amount
Trifluorotoluene (TFT)		0.804	mg/Kg	10	0.100
4-Bromofluorobenzene (4-BFB)		0.845	mg/Kg	10	0.100
		Percent Recovery		Recovery Limits	

**Sample: 49257 - ESP D**

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

Parameter	Flag	Result	Units	Dilution	RL		
DRO		<50.0	mg/Kg	1	50.0		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limits	
n-Triacontane		140	mg/Kg	1	150	94	69.8 - 106.1

Sample: 49257 - ESP D

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL		
GRO		<1.00	mg/Kg	10	0.100		
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery		
Trifluorotoluene (TFT)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

Sample: 49258 - ESP E

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0835	mg/Kg	10	0.00100

*continued...*

sample 49258 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		0.914	mg/Kg	10	0.100
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	10	0.100

Sample: 49258 - ESP E

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

Parameter	Flag	Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
n-Triacontane		139	mg/Kg	1	150

Sample: 49258 - ESP E

Analysis: TPH GRO  
QC Batch: 14401  
Prep Batch: 12722

Analytical Method: S 8015B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100
Surrogate	Flag	Result	Units	Dilution	Recovery
Trifluorotoluene (TFT)		0.913	mg/Kg	10	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0 - 174

Sample: 49259 - ESP F

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

continued ...

sample 49259 continued ...

Parameter	Flag	Result	Units	Dilution	RL
Parameter	Flag	Result	Units	Dilution	RL
Benzene	<sup>2</sup>	<0.0500	mg/Kg	50	0.00100
Toluene		0.258	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>3</sup>	0.735	mg/Kg	50	0.100	15	60.1 - 104
4-Bromofluorobenzene (4-BFB)	<sup>4</sup>	0.913	mg/Kg	50	0.100	18	63.1 - 105

#### Sample: 49259 - ESP F

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

Parameter	Flag	Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Recovery Limits
n-Triacontane		128	mg/Kg	1	150 86 69.8 - 106.1

#### Sample: 49259 - ESP F

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	Result	Units	Dilution	RL
GRO	<sup>5</sup>	<5.00	mg/Kg	50	0.100
Surrogate	Flag	Result	Units	Dilution	Recovery Limits
Trifluorotoluene (TFT)		0.705	mg/Kg	50	0.100 14 0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100 20 0 - 174

#### Sample: 49260 - ESP G

<sup>2</sup>Sample diluted due to surfactant content.

<sup>3</sup>Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>4</sup>Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>5</sup>Sample diluted due to surfactants.

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Analysis: BTEX  
QC Batch: 14435  
Prep Batch: 12753

Analytical Method: S 8021B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene	<sup>6</sup>	<0.100	mg/Kg	100	0.00100
Toluene		0.560	mg/Kg	100	0.00100
Ethylbenzene		<0.100	mg/Kg	100	0.00100
Xylene		<0.100	mg/Kg	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent	Recovery
					Amount	Recovery	Limits
Trifluorotoluene (TFT)	<sup>7</sup>	0.715	mg/Kg	100	0.100	7	60.1 - 104
4-Bromofluorobenzene (4-BFB)	<sup>8</sup>	0.877	mg/Kg	100	0.100	9	63.1 - 105

#### Sample: 49260 - ESP G

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

Parameter	Flag	RL		Dilution	RL		
		Result	Units				
DRO		109	mg/Kg	1	50.0		
Surrogate	Flag	Result	Units	Dilution	Spike		
n-Triacanate		147	mg/Kg	1	150	Percent	Recovery
					98	Limits	69.8 - 106.1

#### Sample: 49260 - ESP G

Analysis: TPH GRO  
QC Batch: 14437  
Prep Batch: 12753

Analytical Method: S 8015B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	RL		Dilution	RL
		Result	Units		
GRO	<sup>9</sup>	<10.0	mg/Kg	100	0.100
Surrogate	Flag	Result	Units	Dilution	Spike
Trifluorotoluene (TFT)		0.680	mg/Kg	100	0.100
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	100	0.100
					Percent
					Recovery
					Limits
					0 - 160
					0 - 174

#### Sample: 49261 - ESP H

<sup>6</sup>Diluted due to surfactant content.

<sup>7</sup>Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>8</sup>Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>9</sup>Sample diluted due to surfactant content.

