AP - 012

STAGE 1 & 2 WORKPLANS

DATE:

Dec. 2004

SITE RESTORATION WORK PLAN
AND
PROPOSED SOIL CLOSURE STRATEGY

TNM 98-05A
Section 26, Township 21 South, Range 37 East
Lea County, New Mexico
PLAINS EMS NUMBER: TNM-98-05A

Prepared For:

Plains Marketing, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

NOVA
safety and environmental

Prepared By:

NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703

December 2004

Craig Eschberger
Geologist/Senior Project Manager

Todd Choban
Director of Technical Services

Table of Contents

1.0 INTRODUCTION

NOVA Safety and Environmental (NOVA) is pleased to submit this Site Restoration Work Plan and Proposed Soil Closure Strategy to Plains Marketing, L.P. (Plains) outlining proposed corrective actions at the referenced crude oil release site and ultimate closure of crude oil impacted soils at the release site. The TNM 98-05A crude oil release site, formerly operated by Enron Oil Trading and Transportation (EOTT) is now owned by Plains. Section 1.0 of this Site Restoration Work Plan and Closure Strategy summarizes investigative and remedial activities performed to date 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 impacts 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). On February 2, 1998 an estimated 38 barrels of crude oil was released from a 6" pipeline. Approximately four barrels were recovered during the emergency response activities.

A Stage 2 Abatement Plan was submitted to the NMOCD in December 1999. Additional soil samples were collected in the release area via a Geo-Probe® unit on May 30, 2000. In a letter dated April 21, 2000, the NMOCD requested additional information regarding the extent of impacted soil at the site. The results of the Geo-Probe® data were summarized in a letter to the NMOCD dated June 27, 2000, which provided additional information regarding the extent of impacted soil and makes the previously submitted report administratively complete. Figure 2 displays Geo-Probe® locations and other site features. Table 1 displays the analytical results of the Geo-Probe® derived soil samples. For background on this site, please refer to these documents.

A Remediation Work Plan prepared by Environmental Technology Group, Inc. (ETGI), dated August 2, 2002 was submitted to the NMOCD to address impacted soil removal and on site bio-remediation of the excavated soil.

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. Groundwater monitoring and sampling will continue at the site until groundwater conditions meet closure standards.

2.0 New Mexico Oil Conservation Division Site Classification

Groundwater at this site occurs between 40 and 50 feet below ground surface, as evidenced by ten monitor wells installed at the site. This site condition results in a score of 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 answer 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.

3.0 SUMMARY OF FIELD ACTIVITIES

Subsequent to the release, approximately 87 cubic yards of impacted soil was excavated and stockpiled on site. Composite soil samples were collected from the bottom and sidewalls of the excavation on May 8, 2002. The analytical results indicated that these soil samples exhibited concentrations of benzene, total BTEX and TPH concentrations below regulatory guidelines. The analytical results of the composite floor and wall soil samples collected from the excavation on May 8, 2002 are presented in TABLE 2. Laboratory reports are provided in APPENDIX B.

As per the Remediation Work Plan dated August 2, 2002, approximately 3,300 cubic yards of impacted soil was excavated and applied to an on-site treatment cell in November 2002. The excavation was completed to an approximate depth of 15 feet bgs. FIGURE 2 displays the excavation boundaries, soil treatment area and other site details. On November 14, 2002, soil samples were obtained specifically from the east wall, west wall, south wall and north wall of the excavation. The analytical results indicated that only the east wall sample exhibited a TPH concentration above the NMOCD regulatory standard of 100 mg/kg. The analytical results of the soil samples collected from the excavation on November 14, 2002 are presented in TABLE 2. Laboratory reports are provided in APPENDIX B.

The on-site treatment cell is aerated on a quarterly basis to enhance bioremediation. Four soil samples obtained from each quadrant of the bio-treatment cell have been obtained on a quarterly basis, from May 2002 through December 2003. In August 2004 three soil samples from 0.5-ft, 1.0-ft and 2.0-ft in depth from each quadrant were obtained and submitted for laboratory analysis of TPH. Review of laboratory analytical results of the soil samples collected from the treatment cell in August 2004 indicated TPH concentrations ranging from non-detect to 1,970 mg/kg with an average of 603 mg/Kg for all samples collected. The analytical results are summarized in TABLE 2. Laboratory reports are provided in APPENDIX B.

1,870

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 impacted soils at this site will include a risk based strategy subject to installing a synthetic clay liner in the bottom of the 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 2003 and April 2004 respectively, Plains proposes to mobilize an excavator to the site and remove additional soil from the east wall of the excavation. A minimum of two confirmation grab soil samples from the proposed excavation area 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 east wall samples exhibit TPH and BTEX concentrations below regulatory guidelines, then Plains proposes to install a geosynthetic clay liner (GCL) in the bottom of the excavation and back fill the excavation with the stockpiled excavated soil. The purpose of the GCL will be to create an impermeable barrier between groundwater and backfilled soils exhibiting TPH concentrations above ~~100~~ B ppm. Manufacturer's specifications of the GCL are provided in APPENDIX ~~C~~. 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.

5.0 SOIL 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, Plains will submit a final Soil Closure Report to the NMOCD, documenting the results of confirmation soil samples, installation of the clay liner (photographic documentation) and final topography restoration. Please note that groundwater remediation activities will continue until such a time that the site meets the NMOCD groundwater standards.

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
1220 South St. Francis Drive
Santa Fe, NM 87505

Copy 2 to:
Paul Sheeley and Larry Johnson
New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Copy 3 to:
Camille Reynolds
Plains Marketing, L.P.
3112 Highway 82
Lovington, New Mexico

Copy 4 to:
Jeff Dann
Plains Marketing, L.P.
333 Clay Street
Suite 600
Houston, Texas, 77002

Copy 5 to:
NOVA Safety and Environmental
4600 West Wall Street
Midland, Texas 79703

COPY NO.: _____

Tables

Table 1

CONCENTRATIONS OF TPH & BTEX IN SOIL

Plains Marketing L.P.
TNM 98-05A
Eunice, New Mexico

All concentrations are in mg/kg

SAMPLE DATE	SAMPLE LOCATION	EPA SW 846-8015M		
		GRO C_6-C_{10}	DRO > C_{10}-C_{28}	TPH C_6-C_{28}
3/30/2000	GP1-001 4'	<10	237	**237**
	GP1-002 7'	<10	34	34
	GP1-003 10'	<10	20	20
	GP1-004 13'	<10	13	13
3/30/2000	GP2-001 4'	<10	<10	<20
	GP2-002 7'	<10	<10	<20
	GP2-003 10'	<10	<10	<20
	GP2-004 13'	<10	<10	<20
3/30/2000	GP3-001 4'	<10	<10	<20
	GP3-002 7'	<10	<10	<20
3/30/2000	GP4-001 4'	<10	<10	<20
	GP4-002 7'	<10	<10	<20
	GP4-003 10'	<10	<10	<20
	GP4-004 13'	<10	<10	<20
3/30/2000	GP5-001 4'	<10	<10	<20
	GP5-002 7'	<10	<10	<20
	GP5-003 10'	<10	<10	<20
	GP5-004 13'	<10	<10	<20
3/30/2000	GP6-001 4'	<10	<10	<20
	GP6-002 7'	<10	<10	<20
	GP6-003 10'	<10	<10	<20
	GP6-004 13'	<10	<10	<20
4/5/2000	GP7-001 4'	9214	12885	**22099**
	GP7-002 7'	13990	15878	**29868**
	GP7-003 10'	3267	4587	**7854**
	GP7-004 13'	6561	8555	**15116**
4/5/2000	GP8-001 4'	16061	21804	**37865**
	GP8-002 7'	16787	21022	**37809**
4/5/2000	GP9-001 4'	2955	5423	**8378**
	GP9-002 7'	17	307	**324**
4/5/2000	GP10-001 4'	<10	64	64
	GP10-002 7'	<10	16	16
	GP10-003 10'	<10	<10	<20
	GP10-004 13'	<10	<10	<20
4/5/2000	GP11-001 4'	<10	<10	<20
	GP11-002 7'	<10	<10	<20
	GP11-003 10'	<10	<10	<20
	GP11-004 13'	<10	<10	<20
4/5/2000	GP12-001 4'	<10	<10	<20
	GP12-002 7'	<10	<10	<20

TABLE 2

SOIL CONCENTRATIONS OF BTEX AND TPH - EXCAVATION and SOIL TREATMENT CELL
TNM 98-05A
PLAINS MARKETING, L.P.

All concentrations are in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030				EPA SW 846-8015M		
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	GRO C6-C10	DRO >C10-C28	TOTAL TPH C6-C28
Initial Excavation Composites								
Excavation Walls	05/08/02	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	0.0
Excavation Bottom	05/08/02	<0.025	<0.025	<0.025	<0.025	<10.0	39.3	39.3
Excavation Soil Samples								
Excavation Westside Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	0.0
Excavation Southside Wall	11/14/02	<0.025	0.079	0.065	0.263	<10.0	<10.0	0.0
Excavation Northside Wall	11/14/02	<0.025	0.028	0.026	0.084	<10.0	29.8	29.8
Excavation Eastside Wall	11/14/02	<0.025	0.035	0.034	0.100	<10.0	831	**831.0**
Bio_Treatment Cell - Soil Samples								
Bio-Mound North East	05/08/02	<0.025	<0.025	<0.025	0.116	868	1680	2,548.0
Bio-Mound North West	05/08/02	0.060	0.268	0.080	0.326	349	392	741.0
Bio-Mound South East	05/08/02	<0.025	0.191	0.092	0.225	405	559	964.0
Bio-Mound South West	05/08/02	<0.025	0.142	0.090	0.440	848	1260	2,108.0
S.W. Biomound Comp	11/14/02	<0.025	0.042	0.040	0.142	22.7	1530	1,552.7
N.W. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	0.043	37.4	1480	1,517.4
S. E. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	<0.025	39.6	2180	2,219.6
N. E. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	<0.025	75.7	2260	2,335.7
N.E. Biomound - 1	03/04/03	na	na	na	na	124	1460	1,584.0
N.W. Biomound - 2	03/04/03	na	na	na	na	115	1890	2,005.0
S.W. Biomound - 3	03/04/03	na	na	na	na	52.6	1250	1,302.6
S.E. Biomound - 4	03/04/03	na	na	na	na	24.8	658	682.8
N.E. Biomound - 5	06/30/03	na	na	na	na	52.8	561	613.8
N.W. Biomound - 6	06/30/03	na	na	na	na	130	2280	2,410.0
S.E. Biomound - 7	06/30/03	na	na	na	na	67.9	1680	1,747.9
S.W. Biomound - 8	06/30/03	na	na	na	na	29.4	578	607.4
N.E. Biomound - 9	09/18/03	na	na	na	na	22.3	1140	1,162.3
S.E. Biomound - 10	09/18/03	na	na	na	na	<10.0	747	747.0
N.W. Biomound - 11	09/18/03	na	na	na	na	<10.0	1020	1,020.0
S.W. Biomound - 12	09/18/03	na	na	na	na	14.6	1770	1,784.6
N.E. Biomound - 13	12/31/03	na	na	na	na	18.7	1100	1,118.7
N.W. Biomound - 14	12/31/03	na	na	na	na	21.7	979	1,000.7
S.E. Biomound - 15	12/31/03	na	na	na	na	17.6	1550	1,567.6
S.W. Biomound - 16	12/31/03	na	na	na	na	<10.0	1000	1,000.0
NE Quad 0-6-in	08/27/04	na	na	na	na	ND	ND	ND
NE Quad 1 ft.	08/27/04	na	na	na	na	24.4	1,010	1,030
NE Quad 2 ft.	08/27/04	na	na	na	na	49.7	1,820	1,870
NW Quad 0-6-in	08/27/04	na	na	na	na	11.4	1,080	1,090
NW Quad 1 ft.	08/27/04	na	na	na	na	J(7.55)	553	553
NW Quad 2 ft.	08/27/04	na	na	na	na	12	147	159
SW Quad 6-in	08/27/04	na	na	na	na	ND	340	340
SW Quad 1 ft.	08/27/04	na	na	na	na	ND	ND	ND
SW Quad 2 ft.	08/27/04	na	na	na	na	35.8	1,610	1,650
SE Quad 0-6-in	08/27/04	na	na	na	na	J(8.82)	547	547
SE Quad 1 ft.	08/27/04	na	na	na	na	ND	ND	ND
SE Quad 2 ft.	08/27/04	na	na	na	na	ND	ND	ND