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Analysis: BTEX  
QC Batch: 14435  
Prep Batch: 12753

Analytical Method: S 8021B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0626	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0164	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.794	mg/Kg	10	0.100	79	63.1 - 105

#### Sample: 49261 - ESP H

Analysis: TPH DRO  
QC Batch: 14356  
Prep Batch: 12682

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-11-30  
Date Prepared: 2004-11-30

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	69.8 - 106.1

#### Sample: 49261 - ESP H

Analysis: TPH GRO  
QC Batch: 14437  
Prep Batch: 12753

Analytical Method: S 8015B  
Date Analyzed: 2004-12-03  
Date Prepared: 2004-12-03

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

Parameter	Flag	Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.26	mg/Kg	10	0.100	126	0 - 160
4-Bromofluorobenzene (4-BFB)		0.894	mg/Kg	10	0.100	89	0 - 174

#### Sample: 49262 - West SP

Analysis: BTEX  
QC Batch: 14400  
Prep Batch: 12722

Analytical Method: S 8021B  
Date Analyzed: 2004-12-02  
Date Prepared: 2004-12-02

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

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene	<sup>10</sup>	<0.0500	mg/Kg	50	0.00100
Toluene		0.297	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent Recovery	Recovery Limits
					Amount		
Trifluorotoluene (TFT)	<sup>11</sup>	0.823	mg/Kg	50	0.100	16	60.1 - 104
4-Bromofluorobenzene (4-BFB)	<sup>12</sup>	0.915	mg/Kg	50	0.100	18	63.1 - 105

**Sample: 49262 - West SP**

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 14356	Date Analyzed: 2004-11-30	Analyzed By: BP
Prep Batch: 12682	Date Prepared: 2004-11-30	Prepared By: DS

Parameter	Flag	RL		Dilution	RL
		Result	Units		
DRO		73.9	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike	Percent Recovery	Recovery Limits
					Amount		
n-Triacontane		136	mg/Kg	1	150	91	69.8 - 106.1

**Sample: 49262 - West SP**

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 14401	Date Analyzed: 2004-12-02	Analyzed By: MS
Prep Batch: 12722	Date Prepared: 2004-12-02	Prepared By: MS

Parameter	Flag	RL		Dilution	RL
		Result	Units		
GRO	<sup>13</sup>	<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike	Percent Recovery	Recovery Limits
					Amount		
Trifluorotoluene (TFT)		0.808	mg/Kg	50	0.100	16	0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100	20	0 - 174

**Method Blank (1) QC Batch: 14356**

Parameter	Flag	Result	Units	RL
DRO		<50.0	mg/Kg	50

<sup>10</sup> Sample diluted due to surfactant content.

<sup>11</sup> Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>12</sup> Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.

<sup>13</sup> Sample diluted due to surfactants.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	69.8 - 106.1

Method Blank (1) QC Batch: 14400

Parameter	Flag	Result	Units			RL
Benzene		<0.0100	mg/Kg			0.001
Toluene		<0.0100	mg/Kg			0.001
Ethylbenzene		<0.0100	mg/Kg			0.001
Xylene		<0.0100	mg/Kg			0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.716	mg/Kg	10	0.100	72	36.6 - 112

Method Blank (1) QC Batch: 14401

Parameter	Flag	Result	Units		RL
GRO		2.11	mg/Kg		0.1
Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100
4-Bromofluorobenzene (4-BFB)		0.729	mg/Kg	10	0.100
					81.8 - 109
					50.7 - 113

Method Blank (1) QC Batch: 14435

Parameter	Flag	Result	Units		RL
Benzene		<0.0100	mg/Kg		0.001
Toluene		<0.0100	mg/Kg		0.001
Ethylbenzene		<0.0100	mg/Kg		0.001
Xylene		<0.0100	mg/Kg		0.001
Surrogate	Flag	Result	Units	Dilution	Spike Amount
Trifluorotoluene (TFT)		0.990	mg/Kg	10	0.100
4-Bromofluorobenzene (4-BFB)		0.698	mg/Kg	10	0.100
					99
					74.5 - 114
					70
					36.6 - 112

Method Blank (1) QC Batch: 14437

Parameter	Flag	Result	Units	RL
GRO		<1.00	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.779	mg/Kg	10	0.100	78	50.7 - 113

Laboratory Control Spike (LCS-1) QC Batch: 14356

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	236	233	mg/Kg	1	250	<12.0	94	1	78.7 - 117.6	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
n-Triacontane	132	128	mg/Kg	1	150	88	85	69.8 - 106.1

Laboratory Control Spike (LCS-1) QC Batch: 14400

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.938	0.969	mg/Kg	10	0.100	<0.0333	94	3	79.8 - 114	9.4
Toluene	0.974	0.978	mg/Kg	10	0.100	<0.0353	97	0	79.7 - 115	7.5
Ethylbenzene	0.993	0.989	mg/Kg	10	0.100	<0.0339	99	0	78.7 - 116	8
Xylene	2.80	2.78	mg/Kg	10	0.300	<0.103	93	1	78.7 - 118	7.9

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)	0.960	1.05	mg/Kg	10	0.100	96	105	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.926	0.944	mg/Kg	10	0.100	93	94	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 14401

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.64	11.3	mg/Kg	10	1.00	<0.381	96	16	72 - 124	21

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)	0.934	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.984	1.02	mg/Kg	10	0.100	98	102	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 14435

*continued ...*

*control spikes continued ...*

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.978	0.956	mg/Kg	10	0.100	<0.0333	98	2	79.8 - 114	9.4
Toluene	0.958	0.937	mg/Kg	10	0.100	<0.0353	96	2	79.7 - 115	7.5
Ethylbenzene	0.990	0.968	mg/Kg	10	0.100	<0.0339	99	2	78.7 - 116	8
Xylene	2.78	2.72	mg/Kg	10	0.300	<0.103	93	2	78.7 - 118	7.9

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)	1.01	0.992	mg/Kg	10	0.100	101	99	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.954	0.933	mg/Kg	10	0.100	95	93	72.2 - 111

**Laboratory Control Spike (LCS-1) QC Batch: 14437**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.55	9.96	mg/Kg	10	1.00	<0.381	96	4	72 - 124	21

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)	0.927	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.994	0.991	mg/Kg	10	0.100	99	99	72.2 - 119

**Matrix Spike (MS-1) QC Batch: 14356 Spiked Sample: 49259**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	<sup>14</sup> 295	253	mg/Kg	1	250	<12.0	118	15	67.7 - 110.5	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	<sup>15</sup> 163	134	mg/Kg	1	150	109	89	69.8 - 106.1

**Matrix Spike (MS-1) QC Batch: 14400 Spiked Sample: 49254**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	<sup>16</sup> 0.818	0.676	mg/Kg	10	0.100	<0.0333	82	19	63.5 - 98.6	12
Toluene	0.889	0.710	mg/Kg	10	0.100	<0.0353	89	22	65.8 - 102	11.4

*continued ...*

<sup>14</sup>Spike recovery out of control chart range but within method limits.

<sup>15</sup>Surrogate recovery out of control chart range but within method limits.

<sup>16</sup>RPD out. LCS/LCSD show the analysis to be in control.

<sup>17</sup>RPD out. LCS/LCSD show the analysis to be in control.

*matrix spikes continued...*

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ethylbenzene	0.891	0.730	mg/Kg	10	0.100	<0.0339	89	20	66.6 - 106	10.5
Xylene	2.52	2.05	mg/Kg	10	0.300	<0.103	84	20	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.859	0.727	mg/Kg	10	0.1	86	73	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.919	0.744	mg/Kg	10	0.1	92	74	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14401 Spiked Sample: 49254

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	12.1	14.2	mg/Kg	10	1.00	<0.381	121	16	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.09	1.43	mg/Kg	10	0.1	109	143	0 - 160
4-Bromofluorobenzene (4-BFB)	1.06	1.02	mg/Kg	10	0.1	106	102	0 - 174

Matrix Spike (MS-1) QC Batch: 14435 Spiked Sample: 49466

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.794	0.839	mg/Kg	10	0.100	<0.0333	79	6	63.5 - 98.6	12
Toluene	0.838	0.852	mg/Kg	10	0.100	<0.0353	83	2	65.8 - 102	11.4
Ethylbenzene	0.891	0.900	mg/Kg	10	0.100	<0.0339	89	1	66.6 - 106	10.5
Xylene	2.52	2.57	mg/Kg	10	0.300	<0.103	84	2	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.853	0.807	mg/Kg	10	0.1	85	81	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.908	0.946	mg/Kg	10	0.1	91	95	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14437 Spiked Sample: 49261