na = not analyzed ND = Non Detect

Figures

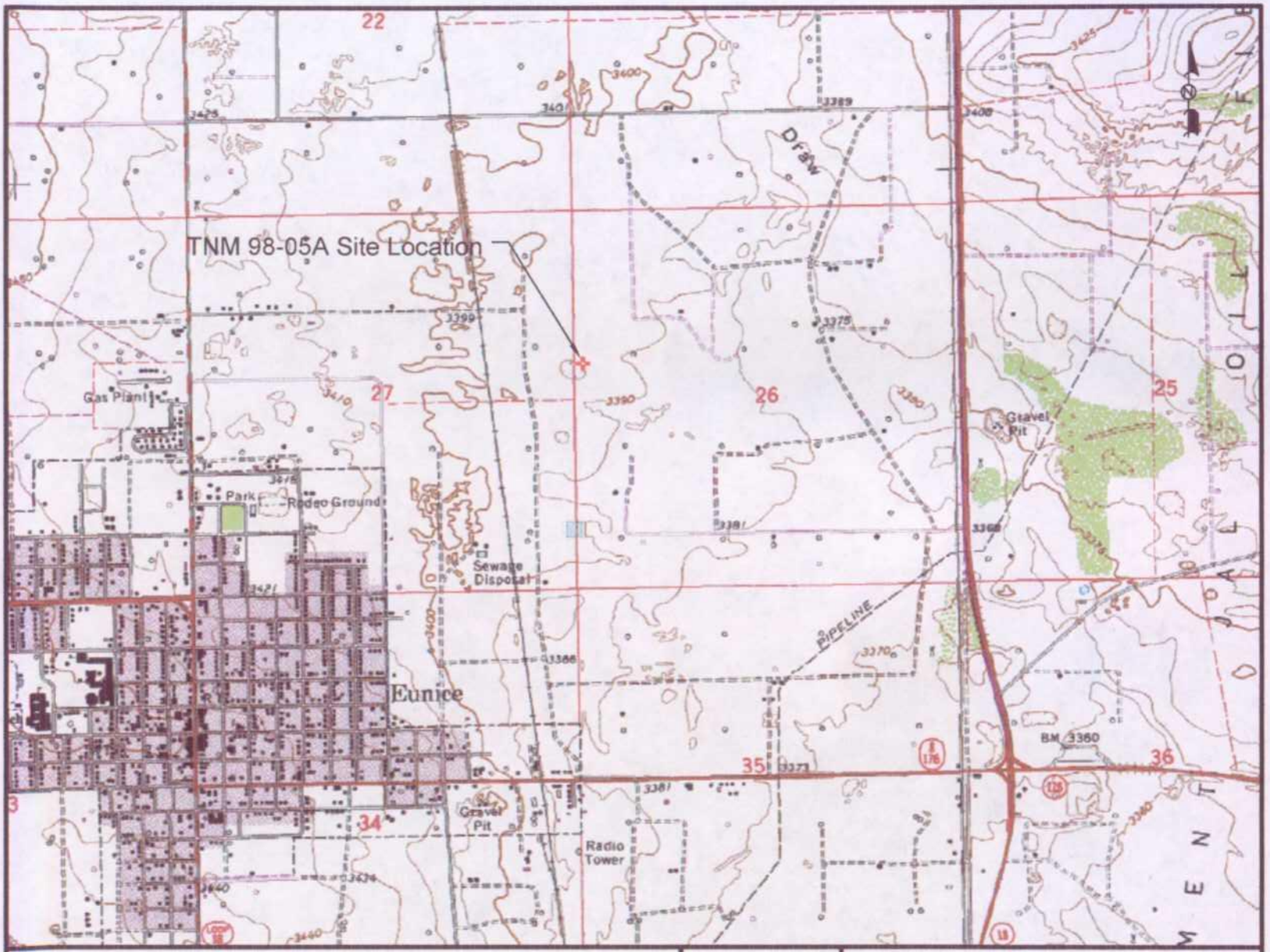
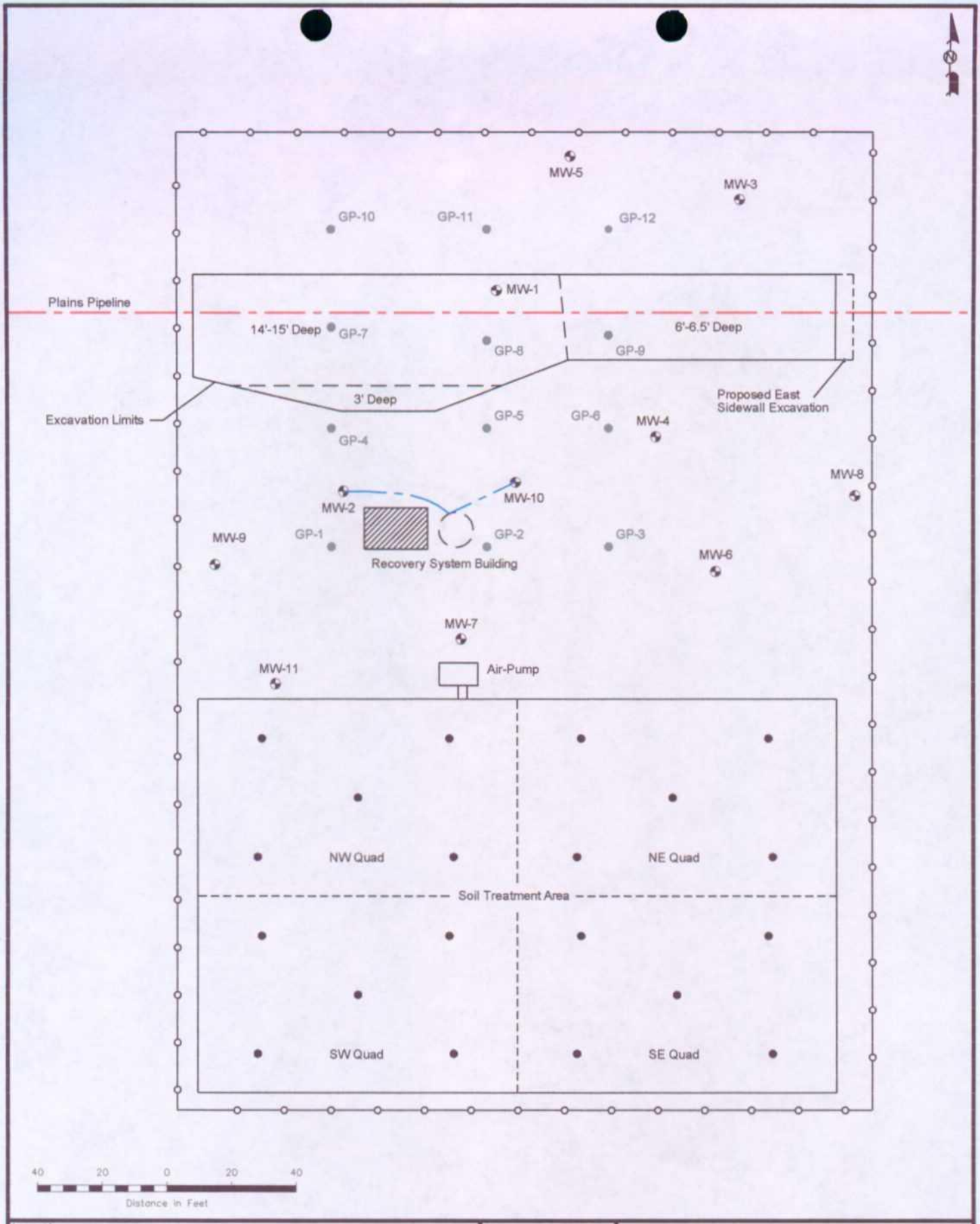


Figure 1
Site Location Map
Plains Marketing, L.P.
TNM 98-05A
Lea County, NM

NOVA Safety and Environmental

Scale: NTS	Prep By: CDS	Checked By: TKC
December 21, 2004	NE1/4 NW1/4 Sec 26 T21S R37E	
Lat. N32° 27' 03.9" Long. W103° 08' 29.2"		



Legend:

- Monitor Well Location
- Fence
- Recovery Line
- Poly Tank
- Shed
- Composite Sample Location
- GP-6 GeoProbe Location

Figure 2
Site Map

Plains Marketing, L.P.
TNM98-05A
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 40	Prep By: CDS	Checked By: TKC
December 2, 2004		

Appendices

Appendix A:
Laboratory Reports

XENCO Laboratories

11381 Meadowglen Suite L
Houston, Texas 77082-2647
(281) 589-0692 Fax: (281) 589-0695
Houston - Dallas - San Antonio - Latin America

December 8, 1998

Project Manager: Theresa Nix
K.E.I. Consultants, Inc.
5309 Wurzbach Rd. Suite 100
San Antonio, TX 78238

Reference: **XENCO Report No.: 1-84298**
Project Name: TNMPL 98-05
Project ID: 810060
Project Address: NM

Dear Theresa Nix:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number 1-84298. All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. 1-84298 will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/IEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Eddie L. Clemons, II
QA/QC Manager

Laboratories

CHRONOLOGY OF SAMPLES

K.E.I. Consultants, Inc.

Projec ID: 810060
Project Mana ger: Theresa Nix
Project Location: NM

Project Name: TNMPL 98-05

XENCO COC#: 1-84298
Date Received in Lab: Nov 6, 1998 11:30 by JO
XENCO contact : Carlos Castro/Karen Olson

	Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Date and Time: Sample Collected	Addition Requested	Extraction	Analysis
1	MW-1	184298-001	BTEX	SW-846	ppm	10 days	Nov 4, 1998 10:30		Nov 11, 1998 by HL	Nov 11, 1998 23:23 by HL
2			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 10:30		Nov 13, 1998 by JM	Nov 18, 1998 21:24 by AM
3		184298-002	BTEX	SW-846	ppm	10 days	Nov 4, 1998 10:40		Nov 12, 1998 by HL	Nov 12, 1998 07:30 by HL
4			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 10:40		Nov 13, 1998 by JM	Nov 18, 1998 17:38 by AM
5			VOA (8260)	EPA1312/8260	mg/kg	24 hours	Nov 4, 1998 10:40	Nov18,1998 16:00	Dec 1, 1998 by CCE	Dec 1, 1998 17:34 by CCE
6			SPLP TPH	EPA	ppm	24 hours	Nov 4, 1998 10:40	Nov18,1998 16:00	Dec 1, 1998 by EZ	Dec 1, 1998 16:35 by EZ
7			SPLP-SV(TCL)	SW846-1312/82	ug/L	24 hours	Nov 4, 1998 10:40	Nov18,1998 16:00	Nov 23, 1998 by RK	Dec 2, 1998 04:42 by MM
8			VOA (8260)	EPA1312/8260	mg/kg	Standard	Nov 4, 1998 10:40		Dec 2, 1998 by CCE	Dec 2, 1998 19:56 by CCE
9		184298-003	BTEX	SW-846	ppm	10 days	Nov 4, 1998 12:00		Nov 10, 1998 by HL	Nov 11, 1998 00:04 by HL
10			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 12:00		Nov 13, 1998 by AM	Nov 18, 1998 13:04 by AM
11	MW-2	184298-004	BTEX	SW-846	ppm	10 days	Nov 4, 1998 13:45		Nov 10, 1998 by HL	Nov 11, 1998 00:22 by HL
12			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 13:45		Nov 13, 1998 by AM	Nov 18, 1998 13:37 by AM
13		184298-005	BTEX	SW-846	ppm	10 days	Nov 4, 1998 14:00		Nov 10, 1998 by HL	Nov 11, 1998 01:01 by HL
14			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 14:00		Nov 13, 1998 by AM	Nov 18, 1998 14:09 by AM
15		184298-006	BTEX	SW-846	ppm	10 days	Nov 4, 1998 14:30		Nov 10, 1998 by HL	Nov 11, 1998 01:20 by HL
16			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 14:30		Nov 13, 1998 by AM	Nov 18, 1998 14:42 by AM
17	MW-3	184298-007	BTEX	SW-846	ppm	10 days	Nov 4, 1998 15:00		Nov 10, 1998 by HL	Nov 11, 1998 01:59 by HL
18			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 15:00		Nov 13, 1998 by AM	Nov 18, 1998 15:14 by AM
19		184298-008	BTEX	SW-846	ppm	10 days	Nov 4, 1998 15:30		Nov 10, 1998 by HL	Nov 11, 1998 02:18 by HL
20			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 15:30		Nov 13, 1998 by AM	Nov 18, 1998 15:50 by AM
21		184298-009	BTEX	SW-846	ppm	10 days	Nov 4, 1998 15:50		Nov 10, 1998 by HL	Nov 11, 1998 02:36 by HL
22			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 15:50		Nov 13, 1998 by JM	Nov 18, 1998 22:29 by AM
23	MW-4	184298-010	BTEX	SW-846	ppm	10 days	Nov 4, 1998 15:40		Nov 10, 1998 by HL	Nov 11, 1998 02:55 by HL
24			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 15:40		Nov 13, 1998 by JM	Nov 20, 1998 16:38 by AM
25		184298-011	BTEX	SW-846	ppm	10 days	Nov 4, 1998 15:45		Nov 11, 1998 by HL	Nov 11, 1998 22:27 by HL
26			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 15:45		Nov 13, 1998 by JM	Nov 20, 1998 16:05 by AM
27		184298-012	BTEX	SW-846	ppm	10 days	Nov 4, 1998 16:00		Nov 11, 1998 by HL	Nov 11, 1998 22:46 by HL
28			TPH8015M-D	SW-846 8015 M	mg/kg	10 days	Nov 4, 1998 16:00		Nov 13, 1998 by JM	Nov 18, 1998 21:56 by AM

Laboratories

K.E.I. Consultants, Inc.

Project ID: 810060
Project Name: TNMPL 98-05
Date Received in Lab : Nov 6, 1998 11:30
Project Manager: Theresa Nix
Date Report Faxed: Dec 8, 1998
Project Location: NM
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	Lab ID: / Field ID: / Depth: / Matrix: / Sampled:	184298 001 MW-1 0-2' Solid 11/04/98 10:30	184298 002 MW-1 2-4' Solid 11/04/98 10:40	184298 003 MW-1 35-37' Solid 11/04/98 12:00	184298 004 MW-2 0-2' Solid 11/04/98 13:45	184298 005 MW-2 15-17' Solid 11/04/98 14:00	184298 006 MW-2 40-42' Solid 11/04/98 14:30
TPH-DRO (Diesel) EPA 8015 M	Analyzed: / Units:	11/18/98 mg/kg R.L.	11/18/98 mg/kg R.L.	11/18/98 mg/kg R.L.	11/18/98 mg/kg R.L.	11/18/98 mg/kg R.L.	11/18/98 mg/kg R.L.
Total Petroleum Hydrocarbons		4040 (100)	11800 (250)	33.8 (10.0)	14.6 (10.0)	< 10.0 (10.0)	14.0 (10.0)
BTEX EPA 8021B	Analyzed: / Units:	11/11/98 ppm R.L.	11/12/98 ppm R.L.	11/11/98 ppm R.L.	11/11/98 ppm R.L.	11/11/98 ppm R.L.	11/11/98 ppm R
Benzene		3.72 (0.10)	4.68 (0.50)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	0.096 (0.050)
Toluene		45.80 (0.10)	32.70 (0.50)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	0.318 (0.050)
Ethylbenzene		64.40 (0.10)	27.40 (0.50)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	0.442 (0.050)
m,p-Xylene		66.60 (0.20)	27.30 (1.00)	< 0.100 (0.100)	< 0.100 (0.100)	< 0.100 (0.100)	0.615 (0.100)
o-Xylene		28.50 (0.10)	11.60 (0.50)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	0.304 (0.050)
Total BTEX		209.020	103.680	N.D.	N.D.	N.D.	1.775
SPLP-Semivolatiles EPA1312/8270	Analyzed: / Units:		12/02/98 mg/L R.L.				
Acenaphthene			< 0.005 (0.005)				
Acenaphthylene			< 0.005 (0.005)				
Anthracene			< 0.005 (0.005)				
Benz(a)anthracene			< 0.005 (0.005)				
Benzo(a)pyrene			< 0.005 (0.005)				
Benzo(b)fluoranthene			< 0.005 (0.005)				
Benzo(g,h,i)perylene			< 0.005 (0.005)				
Benzo(k)fluoranthene			< 0.005 (0.005)				
4-Bromophenyl-phenylether			< 0.005 (0.005)				
Butyl benzyl phthalate			< 0.005 (0.005)				
Carbazole			< 0.005 (0.005)				
4-Chloro-3-methylphenol			< 0.005 (0.005)				

Eddie L. Clemons, II
QA/QC Manager

K.E.I. Consultants, Inc.

Project ID: 810060
Project Manager: Theresa Nix
Project Location: NM

Project Name: TNMPL 98-05

Date Received in Lab : Nov 6, 1998 11:30
Date Report Faxed: Dec 8, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	Lab ID: / Field ID: / Depth: / Matrix: / Sampled:	184298 001 MW-1 0-2' Solid 11/04/98 10:30	184298 002 MW-1 2-4' Solid 11/04/98 10:40	184298 003 MW-1 35-37' Solid 11/04/98 12:00	184298 004 MW-2 0-2' Solid 11/04/98 13:45	184298 005 MW-2 15-17' Solid 11/04/98 14:00	184298 006 MW-2 40-42' Solid 11/04/98 14:30
SPLP-Semivolatiles EPA1312/8270	Analyzed: / Units:		12/02/98 mg/L R.L.				
4-Chloroaniline			< 0.005 (0.005)				
2-Chloronaphthalene			< 0.005 (0.005)				
2-Chlorophenol			< 0.005 (0.005)				
4-Chlorophenyl-phenyl ether			< 0.005 (0.005)				
Chrysene			< 0.005 (0.005)				
Di-n-butyl phthalate			< 0.005 (0.005)				
Di-n-octylphthalate			< 0.005 (0.005)				
Dibenz(a,h)anthracene			< 0.005 (0.005)				
Dibenzofuran			0.005 (0.005)				
1,2-Dichlorobenzene			< 0.005 (0.005)				
1,3-Dichlorobenzene			< 0.005 (0.005)				
1,4-Dichlorobenzene			< 0.005 (0.005)				
3,3'-Dichlorobenzidine			< 0.005 (0.005)				
2,4-Dichlorophenol			< 0.005 (0.005)				
Diethyl phthalate			< 0.005 (0.005)				
2,4-Dimethylphenol			< 0.005 (0.005)				
Dimethyl phthalate			< 0.005 (0.005)				
4,6-Dinitro-2-methylphenol			< 0.013 (0.013)				
2,4-Dinitrophenol			< 0.013 (0.013)				
2,4-Dinitrotoluene			< 0.005 (0.005)				
2,6-Dinitrotoluene			< 0.005 (0.005)				
Fluoranthene			< 0.005 (0.005)				
Fluorene			< 0.005 (0.005)				
Hexachlorobenzene			< 0.005 (0.005)				

Eddie L. Clemons, II
QA/QC Manager

Laboratories

CERTIFICATE OF ANALYSIS SUMMARY 184298

K.E.I. Consultants, Inc.

Project ID: 810060
Project Name: TNMPL 98-05
Project Manager: Theresa Nix
Project Location: NM

Date Received in Lab : Nov 6, 1998 11:30
Date Report Faxed: Dec 8, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	Lab ID: / Field ID: / Depth: / Matrix: / Sampled:	184298 001 MW-1 0-2' Solid 11/04/98 10:30	184298 002 MW-1 2-4' Solid 11/04/98 10:40	184298 003 MW-1 35-37' Solid 11/04/98 12:00	184298 004 MW-2 0-2' Solid 11/04/98 13:45	184298 005 MW-2 15-17' Solid 11/04/98 14:00	184298 006 MW-2 40-42' Solid 11/04/98 14:30
SPLP-Semivolatiles EPA1312/8270	Analyzed: / Units:		12/02/98 mg/L R.L.				
Hexachlorobutadiene			< 0.005 (0.005)				
Hexachlorocyclopentadiene			< 0.005 (0.005)				
Hexachloroethane			< 0.005 (0.005)				
Indeno(1,2,3-cd)pyrene			< 0.005 (0.005)				
Isophorone			< 0.005 (0.005)				
2-Methylnaphthalene			0.045 (0.005)				
2-Methylphenol			< 0.005 (0.005)				
4-Methylphenol			< 0.005 (0.005)				
N-Nitrosodi-n-propylamine			< 0.005 (0.005)				
N-Nitrosodiphenylamine			< 0.005 (0.005)				
Naphthalene			0.071 (0.005)				
2-Nitroaniline			< 0.013 (0.013)				
3-Nitroaniline			< 0.013 (0.013)				
4-Nitroaniline			< 0.013 (0.013)				
Nitrobenzene			< 0.005 (0.005)				
2-Nitrophenol			< 0.005 (0.005)				
4-Nitrophenol			< 0.005 (0.005)				
Pentachlorophenol			< 0.013 (0.013)				
Phenanthrene			< 0.005 (0.005)				
Phenol			< 0.005 (0.005)				
Pyrene			< 0.005 (0.005)				
1,2,4-Trichlorobenzene			< 0.005 (0.005)				
2,4,5-Trichlorophenol			< 0.013 (0.013)				
2,4,6-Trichlorophenol			< 0.005 (0.005)				

Eddie L. Clemons, II
QA/QC Manager

CERTIFICATE OF ANALYSIS SUMMARY 1-84298

K.E.I. Consultants, Inc.

Project ID: 810060
Project Name: TNMPL 98-05
Project Manager: Theresa Nix
Project Location: NM
Date Received in Lab : Nov 6, 1998 11:30
Date Report Faxed: Dec 8, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	Lab ID: / Field ID: / Depth: / Matrix: / Sampled:	184298 001 MW-1 0-2' Solid 11/04/98 10:30	184298 002 MW-1 2-4' Solid 11/04/98 10:40	184298 003 MW-1 35-37' Solid 11/04/98 12:00	184298 004 MW-2 0-2' Solid 11/04/98 13:45	184298 005 MW-2 15-17' Solid 11/04/98 14:00	184298 006 MW-2 40-42' Solid 11/04/98 14:30
SPLP-Semivolatiles EPA1312/8270	Analyzed: / Units:		12/02/98 mg/L R.L.				
bis(2-Chloroethoxy) methane			< 0.005 (0.005)				
bis(2-Chloroethyl) ether			< 0.005 (0.005)				
bis(2-Chloroisopropyl) ether			< 0.005 (0.005)				
bis(2-Ethylhexyl) phthalate			< 0.005 (0.005)				
SPLP Volatiles EPA 8260	Analyzed: / Units:		12/01/98 mg/L R.L.				
Benzene			0.034 (0.005)				
Bromobenzene			< 0.005 (0.005)				
Bromochloromethane			< 0.005 (0.005)				
Bromodichloromethane			< 0.005 (0.005)				
Bromoform			< 0.005 (0.005)				
Bromomethane			< 0.005 (0.005)				
Carbon tetrachloride			< 0.005 (0.005)				
Chlorobenzene			< 0.005 (0.005)				
Chlorodibromomethane			< 0.005 (0.005)				
Chloroethane			< 0.010 (0.010)				
Chloroform			< 0.005 (0.005)				
Chloromethane			< 0.010 (0.010)				
2-Chlorotoluene			< 0.005 (0.005)				
4-Chlorotoluene			< 0.005 (0.005)				
1,2-Dibromo-3-chloropropane			< 0.005 (0.005)				
1,2-Dibromoethane			< 0.005 (0.005)				

Eddie L. Clemons, II
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Project Manager: Theresa Nix
Date Report Faxed: Dec 8, 1998
Project Location: NM
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	*Lab ID:*	184298 001	184298 002	184298 003	184298 004	184298 005	184298 006
	Field ID:	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2
	Depth:	0-2'	2-4'	35-37'	0-2'	15-17'	40-42'
	Matrix:	Solid	Solid	Solid	Solid	Solid	Solid
	Sampled:	11/04/98 10:30	11/04/98 10:40	11/04/98 12:00	11/04/98 13:45	11/04/98 14:00	11/04/98 14:30
SPLP Volatiles EPA 8260	*Analyzed:*		12/01/98				
	Units:		mg/L R.L.				
Dibromomethane			< 0.005 (0.005)				
1,2-Dichlorobenzene			< 0.005 (0.005)				
1,3-Dichlorobenzene			< 0.005 (0.005)				
1,4-Dichlorobenzene			< 0.005 (0.005)				
Dichlorodifluoromethane			< 0.005 (0.005)				
1,1-Dichloroethane			< 0.005 (0.005)				
1,2-Dichloroethane			0.021 (0.005)				
1,1-Dichloroethene			< 0.005 (0.005)				
1,2-Dichloropropane			< 0.005 (0.005)				
1,3-Dichloropropane			< 0.005 (0.005)				
2,2-Dichloropropane			< 0.005 (0.005)				
1,1-Dichloropropene			< 0.005 (0.005)				
Ethylbenzene			1.388 (0.050)				
Hexachlorobutadiene			< 0.005 (0.005)				
Isopropylbenzene (Cumene)			0.075 (0.005)				
MTBE			< 0.010 (0.010)				
Methylene chloride			< 0.010 (0.010)				
Naphthalene			0.117 (0.005)				
Styrene			< 0.005 (0.005)				
1,1,1,2-Tetrachloroethane			< 0.005 (0.005)				
1,1,2,2-Tetrachloroethane			< 0.005 (0.005)				
Tetrachloroethene			< 0.005 (0.005)				
Toluene			2.082 (0.050)				
1,2,3-Trichlorobenzene			< 0.005 (0.005)				

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XENCO Laboratories

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Analysis Requested	*Lab ID:* / *Field ID:* / *Depth:* / *Matrix:* / *Sampled:*	184298 001 MW-1 0-2' Solid 11/04/98 10:30	184298 002 MW-1 2-4' Solid 11/04/98 10:40	184298 003 MW-1 35-37' Solid 11/04/98 12:00	184298 004 MW-2 0-2' Solid 11/04/98 13:45	184298 005 MW-2 15-17' Solid 11/04/98 14:00	184298 006 MW-2 40-42' Solid 11/04/98 14:30
SPLP Volatiles **EPA 8260**	*Analyzed:* *Units:*		12/01/98 R.L. mg/L				
1,2,4-Trichlorobenzene			< 0.005 (0.005)				
1,1,1-Trichloroethane			< 0.005 (0.005)				
1,1,2-Trichloroethane			< 0.005 (0.005)				
Trichloroethene			< 0.005 (0.005)				
Trichlorofluoromethane			< 0.005 (0.005)				
1,2,3-Trichloropropane			< 0.005 (0.005)				
1,2,4-Trimethylbenzene			0.338 (0.050)				
1,3,5-Trimethylbenzene			0.068 (0.005)				
Vinyl chloride			< 0.005 (0.005)				
cis-1,2-Dichloroethene			< 0.005 (0.005)				
cis-1,3-Dichloropropene			< 0.005 (0.005)				
m,p-Xylene			1.418 (0.050)				
n-Butylbenzene			0.017 (0.005)				
n-Propylbenzene			0.102 (0.005)				
o-Xylene			0.658 (0.050)				
p-Isopropyltoluene (p-Cymene)			0.009 (0.005)				
sec-Butylbenzene			0.014 (0.005)				
tert-Butylbenzene			< 0.005 (0.005)				
trans-1,2-Dichloroethene			< 0.005 (0.005)				
trans-1,3-Dichloropropene			< 0.005 (0.005)				
SPLP TPH **1312/418.1**	*Analyzed:* *Units:*		12/01/98 R.L. ppm				

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Project Location: NM
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Analysis Requested	*Lab ID:*	184298 001	184298 002	184298 003	184298 004	184298 005	184298 006
	Field ID:	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2
	Depth:	0-2'	2-4'	35-37'	0-2'	15-17'	40-42'
	Matrix:	Solid	Solid	Solid	Solid	Solid	Solid
	Sampled:	11/04/98 10:30	11/04/98 10:40	11/04/98 12:00	11/04/98 13:45	11/04/98 14:00	11/04/98 14:30
SPLP TPH 1312/418.1	*Analyzed:*		12/01/98				
	Units:		ppm R.L.				
Total Petroleum Hydrocarbons			8.8 (0.9)				

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

CERTIFICATE OF ANALYSIS SUMMARY 1-84298

K.E.I. Consultants, Inc.