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	11.5	12.2	mg/Kg	10	1.00	0.649	108	6	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.01	1.08	mg/Kg	10	0.1	101	108	0 - 160

*continued...*

*matrix spikes continued...*

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.960	1.02	mg/Kg	10	0.1	96	102	0 - 174

Standard (ICV-1) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	294	118	75 - 125	2004-11-30

Standard (CCV-1) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	232	93	75 - 125	2004-11-30

Standard (CCV-2) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	230	92	75 - 125	2004-11-30

Standard (ICV-1) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

Standard (CCV-1) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.100	100	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0975	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.288	96	85 - 115	2004-12-02

Standard (CCV-2) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-12-02

Standard (CCV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.04	104	85 - 115	2004-12-02

Standard (CCV-2) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0979	98	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0963	96	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0993	99	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.280	93	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0950	95	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0953	95	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0967	97	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2004-12-03

Standard (ICV-1) QC Batch: 14437

Report Date: December 7, 2004  
TNM 98-05

Work Order: 4113008  
TNM 98-05

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Lea County

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.978	98	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14437

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.992	99	85 - 115	2004-12-03

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TraceAnalysis, Inc.		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST				
		LAB Order ID # <u>4113008</u>				
Company Name: <u>PLAINS</u>		ANALYSIS REQUEST (Circle or Specify Method No.)				
Address: <u>155 McCulcheon, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1 (800) 378-1296 1 (888) 588-3443</u>		<input type="checkbox"/> Turn Around Time if different from standard <input type="checkbox"/> Hold				
Contact Person:						
Invoice to: (if different from above)						
Project #: <u>7701NM 98-05</u>		Project Name: <u>7701NM 98-05</u>				
Project Location: <u>Lea County</u>		Sampler Signature: <u>John S.</u>				
LAB # (LAB USE ONLY)	FIELD CODE	MATRIX	PRESERVATIVE METHOD	SAMPLING TIME	REMARKS:	
					# CONTAINERS	VOLUME/AMOUNT
40254	ESP A	1	H2O	X	<u>PAH 8270C</u>	<u>TPH 418-1/TX1005</u>
55	ESP B	1		X	<u>BTEX 8021B/602</u>	<u>Tolu Meats Ag As Ba Cd Cr Pb Se Hg</u>
56	ESP C	1		X	<u>MTE 8021B/602</u>	<u>TCLP Volatiles</u>
57	ESP D	1		X	<u>TCLP Semi Volatiles</u>	<u>TCLP Pesticides</u>
58	ESP E	1		X	<u>PCBs 8082/608</u>	<u>PCBs 8082/608</u>
59	ESP F	1		X	<u>GCMS Semi Vol 8270C/625</u>	<u>GCMS Semi Vol 8270C/625</u>
60	ESP G	1		X	<u>PCBs 8082/608</u>	<u>PCBs 8082/608</u>
61	ESP H	1		X	<u>RCI</u>	<u>RCI</u>
62	LAST SP	1		X	<u>BOD TSS PH</u>	<u>BOD TSS PH</u>
					<u>Pesticides 8082/608</u>	<u>Pesticides 8082/608</u>
					<u>Turn Around Time if different from standard</u>	<u>Turn Around Time if different from standard</u>
Relinquished by: <u>John S.</u> Date: <u>11/29/04</u> Time: <u>1645</u>		Received by: <u>John S.</u> Date: <u>11/29/04</u> Time: <u>1645</u>		LAB USE ONLY		REMARKS: <u>Please CC - Reports to C Eschbreyer &amp; Novattawiny CC</u>
Relinquished by: <u>John S.</u> Date: <u>11/29/04</u> Time: <u>1720</u>		Received at Laboratory by: <u>John S.</u> Date: <u>11/30/04</u> Time: <u>9:13</u>		Inlet <u>Y/N</u>		
Relinquished by: <u>John S.</u> Date: <u>11/29/04</u> Time: <u>1720</u>		Log-in Review		Headspace <u>Y/N</u>		
Relinquished by: <u>John S.</u> Date: <u>11/29/04</u> Time: <u>1720</u>		Carrier # <u>113008</u>		Temp <u>41</u>		

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John S. 11/29/04 113008

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