Project ID: 810060
Project Manager: Theresa Nix
Project Location: NM

Project Name: TNMPL 98-05

Date Received in Lab : Nov 6, 1998 11:30
Date Report Faxed: Dec 8, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	*Lab ID:*	184298 007	184298 008	184298 009	184298 010	184298 011	184298 012
	Field ID:	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4
	Depth:	0-2'	25-27'	40-42'	0-2'	8-10'	40-42'
	Matrix:	Solid	Solid	Solid	Solid	Solid	Solid
	Sampled:	11/04/98 15:00	11/04/98 15:30	11/04/98 15:50	11/04/98 15:40	11/04/98 15:45	11/04/98 16:00
TPH-DRO (Diesel) EPA 8015 M	*Analyzed:*	11/18/98	11/18/98	11/18/98	11/20/98	11/20/98	11/18/98
	Units:	mg/kg R.L.	mg/kg R.L.	mg/kg R.L.	mg/kg R.L.	mg/kg R.L.	mg/kg R.L.
Total Petroleum Hydrocarbons		< 10.0 (10.0)	< 10.0 (10.0)	< 10.0 (10.0)	< 10.0 (10.0)	25.4 (10.0)	14.5 (1
BTEX EPA 8021B	*Analyzed:*	11/11/98	11/11/98	11/11/98	11/11/98	11/11/98	11/11/98
	Units:	ppm R.L.	ppm R.L.	ppm R.L.	ppm R.L.	ppm R.L.	ppm R.L.
Benzene		< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)
Toluene		< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)
Ethylbenzene		< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)
m,p-Xylene		< 0.100 (0.100)	< 0.100 (0.100)	< 0.100 (0.100)	< 0.100 (0.100)	< 0.100 (0.100)	< 0.100 (0.100)
o-Xylene		< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)	< 0.050 (0.050)
Total BTEX		N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch :: 18A40100

SW- 846 8015 M TPH- DRO (Diesel)

Date Validated: Nov 23, 1998 12:45
Date Analyzed: Nov 20, 1998 18:14

Analyst: AM
Matrix: Solid

	BLANK SPIKE ANALYSIS						
	[A]	[B]	[C]	[D]	[E]	[F]	[G]
					QC	LIMITS	
Parameter	Blank Result	Blank Spike Result	Blank Spike Amount	Detection Limit	Blank Spike Recovery	Recovery Range	Qualifier
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	
Total Petroleum Hydrocarbons	< 10.00	211	200	10.00	105.5	65-135	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A40100

SW- 846 8015 M TPH- DRO (Diesel)

Date Validated: Nov 23, 1998 12:45
Date Analyzed: Nov 20, 1998 19:51

Analyst: AM
Matrix: Solid

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE AND RECOVERY										
Q.C. Sample ID 184298- 011	[A] Sample Result	[B] Matrix Spike Result	[C] Matrix Spike Duplicate Result	[D] Matrix Spike Amount	[E] Detection Limit	Matrix Limit Relative Difference	[F] QC Spike Relative Difference	[G] QC Matrix Spike Recovery	[H] QC M.S.D. Recovery	[I] Matrix Spike Recovery Range	[J] Qualifier
Parameter	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	%	
Total Petroleum Hydrocarbons	25.37	228	239	200	10.00	30.0	4.7	101.3	106.8	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Matrix Spike Recovery [G] = 100*(B-A)/[D]
M.S.D. = Matrix Spike Duplicate
M.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A25E02

SW- 846 5030/8021B BTEX

Date Validated: Nov 12, 1998 10:45
Date Analyzed: Nov 11, 1998 19:58

Analyst: HL
Matrix: Solid

	BLANK SPIKE ANALYSIS						
Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Amount ppm	[D] Detection Limit ppm	[E] QC LIMITS Blank Spike Recovery %	[F] LIMITS Recovery Range %	[G] Qualifier
Benzene	< 0.0010	0.1080	0.1000	0.0010	108.0	65-135	
Toluene	< 0.0010	0.1090	0.1000	0.0010	109.0	65-135	
Ethylbenzene	< 0.0010	0.1090	0.1000	0.0010	109.0	65-135	
m,p-Xylene	< 0.0020	0.2160	0.2000	0.0020	108.0	65-135	
o-Xylene	< 0.0010	0.1050	0.1000	0.0010	105.0	65-135	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A25E02

SW- 846 5030/8021B BTEX

Date Validated: Nov 12, 1998 10:45
Date Analyzed: Nov 11, 1998 20:35

Analyst: HL
Matrix: Solid

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE AND RECOVERY										
Q.C. Sample ID 184323- 001 / Parameter	[A] Sample Result	[B] Matrix Spike Result	[C] Matrix Spike Duplicate Result	[D] Matrix Spike Amount	[E] Detection Limit	Matrix Limit Relative Difference	[F] QC Spike Relative Difference	[G] QC Matrix Spike Recovery	[H] QC M.S.D. Recovery	[I] Matrix Spike Recovery Range	[J] Qualifier
	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	
Benzene	< 0.020	1.940	1.960	2.000	0.020	25.0	1.0	97.0	98.0	65-135	
Toluene	< 0.020	1.954	1.958	2.000	0.020	25.0	0.2	97.7	97.9	65-135	
Ethylbenzene	< 0.020	1.988	2.000	2.000	0.020	25.0	0.6	99.4	100.0	65-135	
m,p-Xylene	< 0.040	3.980	4.000	4.000	0.040	25.0	0.5	99.5	100.0	65-135	
o-Xylene	< 0.020	1.968	1.978	2.000	0.020	25.0	0.5	98.4	98.9	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Matrix Spike Recovery [G] = 100*(B-A)/[D]
M.S.D. = Matrix Spike Duplicate
M.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch: 18A25D96

SW- 846 5030/8021B BTEX

Date Validated: Nov 11, 1998 09:00
Date Analyzed: Nov 10, 1998 18:47

Analyst: HL
Matrix: Solid

BLANK SPIKE ANALYSIS

Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Amount ppm	[D] Detection Limit ppm	[E] QC Blank Spike Recovery %	[F] LIMITS Recovery Range %	[G] Qualifier
Benzene	< 0.0010	0.1130	0.1000	0.0010	113.0	65-135	
Toluene	< 0.0010	0.1120	0.1000	0.0010	112.0	65-135	
Ethylbenzene	< 0.0010	0.1110	0.1000	0.0010	111.0	65-135	
m,p-Xylene	< 0.0020	0.2240	0.2000	0.0020	112.0	65-135	
o-Xylene	< 0.0010	0.1100	0.1000	0.0010	110.0	65-135	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A25D96

SW- 846 5030/8021B BTEX

Date Validated: Nov 11, 1998 09:00
Date Analyzed: Nov 10, 1998 19:24

Analyst: HL
Matrix: Solid

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE AND RECOVERY										
Q.C. Sample ID 184273- 003	[A] Sample Result	[B] Matrix Spike Result	[C] Matrix Spike Duplicate Result	[D] Matrix Spike Amount	[E] Detection Limit	Matrix Limit Relative Difference	[F] QC Spike Relative Difference	[G] QC Matrix Spike Recovery	[H] QC M.S.D. Recovery	[I] Matrix Spike Recovery Range	Qualifier
Parameter	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	
Benzene	< 0.020	2.040	2.020	2.000	0.020	25.0	1.0	102.0	101.0	65-135	
Toluene	< 0.020	2.040	1.996	2.000	0.020	25.0	2.2	102.0	99.8	65-135	
Ethylbenzene	< 0.020	2.060	2.020	2.000	0.020	25.0	2.0	103.0	101.0	65-135	
m,p-Xylene	< 0.040	4.120	4.040	4.000	0.040	25.0	2.0	103.0	101.0	65-135	
o-Xylene	< 0.020	2.040	2.000	2.000	0.020	25.0	2.0	102.0	100.0	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Matrix Spike Recovery [G] = 100*(B-A)/[D]
M.S.D. = Matrix Spike Duplicate
M.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch = 18A23E79

EPA1312/8260 SPLP Volatiles

Date Validated: Dec 3, 1998 12:00
Date Analyzed: Dec 1, 1998 19:45

Analyst: CCE
Matrix: Solid

	BLANK SPIKE ANALYSIS						
Parameter	[A] Blank Result mg/kg	[B] Blank Spike Result mg/kg	[C] Blank Spike Amount mg/kg	[D] Detection Limit mg/kg	[E] QC Blank Spike Recovery %	[F] LIMITS Recovery Range %	[G] Qualifier
Benzene	< 0.0010	0.0383	0.0500	0.0010	76.6	66-142	
Chlorobenzene	< 0.0010	0.0400	0.0500	0.0010	80.0	60-133	
1,1-Dichloroethene	< 0.0040	0.0358	0.0500	0.0040	71.6	59-172	
Toluene	< 0.0010	0.0395	0.0500	0.0010	79.0	59-139	
Trichloroethene	< 0.0030	0.0372	0.0500	0.0030	74.4	62-137	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A23E79

EPA1312/8260 SPLP Volatiles

Date Validated: Dec 3, 1998 12:00
Date Analyzed: Dec 1, 1998 14:45

Analyst: CCE
Matrix: Solid

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE AND RECOVERY										
Q.C. Sample ID 184388- 001	[A] Sample Result	[B] Matrix Spike Result	[C] Matrix Spike Duplicate Result	[D] Matrix Spike Amount	[E] Detection Limit	Matrix Limit Relative Difference	[F] QC Spike Relative Difference	[G] QC Matrix Spike Recovery	[H] QC M.S.D. Recovery	[I] Matrix Spike Recovery Range	[J] Qualifier
Parameter	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	%	
Benzene	< 0.0010	0.0531	0.0486	0.0500	0.0010	20.0	8.8	106.2	97.2	66-142	
Chlorobenzene	< 0.0010	0.0482	0.0460	0.0500	0.0010	20.0	4.7	96.4	92.0	60-133	
1,1-Dichloroethene	< 0.0040	0.0582	0.0527	0.0500	0.0040	25.0	9.9	116.4	105.4	59-172	
Toluene	0.0095	0.0543	0.0505	0.0500	0.0010	20.0	7.3	89.6	82.0	59-139	
Trichloroethene	< 0.0030	0.0533	0.0482	0.0500	0.0030	20.0	10.0	106.6	96.4	62-137	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Matrix Spike Recovery [G] = 100*(B-A)/[D]
M.S.D. = Matrix Spike Duplicate
M.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A07E40

EPA 1312/418.1 SPLP TPH

Date Validated: Dec 2, 1998 09:37
Date Analyzed: Dec 1, 1998 14:55

Analyst: EZ
Matrix: Solid

	BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY										
Parameter	[A] Blank Result	[B] Blank Spike Result	[C] Blank Spike Duplicate Result	[D] Blank Spike Amount	[E] Detection Limit	Blank Limit Relative Difference	[F] QC Spike Relative Difference	[G] QC Blank Spike Recovery	[H] QC B.S.D. Recovery	[I] Blank Spike Recovery Range	Qualifier
	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	
Total Petroleum Hydrocarbons	< 0.50	3.59	3.71	4.01	0.50	20.0	3.3	89.5	92.5	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Blank Spike Recovery [G] = 100*(B-A)/[D]
B.S.D. = Blank Spike Duplicate
B.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

ANALYTICAL REPORT 1-84474

for

K.E.I. Consultants, Inc.

Project Manager: S. Grover

Project Name: 810060-1-0

December 10, 1998

XENCO Laboratories

HOUSTON - DALLAS - SAN ANTONIO

11331 Meadowglen Lane Suite L * Houston, Texas 77082-2647
Phone (281) 589-0692 Fax (281) 589-0695

XENCO Laboratories

11381 Meadowglen Suite L
Houston, Texas 77082-2647
(281) 589-0692 Fax: (281) 589-0695
Houston - Dallas - San Antonio - Latin America

December 10, 1998

Project Manager: S. Grover
K.E.I. Consultants, Inc.
5309 Wurzbach Rd. Suite 100
San Antonio, TX 78238

Reference: **XENCO Report No.: 1-84474**
Project Name: 810060-1-0

Project Address: Lea County, NM

Dear S. Grover:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number 1-84474. All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. 1-84474 will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/IEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

ANALYTICAL CHAIN OF CUSTODY REPORT
CHRONOLOGY OF SAMPLES

K.E.I. Consultants, Inc.

Project Name: 810060-1-0

XENCO COC#: **1-84474**

Date Received in Lab: Nov 19, 1998 10:00 by LY

XENCO contact : Carlos Castro/Karen Olson

Project Manager: S. Grover

Project Location: Lea County, NM

	Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Date and Time: Sample Collected	Date and Time: Addition Requested	Date and Time: Extraction	Date and Time: Analysis
1	MW-3	184474-001	BTEX	SW-846	ppm	10 days	Nov 18, 1998 12:35		Nov 19, 1998 by HL	Nov 19, 1998 22:16 by HL
2			PAHs	SW846-8270	mg/L	10 days	Nov 18, 1998 12:35		Nov 23, 1998 by RK	Dec 2, 1998 02:23 by MM
3			Tot. Metals	EPA	mg/L	10 days	Nov 18, 1998 12:35		Nov 24, 1998 by ALO	Nov 24, 1998 16:08 by MAB
4			Anions	EPA 300.0	mg/L	10 days	Nov 18, 1998 12:35		Dec 8, 1998 by CG	Dec 8, 1998 19:24 by CG
5			TDS	EPA 160.1	mg/L	10 days	Nov 18, 1998 12:35		Nov 23, 1998 by EZ	Nov 24, 1998 09:20 by EZ
6			Total Metals	EPA 6010	mg/L	10 days	Nov 18, 1998 12:35		Nov 24, 1998 by AO	Dec 1, 1998 15:39 by CG
7			Carbonate	SM4500CO2D	mg/L	10 days	Nov 18, 1998 12:35		Nov 23, 1998 by IF	Nov 23, 1998 10:50 by IF
8			Bicarbonate	SM 4500CO2D	mg/L	10 days	Nov 18, 1998 12:35		Nov 23, 1998 by IF	Nov 23, 1998 10:50 by IF
9	MW-4	184474-002	BTEX	SW-846	ppm	10 days	Nov 18, 1998 12:20		Nov 19, 1998 by HL	Nov 19, 1998 21:57 by HL
10			PAHs	SW846-8270	mg/L	10 days	Nov 18, 1998 12:20		Nov 23, 1998 by RK	Dec 2, 1998 03:10 by MM
11			Tot. Metals	EPA	mg/L	10 days	Nov 18, 1998 12:20		Nov 24, 1998 by ALO	Nov 24, 1998 16:15 by MAB
12			Anions	EPA 300.0	mg/L	10 days	Nov 18, 1998 12:20		Dec 8, 1998 by CG	Dec 8, 1998 19:43 by CG
13			TDS	EPA 160.1	mg/L	10 days	Nov 18, 1998 12:20		Nov 23, 1998 by EZ	Nov 24, 1998 09:25 by EZ
14			Total Metals	EPA 6010	mg/L	10 days	Nov 18, 1998 12:20		Nov 24, 1998 by AO	Dec 1, 1998 15:44 by CG
15			Carbonate	SM4500CO2D	mg/L	10 days	Nov 18, 1998 12:20		Nov 23, 1998 by IF	Nov 23, 1998 11:00 by IF
16			Bicarbonate	SM 4500CO2D	mg/L	10 days	Nov 18, 1998 12:20		Nov 23, 1998 by IF	Nov 23, 1998 11:00 by IF

XENCO Laboratories

CERTIFICATE OF ANALYSIS SUMMARY 1-84474

K.E.I. Consultants, Inc.

Project Name: 810060-1-0

Project Manager: S. Grover
Project Location: Lea County, NM

Date Received in Lab : Nov 19, 1998 10:00
Date Report Faxed: Dec 10, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	*Lab ID:*	184474 001		184474 002			
	Field ID:	MW-3		MW-4			
	Depth:						
	Matrix:	Liquid		Liquid			
	Sampled:	11/18/98 12:35		11/18/98 12:20			
Total Metals (ICP) EPA 6010	*Analyzed:*	12/01/98	R.L.	12/01/98	R.L.		
	Units:	mg/L		mg/L			
Boron		0.25	(0.11)	0.23	(0.11)		
Molybdenum		< 0.22	(0.22)	< 0.22	(0.22)		
Silicon		39.8	(0.6)	34.6	(0.6)		
Sodium		132	(5.6)	143	(5.6)		
Strontium		3.44	(0.22)	2.97	(0.22)		
Tin		< 0.22	(0.22)	< 0.22	(0.22)		
BTEX EPA 8021B	*Analyzed:*	11/19/98	R.L.	11/19/98	R.L.		
	Units:	ppm		ppm			
Benzene		0.011	(0.001)	0.018	(0.001)		
Toluene		0.006	(0.001)	0.011	(0.001)		
Ethylbenzene		0.004	(0.001)	0.006	(0.001)		
m,p-Xylene		0.003	(0.002)	0.007	(0.002)		
o-Xylene		< 0.001	(0.001)	0.002	(0.001)		
Total BTEX		0.024		0.044			
PAHs by GC-MS EPA 8270	*Analyzed:*	12/02/98	R.L.	12/02/98	R.L.		
	Units:	mg/L		mg/L			
Acenaphthene		< 0.002	(0.002)	< 0.002	(0.002)		
Acenaphthylene		< 0.002	(0.002)	< 0.002	(0.002)		
Anthracene		< 0.002	(0.002)	< 0.002	(0.002)		
Benz(a)anthracene		< 0.002	(0.002)	< 0.002	(0.002)		
Benzo(a)pyrene		< 0.002	(0.002)	< 0.002	(0.002)		
Benzo(b)fluoranthene		< 0.002	(0.002)	< 0.002	(0.002)		
Benzo(g,h,i)perylene		< 0.002	(0.002)	< 0.002	(0.002)		
Benzo(k)fluoranthene		< 0.002	(0.002)	< 0.002	(0.002)		
Chrysene		< 0.002	(0.002)	< 0.002	(0.002)		
Dibenz(a,h)anthracene		< 0.002	(0.002)	< 0.002	(0.002)		
Fluoranthene		< 0.002	(0.002)	< 0.002	(0.002)		
Fluorene		< 0.002	(0.002)	< 0.002	(0.002)		
Indeno(1,2,3-cd)pyrene		< 0.002	(0.002)	< 0.002	(0.002)		
Naphthalene		< 0.002	(0.002)	< 0.002	(0.002)		
Phenanthrene		< 0.002	(0.002)	< 0.002	(0.002)		
Pyrene		< 0.002	(0.002)	< 0.002	(0.002)		

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

CERTIFICATE OF ANALYSIS SUMMARY 1-84474

K.E.I. Consultants, Inc.

Project Name: 810060-1-0

Project Manager: S. Grover
Project Location: Lea County, NM

Date Received in Lab : Nov 19, 1998 10:00
Date Report Faxed: Dec 10, 1998
XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	*Lab ID:* / *Field ID:* / *Depth:* / *Matrix:* / *Sampled:*	184474 001 MW-3 Liquid 11/18/98 12:35		184474 002 MW-4 Liquid 11/18/98 12:20			
Bicarbonate **SM 4500CO2D**	*Analyzed:* / *Units:*	11/23/98 mg/L	R.L.	11/23/98 mg/L	R.L.		
Bicarbonate		135	(4.0)	134	(4.0)		
Carbonate **SM4500CO2D**	*Analyzed:* / *Units:*	11/23/98 mg/L	R.L.	11/23/98 mg/L	R.L.		
Carbonate		< 4.0	(4.0)	< 4.0	(4.0)		
Total Dissolved Solids **EPA 160.1**	*Analyzed:* / *Units:*	11/24/98 mg/L	R.L.	11/24/98 mg/L	R.L.		
Total Dissolved Solids		892	(5.0)	865	(5.0)		
Total Metals by ICP-MS **ICP-MS Metal**	*Analyzed:* / *Units:*	11/24/98 mg/L	R.L.	11/24/98 mg/L	R.L.		
Aluminum		2.26	(1.11)	< 1.11	(1.11)		
Arsenic		< 0.056	(0.056)	< 0.056	(0.056)		
Barium		0.212	(0.028)	0.163	(0.028)		
Beryllium		< 0.006	(0.006)	< 0.006	(0.006)		
Cadmium		< 0.006	(0.006)	< 0.006	(0.006)		
Calcium		666	(0.6)	631	(1.1)		
Chromium		< 0.028	(0.028)	< 0.028	(0.028)		
Cobalt		< 0.028	(0.028)	< 0.028	(0.028)		
Copper		< 0.028	(0.028)	< 0.028	(0.028)		
Iron		0.94	(0.56)	< 0.56	(0.56)		
Lead		< 0.011	(0.011)	< 0.011	(0.011)		
Magnesium		52.4	(1.1)	53.5	(1.1)		
Manganese		0.133	(0.056)	0.095	(0.056)		
Mercury		< 0.002	(0.002)	< 0.002	(0.002)		
Nickel		< 0.056	(0.056)	< 0.056	(0.056)		
Potassium		8.28	(2.78)	8.61	(2.78)		
Selenium		< 0.050	(0.050)	< 0.050	(0.050)		
Silver		< 0.028	(0.028)	< 0.028	(0.028)		
Vanadium		0.066	(0.028)	0.109	(0.028)		
Zinc		0.056	(0.028)	< 0.028	(0.028)		
Anions by Ion Chromatography **EPA 300.0**	*Analyzed:* / *Units:*	12/08/98 mg/L	R.L.	12/08/98 mg/L	R.L.		
Chloride		238	(10)	315	(10)		
Sulfate		216	(10)	274	(10)		

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A48A33

EPA 200.3 Total Metals by ICP- MS

Date Validated: Nov 25, 1998 09:24
Date Analyzed: Nov 24, 1998 14:44

Analyst: MAB
Matrix: Liquid

	BLANK SPIKE ANALYSIS						
Parameter	[A] Blank Result mg/L	[B] Blank Spike Result mg/L	[C] Blank Spike Amount mg/L	[D] Detection Limit mg/L	[E] QC Blank Spike Recovery %	[F] LIMITS Recovery Range %	[G] Qualifier
Aluminum	< 0.56	2.10	2.22	0.56	94.6	70-125	
Arsenic	< 0.0278	1.9344	2.2200	0.0278	87.1	70-125	
Barium	< 0.0278	0.9761	1.1100	0.0278	87.9	70-125	
Beryllium	< 0.0056	0.3983	0.4440	0.0056	89.7	70-125	
Cadmium	< 0.0056	0.4061	0.4440	0.0056	91.5	75-125	
Calcium	< 0.56	1.56	2.22	0.56	70.3	70-125	
Chromium	< 0.0111	0.9878	1.1000	0.0111	89.8	70-125	
Cobalt	< 0.0278	0.9917	1.1100	0.0278	89.3	70-125	
Copper	< 0.0278	1.0128	1.1100	0.0278	91.2	70-125	
Iron	< 0.556	2.389	2.220	0.556	107.6	70-125	
Lead	< 0.0111	1.8856	2.2200	0.0111	84.9	70-125	
Magnesium	< 0.56	4.39	4.44	0.56	98.9	70-125	
Manganese	< 0.0556	2.0461	2.2200	0.0556	92.2	70-125	
Mercury	< 0.0028	0.0056	0.0056	0.0028	100.0	75-125	
Nickel	< 0.0278	0.9861	1.1100	0.0278	88.8	70-125	
Potassium	< 2.778	4.111	4.440	2.778	92.6	70-125	
Selenium	< 0.0556	1.9850	2.2000	0.0556	90.2	70-125	
Silver	< 0.0278	0.5689	0.5560	0.0278	102.3	70-125	
Vanadium	< 0.0278	0.9517	1.1100	0.0278	85.7	70-125	
Zinc	< 0.0278	0.9650	1.1100	0.0278	86.9	70-125	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A48A33

EPA 200.8 Total Metals by ICP- MS

Date Validated: Nov 25, 1998 09:24
Date Analyzed: Nov 24, 1998 15:03

Analyst: MAB
Matrix: Liquid

	MATRIX DUPLICATE ANALYSIS					MATRIX SPIKE ANALYSIS				
Q.C. Sample ID 184449- 001	[A] Sample Result	[B] Duplicate Result	[C]	[D] QC	[E] LIMITS	[F] Matrix Spike Result	[G] Matrix Spike Amount	[H] QC	[I] LIMITS	[G]
Parameter			Detection Limit	Relative Difference	Relative Difference			Matrix Spike Recovery	Recovery Range	Qualifier
	mg/L	mg/L	mg/L	%	%	mg/L	mg/L	%	%	
Mercury	< 0.0028	< 0.0028	0.0028	N.C	20.0	0.0033	0.006	58.9	75-125	B
Nickel	< 0.0278	< 0.0278	0.0278	N.C	25.0	0.8617	1.100	78.3	70-125	
Potassium	116	114	2.7778	1.7	25.0	104	4.400	272.7	70-125	A,B
Selenium	0.6061	0.6167	0.0556	1.7	25.0	2.2644	2.200	75.4	70-125	
Silver	< 0.0278	< 0.0278	0.0278	N.C	25.0	0.4811	0.556	86.5	70-125	
Vanadium	0.4189	0.4156	0.0278	0.8	25.0	1.3300	1.100	82.8	70-125	
Zinc	0.0294	< 0.0278	0.0278	N.C	25.0	0.7472	1.100	65.3	70-125	B

(A) High analyte concentration affects spike recovery.
(B) LCS within acceptance limits.
Relative Difference [D] = 200*(B-A)/(B+A)
Matrix Spike Recovery [H] = 100*(F-A)/[G]
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch - 18A46A77

EPA 6010 Total Metals (ICP)

Date Validated: Dec 2, 1998 16:33
Date Analyzed: Dec 1, 1998 14:39

Analyst: CG
Matrix: Liquid

	BLANK SPIKE ANALYSIS						
	[A]	[B]	[C]	[D]	[E]	[F]	[G]
					QC	LIMITS	
Parameter	Blank Result	Blank Spike Result	Blank Spike Amount	Detection Limit	Blank Spike Recovery	Recovery Range	Qualifier
	mg/L	mg/L	mg/L	mg/L	%	%	
Boron	< 0.111	2.019	2.220	0.111	90.9	70-125	
Molybdenum	< 0.333	0.996	1.110	0.333	89.7	70-125	
Silicon	< 0.556	4.432	4.440	0.556	99.8	70-125	
Sodium	< 1.11	13.43	13.33	1.11	100.8	70-125	
Strontium	< 0.222	1.932	2.220	0.222	87.0	70-125	
Tin	< 0.222	2.399	2.220	0.222	108.1	70-125	

Blank Spike Recovery [E] = 100*(B-A)/(C)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch = 18A46A77

EPA 6010 Total Metals (ICP)

Date Validated: Dec 2, 1998 16:33
Date Analyzed: Dec 1, 1998 14:54

Analyst: CG
Matrix: Liquid

	MATRIX DUPLICATE ANALYSIS					
Q.C. Sample ID 184449- 001	[A] Sample Result	[B] Duplicate Result	[C]	[D] QC	[E] LIMITS	[F]
Parameter			Detection Limit	Relative Difference	Relative Difference	Qualifier
	mg/L	mg/L	mg/L	%	%	
Boron	5.06	5.12	0.11	1.2	25.0	
Molybdenum	0.630	0.631	0.333	0.2	25.0	
Silicon	26.76	26.38	0.56	1.4	25.0	
Sodium	2270	2320	1.11	2.2	25.0	
Strontium	11.86	11.58	0.22	2.4	25.0	
Tin	< 0.222	< 0.222	0.222	N.C	25.0	

Relative Difference [D] = 200*(B-A)/(B+A)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 18A25E15

SW- 846 5030/8021B BTEX

Date Validated: Nov 24, 1998 11:00
Date Analyzed: Nov 19, 1998 13:50

Analyst: HL
Matrix: Liquid

BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Duplicate Result ppm	[D] Blank Spike Amount ppm	[E] Detection Limit ppm	Blank Limit Relative Difference %	[F] QC Spike Relative Difference %	[G] QC Blank Spike Recovery %	[H] QC B.S.D. Recovery %	[I] Blank Spike Recovery Range %	[Qualifier
Benzene	< 0.0010	0.1040	0.1140	0.1000	0.0010	20.0	9.2	103.9	113.9	65-135	
Toluene	< 0.0010	0.1020	0.1110	0.1000	0.0010	20.0	8.5	101.9	110.9	65-135	
Ethylbenzene	< 0.0010	0.1010	0.1100	0.1000	0.0010	20.0	8.5	100.9	109.9	65-135	
m,p-Xylene	< 0.0020	0.2060	0.2220	0.2000	0.0020	20.0	7.5	103.0	111.0	65-135	
o-Xylene	< 0.0010	0.1050	0.1130	0.1000	0.0010	20.0	7.3	104.9	112.9	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Blank Spike Recovery [G] = 100*(B-A)/[D]
B.S.D. = Blank Spike Duplicate
B.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch - 18A20C18

SM4500CO2D Carbonate

Date Validated: Nov 23, 1998 16:04
Date Analyzed: Nov 23, 1998 09:40

Analyst: IF
Matrix: Liquid

	MATRIX DUPLICATE ANALYSIS					
Q.C. Sample ID 184449- 001	[A] Sample Result	[B] Duplicate Result	[C]	[D] QC	[E] LIMITS	[F]
Parameter			Detection Limit	Relative Difference	Relative Difference	Qualifier
	mg/L	mg/L	mg/L	%	%	
Carbonate	< 4.00	< 4.00	4.00	N.C	25.0	

Relative Difference [D] = 200*(B-A)/(B+A)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch = 18A19D61

EPA 160.1 Total Dissolved Solids

Date Validated: Nov 24, 1998 09:58
Date Analyzed: Nov 24, 1998 09:35

Analyst: EZ
Matrix: Liquid

	MATRIX DUPLICATE ANALYSIS					
Q.C. Sample ID 184513- 002	[A] Sample Result	[B] Duplicate Result	[C]	[D] QC	[E] LIMITS	[F]
			Detection Limit	Relative Difference	Relative Difference	Qualifier
Parameter	mg/L	mg/L	mg/L	%	%	
Total Dissolved Solids	596	587	5.00	1.5	25.0	

Relative Difference [D] = 200*(B-A)/(B+A)
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch - 18A10C89

EPA 300.0 Anions by Ion Chromatography

Date Validated: Dec 10, 1998 13:12
Date Analyzed: Dec 8, 1998 19:24

Analyst: CG
Matrix: Liquid

MATRIX DUPLICATE ANALYSIS

Q.C. Sample ID 184474- 001 / Parameter	[A] Sample Result mg/L	[B] Duplicate Result mg/L	[C] Detection Limit mg/L	[D] QC Relative Difference %	[E] LIMITS Relative Difference %	[F] Qualifier
Chloride	238	196	10.0	19.4	20.0	
Sulfate	216	192	10.0	11.8	20.0	

Relative Difference [D] = 200(B-A)/(B+A)*
N.C. = Not calculated, data below detection limit
N.D. = Below detection limit
All results are based on MDL and validated for QC purposes only

Eddie L. Clemons, II
QA/QC Manager

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ETGI
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-392-3760(Ken Dutton)

Sample Type: Soil
Sample Condition: Intact/Iced
Project #: TNM 98-05A
Project Name: None Given
Project Location: Lea County, N.M.

Sampling Date: 10/25/99
Receiving Date: 10/30/99
Analysis Date: 11/01/99

ELT#	FIELD CODE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)
21144	MW-5 (50-52)	<0.100	0.122	<0.100	<0.100	<0.100
21145	MW-6 (38-40)	<0.100	<0.100	<0.100	<0.100	<0.100
21146	MW-7 (20-22)	<0.100	<0.100	<0.100	<0.100	<0.100
21147	MW-8 (38-40)	<0.100	<0.100	<0.100	<0.100	<0.100
21148	MW-9 (38-40)	<0.100	<0.100	<0.100	<0.100	<0.100
21149	MW-10 (40-42)	0.620	1.79	1.11	1.40	0.696
21150	MW-7 (40-42)	<0.100	<0.100	<0.100	<0.100	<0.100
	% IA	91	89	89	89	89
	% EA	93	86	88	88	89
	BLANK	<0.100	<0.100	<0.100	<0.100	<0.100

METHODS: SW 846-8021,5030

Raland K. Tuttle

11-5-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ETGI
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760 (Ken Dutton)
FAX: 915-520-4310

Sample Type: Soil
Sample Condition: Intact/Iced
Project #: TNM 98-05A
Project Name: None Given
Project Location: Lea County, N.M.

Sampling Date: 10/25/99
Receiving Date: 10/30/99
Analysis Date: 11/01/99

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C25 mg/kg
21144	MW-5 (50-52)	<10	29
21145	MW-6 (38-40)	<10	<10
21146	MW-7 (20-22)	<10	<10
21147	MW-8 (38-40)	<10	<10
21148	MW-9 (38-40)	<10	<10
21149	MW-10 (40-42)	271	444
21150	MW-7 (40-42)	<10	<10
	% INSTRUMENT ACCURACY	115	106
	% EXTRACTION ACCURACY	115	104
	BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

Raland K.Tuttle

11-5-99

Date

12600 West I-20 East • Odessa, Texas 79765 • (915) 563-1800 • Fax (915) 563-1713

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

COC: 027

Project Manager: Jesse Taylor

Phone #: (915) 664-9166

FAX #: (915) 520-4310

Company Name & Address: ETGI

P.O. Box 4845 MIDLAND TX 79704

Project #: TNM 98-05A

Project Name: —

Project Location: LEA County NM

Sampler Signature: Ken Dutton

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE 1999	TIME	BTEX 8021B	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI	TPH 8015 (DRO/GRO)
	MW-5 (50'-52)	1	4oz	X							X			10-25	0900	X								X
	MW-6 (38-40)	1												10-25	1015									
	MW-7 (20-22')	1												10-25	1130									
	MW-8 (38-40)	1												10-26	0910									
	MW-9 (38-40)	1												10-26	1020									
	MW-10 (40-42)	1												10-26	1300									
	MW-7 (40'-42')	1												10-25	1150									

Relinquished by:	Date:	Time:	Received by:
Keri Dutton	30 OCT 99	1420	Roland Kjerd
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS

FAX Results to Ken Dutton @ (505) 392-3760

INVOICE: Lennah Frost PO 1015M

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: 505-392-3780

Sample Type: Water
Sample Condition: Intact/ Iced/HCl
Project #: TNM 98-05A
Project Name: EOT 1015C
Project Location: Eunice, N.M.

Sampling Date: 11/29/99
Receiving Date: 12/02/99
Analysis Date: 12/2 & 12/3/99

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
21930	MW-3	0.003	0.003	0.001	0.001	<0.001
21931	MW-4	0.002	0.002	0.009	0.005	0.001
21932	MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
21933	MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
21934	MW-7	<0.001	<0.001	<0.001	<0.001	<0.001
21935	MW-8	0.004	0.003	0.001	0.002	<0.001
21936	MW-9	0.013	0.009	0.002	0.003	0.001
	% IA	101	96	97	97	95
	% EA	96	95	96	97	96
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B,5030

Roland K Tuttle
Roland K. Tuttle

12-7-99
Date

F-82

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

044

Project Manager: Jesse Taylor
Phone #: (915) 664-9166
FAX #: (505) 392-3760

Company Name & Address: EICT
PO Box 4845 Midland TX 79704

Project Name: TNM 98-05 A
Project #: EOT 1015 C

Project Location: Eunice, NM

Sampler Signature: Simon Casas

ANALYSIS REQUEST

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS (160.1)	RCI	Anions (300.0)	Cations (6010) Sm 4500 CO2D	PAH 8100 or 8270	Heavy Metal ICP Scan (6010)
21930	MW 3	2	V	X					X		X			11-29	1450	X											
21931	MW 4	2	V												1435												
21932	MW 5	5	V-5 VL												1330							X		X	X	X	X
21933	MW 6	6													1423												
21934	MW 7	5													1414												
21935	MW 8	5													1440												
21936	MW 9	5	V	V					V		V			V	1400	V						X		X	X	X	X

Relinquished by:	Date:	Time:	Received by:	REMARKS
Simon Casas	12-2-99	0900		Mail Results - K. Dutton
	12-2-99	1320		Invoice: Lennah Frost 1015 M

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
FAX: 970-461-1058

Sample Type: Soil
Sample Condition: Intact/Iced
Project #: EOT1026C
Project Name: TNM 98-05A
Project Location: Eunice, N.M.

Sampling Date: 03/30/00
Receiving Date: 03/31/00
Analysis Date: 04/04/00

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
24510	GP1-001 4'	<10	237
24511	GP1-002 7'	<10	34
24512	GP1-003 10'	<10	20
24513	GP1-004 13'	<10	13
24514	GP2-001 4'	<10	<10
24515	GP2-002 7'	<10	<10
24516	GP2-003 10'	<10	<10
24517	GP2-004 13'	<10	<10
24518	GP3-001 4'	<10	<10
24519	GP3-002 7'	<10	<10
24520	GP6-001 4'	<10	<10
24521	GP6-002 7'	<10	<10
24522	GP6-003 10'	<10	<10
24523	GP6-004 13'	<10	<10
24524	GP5-001 4'	<10	<10
24525	GP5-002 7'	<10	<10
24526	GP5-003 10'	<10	<10
24527	GP5-004 13'	<10	<10
24528	GP4-001 4'	<10	<10
24529	GP4-002 7'	<10	<10
24530	GP4-003 10'	<10	<10
24531	GP4-004 13'	<10	<10
	% INSTRUMENT ACCURACY	90	97
	% EXTRACTION ACCURACY	93	99
	BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

4-12-00
Date

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

Project Manager: Jesse Taylor

Phone #: 915-664-9766

FAX #: 970-461-1058

Company Name & Address: ETGT

Project #: EOT1026C

Project Name: TNM 9805A (Change to 9805A per Justin 4-12-00)

Project Location: Eunice NM

Sampler Signature: Justin Jones

ANALYSIS REQUEST

LAB # (LAB USE ONLY)	FIELD CODE		# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021(5030)	TPH 8015 DRO/GRO	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
24510	GP1-001	4'	4oz			X						X			3/30		X	X					
24511	GP1-002	7'	4oz			X						X			3/30		X	X					
24512	GP1-003	10'	4oz			X						X			3/30		X	X					
24513	GP1-004	13'	4oz			X						X			3/30		X	X					
24514	GP2-001	4'	4oz			X						X			3/30		X	X					
24515	GP2-002	7'	4oz			X						X			3/30		X	X					
24516	GP2-003	10'	4oz			X						X			3/30		X	X					
24517	GP2-004	13'	4oz			X						X			3/30		X	X					
24518	GP3-001	4'	4oz			X						X			3/30		X	X					
24519	GP3-002	7'	4oz			X						X			3/30		X	X					
	[redacted]		4oz			X						X			3/30		X	X					

Relinquished by:	Date:	Times:	Received by:
Justin Jones	3/30/00		
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

FAX RESULTS ASAP!

* Do not Run BTEX *

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

Project Manager: Jesse Taylor

Phone #: 915-664-9166

FAX #: 970-461-1038

Company Name & Address: IETOE

Project #: EOT1026C

Project Name: TNM 98-05A (Change to 9805A per Justin 4-12-00)

Project Location: Eunice NM

Sampler Signature: Justin Jones

ANALYSIS REQUEST

LAB # (LAB USE ONLY)	FIELD CODE		# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B/5030	TPH [redacted] 8015 DRO/GRO	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	[redacted]		4oz			X						X			3/30		X	X						
245 20	GP16-001	4'	4oz			X						X			3/31		X	X						
245 21	GP16-002	7'	4oz			X						X			3/31		X	X						
245 22	GP16-003	10'	4oz			X						X			3/31		X	X						
245 23	GP16-004	13'	4oz			X						X			3/31		X	X						
245 24	GP5-001	4'	4oz			X						X			3/31		X	X						
245 25	GP5-002	7'	4oz			X						X			3/31		X	X						
245 26	GP5-003	10'	4oz			X						X			3/31		X	X						
245 27	GP5 004	13'	4oz			X						X			3/31		X	X						
245 28	GP4 001	4'	4oz			X						X			3/30		X	X						
245 29	GP4 002	7'	4oz			X						X			3/30		X	X						

Relinquished by:	Date:	Times:	Received by:
	3/30/00		
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times: 1:20	Received by Laboratory:

REMARKS

FAX RESULTS ASAP!

Do Not Run BTEX

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

Project Manager: Jesse Taylor

Phone #: 915-664-9166

FAX #: 970-461-1058

Company Name & Address: IETCE

Project #: EOT 1026C

Project Name: TNM 98-05 (Change to 9605A per Justin 4-12-00)

Project Location: Eunice NM

Sampler Signature: Justin Jam

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME
24530	GP4 003 10'	4oz			X						X			3/30	
24531	GP4 004 18'	4oz			X						X			3/30	

ANALYSIS REQUEST

BTEX 8021B/5030	TPH [redacted] 8015 DRO/GRO	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	X						
	X						

Relinquished by:	Date:	Time:	Received by:
Justin Jam	3/31/00		
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time: 11:30	Received by Laboratory:

REMARKS

FAX RESULTS ASAP!

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 98-05A
Project Location: Eunice, N.M.

Sampling Date: 04/05/00
Receiving Date: 04/06/00
Analysis Date: 04/07/00

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
24623	GP7 001 4'	9214	12885
24624	GP7 002 7'	13990	15878
24625	GP7 003 10'	3267	4587
24626	GP7 004 13'	6561	8555
24627	GP8 001 4'	16061	21804
24628	GP8 002 7'	16787	21022
24629	GP9 001 4'	2955	5423
24630	GP9 002 7'	17	307
24631	GP10 001 4'	<10	64
24632	GP10 002 7'	<10	16
24633	GP10 003 10'	<10	<10
24634	GP10 004 13'	<10	<10
24635	GP11 001 4'	<10	<10
24636	GP11 002 7'	<10	<10
24637	GP11 003 10'	<10	<10
24638	GP11 004 13'	<10	<10
24639	GP12 001 4'	<10	<10
24640	GP12 002 7'	<10	<10
	% INSTRUMENT ACCURACY	99	103
	% EXTRACTION ACCURACY	83	92
	BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle

4-12-00
Date

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

Project Manager: Jesse Taylor

Phone #: 915-569-9166

FAX #: 505-392-2760

Company Name & Address: ETGI

Project #: EGI 10266

Project Name: TNM 98-05A

Project Location: Eunice NM

Sampler Signature: Justin James

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B/5030	TPH ~~418.1~~ 8015 DRO/GRO	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
24623	GP7 001 4'	4oz			X						X			4/5			X						
24624	GP7 002 7'	4oz			X						X			4/5			X						
24625	GP7 003 10'	4oz			X						X			4/5			X						
24626	GP7 004 13'	4oz			X						X			4/5			X						
24627	GP8 001 4'	4oz			X						X			4/5			X						
24628	GP8 002 7'	4oz			X						X			4/5			X						
24629	GP9 001 4'	4oz			X						X			4/5			X						
24630	GP9 002 7'	4oz			X						X			4/5			X						
24631	GP10 001 4'	4oz			X						X			4/5			X						
24632	GP10 002 7'	4oz			X						X			4/5			X						
24633	GP10 003 10'	4oz			X						X			4/5			X						

Relinquished by:	Date:	Time:	Received by:
Justin James	4/6/00		
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS

FAX RESULTS ASAP

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

Project Manager: Tessa Taylor

Phone #: 915-664-9166

FAX #: 505-392-3760

Company Name & Address: ETGI

Project #: EOT1026C

Project Name: TNM 98-05

Project Location: Eunice NM

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B/5030	TPH ~~418.1~~ 8015 DRO/GRO	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
24634	GP10 004 13'	4oz			X						X			4/5			X						
24635	GP11 001 4'	4oz			X						X			4/5			X						
24636	GP11 002 7'	4oz			X						X			4/5			X						
24637	GP11 003 10'	4oz			X						X			4/5			X						
24638	GP11 004 13'	4oz			X						X			4/5			X						
24639	GP12 001 4'	4oz			X						X			4/5			X						
24640	GP12 002 7'	4oz			X						X			4/5			X						

Relinquished by:	Date:	Time:	Received by:
	4/6/00		
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time: 11:00	Received by Laboratory:

REMARKS

FAX RESULTS ASAP!

ANALYTICAL REPORT

Prepared for:

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Project:	TNM 98-05A
Order#:	G0203314
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#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
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 Collected	Date / Time Received	Container	Preservative
0203314-01	Excavation Walls	Soil	5/8/02 13:50	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 0 C		
	8015M					
	8021B/5030 BTEX					
0203314-02	Excavation Bottom	Soil	5/8/02 14:00	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 0 C		
	8015M					
	8021B/5030 BTEX					
0203314-03	Bio-Mound North East	Soil	5/8/02 14:30	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 0 C		
	8015M					
	8021B/5030 BTEX					
0203314-04	Bio-Mound North West	Soil	5/8/02 14:15	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 0 C		
	8015M					
	8021B/5030 BTEX					
0203314-05	Bio-Mound South East	Soil	5/8/02 14:45	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 0 C		
	8015M					
	8021B/5030 BTEX					
0203314-06	Bio-Mound South West	Soil	5/8/02 15:00	5/9/02 10:30	4 oz glass	Ice
	Lab Testing:	**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#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-01
Sample ID: Excavation Walls

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	<10.0	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 19:47	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	<25.0	25.0
p/m-Xylene	<25.0	25.0
o-Xylene	<25.0	25.0

Lab ID: 0203314-02
Sample ID: Excavation Bottom

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	39.3	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	39.3	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-02
Sample ID: Excavation Bottom

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 20:09	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	**<25.0**	25.0
Ethylbenzene	**<25.0**	25.0
Toluene	**<25.0**	25.0
p/m-Xylene	**<25.0**	25.0
o-Xylene	**<25.0**	25.0

Lab ID: 0203314-03
Sample ID: Bio-Mound North East

8015M

Method Blank	Date Prepared	Date Analyzed	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	**868**	10.0
TOTAL, C6-C35	**2548**	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-03
Sample ID: Bio-Mound North East

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 20:31	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	<25.0	25.0
p/m-Xylene	58.1	25.0
o-Xylene	58.0	25.0

Lab ID: 0203314-04
Sample ID: Bio-Mound North West

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	392	10.0
GRO, C6-C12	349	10.0
TOTAL, C6-C35	741	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-04
Sample ID: Bio-Mound North West

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 20:53	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	60.0	25.0
Ethylbenzene	80.0	25.0
Toluene	268	25.0
p/m-Xylene	154	25.0
o-Xylene	172	25.0

Lab ID: 0203314-05
Sample ID: Bio-Mound South East

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	559	10.0
GRO, C6-C12	405	10.0
TOTAL, C6-C35	964	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-05
Sample ID: Bio-Mound South East

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 21:16	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	92.2	25.0
Toluene	191	25.0
p/m-Xylene	174	25.0
o-Xylene	50.6	25.0

Lab ID: 0203314-06
Sample ID: Bio-Mound South West

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		5/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	1260	10.0
GRO, C6-C12	848	10.0
TOTAL, C6-C35	2108	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0203314
Project: EOT 2026C
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0203314-06
Sample ID: Bio-Mound South West

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 21:38	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	90.1	25.0
Toluene	142	25.0
p/m-Xylene	192	25.0
o-Xylene	248	25.0

Approval: Raland K Tuttle 5-14-02
Raland K. Tuttle, Lab Director, QA Officer — Date
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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203314

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#: G0203314

BLANK Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0001667-02			<25.0		
Ethylbenzene-µg/kg	0001667-02			<25.0		
Toluene-µg/kg	0001667-02			<25.0		
p/m-Xylene-µg/kg	0001667-02			<25.0		
o-Xylene-µg/kg	0001667-02			<25.0		
MS Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0203305-01	0	100	107	107.%	
Ethylbenzene-µg/kg	0203305-01	0	100	110	110.%	
Toluene-µg/kg	0203305-01	0	100	108	108.%	
p/m-Xylene-µg/kg	0203305-01	0	200	228	114.%	
o-Xylene-µg/kg	0203305-01	0	100	109	109.%	
MSD Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0203305-01	0	100	106	106.%	0.9%
Ethylbenzene-µg/kg	0203305-01	0	100	108	108.%	1.8%
Toluene-µg/kg	0203305-01	0	100	107	107.%	0.9%
p/m-Xylene-µg/kg	0203305-01	0	200	226	113.%	0.9%
o-Xylene-µg/kg	0203305-01	0	100	108	108.%	0.9%
SRM Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0001667-05		100	112	112.%	
Ethylbenzene-µg/kg	0001667-05		100	112	112.%	
Toluene-µg/kg	0001667-05		100	114	114.%	
p/m-Xylene-µg/kg	0001667-05		200	229	114.5%	
o-Xylene-µg/kg	0001667-05		100	110	110.%	

Environmental Technology Group, Inc
Environmental Consulting & Remediation Services

For Use On **EOTT ENERGY CORP.** Projects Only

4600 West Wall
Midland, TX 79703
Tel (915) 522-1139
Fax (915) 520-4310

2540 West Marland
Hobbs, NM 88242
Tel (505) 397-4882
Fax (505) 397-4701

EOTT ENERGY CORP.
East Business 20
TX 79702
(915) 687-3400
(915) 582-2781

5805
Midland,
Tel
Fax

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Manager: Camille Reynolds
Project Name: TNM 98-05A
Project Location: Eunice NM
EOTT Leak Number:
ETGI Project Number: EOT 2026C
Sampler Signature: Simon Casas

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATION METHOD: HCL	HNO_3	$NaHSO_4$	ICE	NONE	SAMPLING: DATE 2002	TIME	BTEX 8021B/5030	TPH 418.1/TX 1005	TPH 8015M GRO/DRO	PAH 8270C (8100 New Mexico only)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/7470	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	Volatiles 8260B	Semi Volatiles 8270C	TDS 160.1	Cations/Anions 375.4/325.3
0203314-01	EXCAVATION WALLS	1	4oz		X						X		5-8	1350	X		+									
02	EXCAVATION BOTTOM													1400												
03	BIO-MOUND NORTH EAST													1430												
04	BIO-MOUND NORTH WEST													1415												
05	BIO-MOUND SOUTH EAST													1445												
06	BIO MOUND SOUTH WEST													1500												

Relinquished by: Simon Casas Date: 5-9-02 Time: 1030
Relinquished by: Date: Time:

Received by: Date: Time:
Received at Lab by: Jeanne Mooney Date: 5-9-2 Time: 1030

REMARKS: Rec 0 °C RUSH
INVOICE EOTT
FAX RESULTS TO HOBBS

ANALYTICAL REPORT

Prepared for:

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Project:	TNM 98-05A
PO#:	EO2026
Order#:	G0205068
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#: G0205068
Project: EO2026
Project Name: TNM 98-05A
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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0205068-01	Excavation Westside wall	SOIL	11/14/02 15:25	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-02	Excavation Southside wall	SOIL	11/14/02 15:22	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-03	Excavation Northside wall	SOIL	11/14/02 15:17	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-04	Excavation Eastside wall	SOIL	11/14/02 15:33	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-05	S.W. Biomound Comp	SOIL	11/14/02 15:07	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-06	N.W. Biomound Comp	SOIL	11/14/02 14:57	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	**Rejected:** No		**Temp:** 2.0C		
0205068-07	S.E. Biomound Comp	SOIL	11/14/02 15:02	11/19/02 17:15	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 2.0C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240
505/397/4701

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
	8015M 8021B/5030 BTEX					
0205068-08	N.E. Biomound Comp	SOIL	11/14/02 14:51	11/19/02 17:15	4 oz glass	Ice
	Lab Testing:	**Rejected:** No		**Temp:** 2.0C		
	8015M 8021B/5030 BTEX					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-01
Sample ID: Excavation Westside wall

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	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	107%	70	130
1-Chlorooctadecane	103%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 10:35	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	86%	80	120
Bromofluorobenzene	91%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-02
Sample ID: Excavation Southside wall

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	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	108%	70	130
1-Chlorooctadecane	102%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 11:32	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.065	0.025
Toluene	0.079	0.025
p/m-Xylene	0.221	0.025
o-Xylene	0.042	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	95%	80	120
Bromofluorobenzene	100%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-03
Sample ID: Excavation Northside wall

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	29.8	10.0
TOTAL, C6-C35	29.8	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	115%	70	130
1-Chlorooctadecane	111%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 11:51	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.026	0.025
Toluene	0.028	0.025
p/m-Xylene	0.084	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	90%	80	120
Bromofluorobenzene	100%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-04
Sample ID: Excavation Eastside wall

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	831	10.0
TOTAL, C6-C35	831	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	120%	70	130
1-Chlorooctadecane	121%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 12:10	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.034	0.025
Toluene	0.035	0.025
p/m-Xylene	0.100	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	90%	80	120
Bromofluorobenzene	98%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-05
Sample ID: S.W. Biomound Comp

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	22.7	10.0
DRO, >C12-C35	1,530	10.0
TOTAL, C6-C35	1,553	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	118%	70	130
1-Chlorooctadecane	120%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 12:29	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.040	0.025
Toluene	0.042	0.025
p/m-Xylene	0.114	0.025
o-Xylene	0.028	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	87%	80	120
Bromofluorobenzene	80%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-06
Sample ID: N.W. Biomound Comp

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	37.4	10.0
DRO, >C12-C35	1,480	10.0
TOTAL, C6-C35	1,517	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	122%	70	130
1-Chlorooctadecane	126%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 12:48	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	0.043	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	88%	80	120
Bromofluorobenzene	82%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-07
Sample ID: S.E. Biomound Comp

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	39.6	10.0
DRO, >C12-C35	2,180	10.0
TOTAL, C6-C35	2,220	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	110%	70	130
1-Chlorooctadecane	110%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 13:47	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	91%	80	120
Bromofluorobenzene	93%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0205068
Project: EO2026
Project Name: TNM 98-05A
Location: Eunice, NM

Lab ID: 0205068-08
Sample ID: N.E. Biomound Comp

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/21/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	75.7	10.0
DRO, >C12-C35	2,260	10.0
TOTAL, C6-C35	2,336	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	105%	70	130
1-Chlorooctadecane	103%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 14:06	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	89%	80	120
Bromofluorobenzene	87%	80	120

Approval: Raland K Tuttle 11-22-02
Raland K. Tuttle, Lab Director, QA Officer — Date
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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0205068

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003842-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003842-03		952	980	102.9%	
CONTROL DUP 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%
SRM 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#: G0205068

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003839-02			<0.025		
Ethylbenzene-mg/kg	0003839-02			<0.025		
Toluene-mg/kg	0003839-02			<0.025		
p/m-Xylene-mg/kg	0003839-02			<0.025		
o-Xylene-mg/kg	0003839-02			<0.025		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0205068-01	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg	0205068-01	0	0.1	0.098	98.%	
Toluene-mg/kg	0205068-01	0	0.1	0.096	96.%	
p/m-Xylene-mg/kg	0205068-01	0	0.2	0.208	104.%	
o-Xylene-mg/kg	0205068-01	0	0.1	0.099	99.%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0205068-01	0	0.1	0.094	94.%	2.2%
Ethylbenzene-mg/kg	0205068-01	0	0.1	0.100	100.%	2.%
Toluene-mg/kg	0205068-01	0	0.1	0.097	97.%	1.%
p/m-Xylene-mg/kg	0205068-01	0	0.2	0.211	105.5%	1.4%
o-Xylene-mg/kg	0205068-01	0	0.1	0.100	100.%	1.%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003839-05		0.1	0.094	94.%	
Ethylbenzene-mg/kg	0003839-05		0.1	0.100	100.%	
Toluene-mg/kg	0003839-05		0.1	0.098	98.%	
p/m-Xylene-mg/kg	0003839-05		0.2	0.212	106.%	
o-Xylene-mg/kg	0003839-05		0.1	0.100	100.%	

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

COC # [illegible]

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Camille Reynolds

Company Name: ETGI

Company Address: 2540 W. Marlin

City/State/Zip: Hobbs/NM/88240

Telephone No: 505-397-4882

Fax No: 505-397-4701

Sampler Signature: [signature] / R.E.

Project Name: TNM 98-05A

Project #: EO 2086 (2 written over 8) (initialed) as per R. Eidson

Project Loc: Eunice, NM

PO #:

JNN as per R.Eidson

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Water	Sludge	Soil	Other (specify)	TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
	~~Excavation Southside Wall Comp~~	~~11/14/02~~	~~[illegible]~~	1	X									X					X				X		
	~~[illegible] Wall Comp~~	~~11/14/02~~	~~[illegible]~~	1	X									X					X				X		
	~~[illegible] Wall Comp~~	~~11/14/02~~	~~[illegible]~~	1	X									X					X				X		
	~~Excavation Eastside Wall Comp~~	~~11/14/02~~	~~[illegible]~~	1	X									X					X				X		
0205068-01	Excavation Westside Wall	11/14/02	15:28	1	X									X					X				X		
02	Excavation Southside Wall	11/14/02	15:22	1	X									X					X				X		
03	Excavation Northside Wall	11/14/02	15:17	1	X									X					X				X		
04	Excavation Eastside Wall	11/14/02	15:33	1	X									X					X				X		
05	S.W. Biomound Comp	11/14/02	15:07	1	X									X					X				X		
06	N.W. Biomound Comp	11/14/02	14:57	1	X									X					X				X		
07	S.E. Biomound Comp	11/14/02	1502	1	X									X											
08	N.E. Biomound Comp	11/14/02	1451	1	X									X											

Special Instructions:

Sample Containers Intact? (Y) N

Temperature Upon Receipt: 2.0°C

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/19/02	14:42	[signature]	11/19/02	1442

Relinquished by:	Date	Time	Received by ELOT:	Date	Time
[signature]	11/19/02	1715	Jeanne McMurrey	11-19-02	1715

ANALYTICAL REPORT

Prepared for:

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Project:	TNM 98-05A
PO#:	EO 2026
Order#:	G0305917
Report Date:	03/11/2003

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#: G0305917
Project: TNM 98-05A
Project Name: TNM 98-05A
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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305917-01	NE Biomound-1	SOIL	3/4/03 13:20	3/7/03 16:03	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 3.5 C		
0305917-02	NW Biomound-2	SOIL	3/4/03 13:42	3/7/03 16:03	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 3.5 C		
0305917-03	SW Biomound-3	SOIL	3/4/03 14:08	3/7/03 16:03	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 3.5 C		
0305917-04	SE Biomound-4	SOIL	3/4/03 13:53	3/7/03 16:03	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 3.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0305917
Project: TNM 98-05A
Project Name: TNM 98-05A
Location: Lea County, NM

Lab ID: 0305917-01
Sample ID: NE Biomound-1

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	124	10.0
DRO, >C12-C35	1,460	10.0
TOTAL, C6-C35	1,584	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	110%	70	130
1-Chlorooctadecane	119%	70	130

Lab ID: 0305917-02
Sample ID: NW Biomound-2

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	115	10.0
DRO, >C12-C35	1,890	10.0
TOTAL, C6-C35	2,005	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	122%	70	130
1-Chlorooctadecane	140%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0305917
Project: TNM 98-05A
Project Name: TNM 98-05A
Location: Lea County, NM

Lab ID: 0305917-03
Sample ID: SW Biomound-3

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	52.6	10.0
DRO, >C12-C35	1,250	10.0
TOTAL, C6-C35	1,303	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	107%	70	130
1-Chlorooctadecane	123%	70	130

Lab ID: 0305917-04
Sample ID: SE Biomound-4

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/10/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	24.8	10.0
DRO, >C12-C35	658	10.0
TOTAL, C6-C35	683	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	108%	70	130
1-Chlorooctadecane	109%	70	130

Approval: Raland K Tuttle 3-11-03
Raland K. Tuttle, Lab Director, QA Officer — Date
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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305917

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004897-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305917-04	683	952	1660	102.6%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305917-04	683	952	1540	90.%	7.5%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004897-05		1000	855	85.5%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0305917

Project: TNM 98-05A

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
NE Biomound-1	0305917-01	SOIL	03/04/2003	03/07/2003
NW Biomound-2	0305917-02	SOIL	03/04/2003	03/07/2003
SW Biomound-3	0305917-03	SOIL	03/04/2003	03/07/2003
SE Biomound-4	0305917-04	SOIL	03/04/2003	03/07/2003

Surrogate recoveries on the 8015M TPH are outside control limits due to matrix interference from coeluting compounds. (0305917-02)

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: Roland K Tuttle Date: 3-11-03

Environmental Lab of Texas I, Ltd.

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-4713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Camille Reynolds
Company Name: ETGI
Company Address: 2540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882
Fax No: (505) 397-4701
Sampler Signature: Camille Reynolds

Project Name: TNM 98-05A
Project #: EO 2026
Project Loc: Lea County, NM
PO #:

LAB # (lab use only) 0305917	FIELD CODE	Date Sampled (2003)	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
-01	NE Biomound-1	3/4	1320	1	X									X					X						X
-02	NW Biomound-2	3/4	1342	↓	↓									↓					↓						↓
-03	SW Biomound-3	3/4	1408	↓	↓									↓					↓						↓
-04	SE Biomound-4	3/4	1353	↓	↓									↓					↓						↓

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
Camille Reynolds	3-7-03	10:30	[signature]	03/07	10:30
[signature]	3/7	1603	Received by ELOT: [signature]	3/7/03	1603

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: ice 3.5°C

FILE

ANALYTICAL REPORT

Prepared for:

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Project:	TNM 98-05A
PO#:	
Order#:	G0307500
Report Date:	09/23/2003

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#: G0307500
Project: EO 2026
Project Name: TNM 98-05A
Location: Lea County, N.M.

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0307500-01	Northeast Quad Biomound-9	SOIL	9/18/2003 10:24	9/19/2003 13:00	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 1.0 C		
0307500-02	Southeast Quad Biomound-10	SOIL	9/18/2003 10:38	9/19/2003 13:00	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 1.0 C		
0307500-03	Northwest Quad Biomound-11	SOIL	9/18/2003 10:47	9/19/2003 13:00	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 1.0 C		
0307500-04	Southwest Quad Biomound-12	SOIL	9/18/2003 10:59	9/19/2003 13:00	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 1.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0307500
Project: EO 2026
Project Name: TNM 98-05A
Location: Lea County, N.M.

Lab ID: 0307500-01
Sample ID: Northeast Quad Biomound-9

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/20/2003	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	22.3	10.0
DRO, >C12-C35	1,140	10.0
TOTAL, C6-C35	1,162	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	81%	70	130

Lab ID: 0307500-02
Sample ID: Southeast Quad Biomound-10

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/20/2003	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	747	10.0
TOTAL, C6-C35	747	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	79%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0307500
Project: EO 2026
Project Name: TNM 98-05A
Location: Lea County, N.M.

Lab ID: 0307500-03
Sample ID: Northwest Quad Biomound-11

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/20/2003	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	1,020	10.0
TOTAL, C6-C35	1,020	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	103%	70	130
1-Chlorooctadecane	86%	70	130

Lab ID: 0307500-04
Sample ID: Southwest Quad Biomound-12

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/20/2003	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	14.6	10.0
DRO, >C12-C35	1,770	10.0
TOTAL, C6-C35	1,785	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	100%	70	130
1-Chlorooctadecane	81%	70	130

Approval: Jeanne McMurrey 09-24-03
Raland K. Tuttle, Lab Director, QA Officer — Date
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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0307500

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006892-02			<10.0		
CONTROL SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0006892-03		2000	1624	81.2%	
CONTROL DUP SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0006892-04		2000	1618	80.9%	0.4%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0006892-05		1000	924	92.4%	

Coc# 100

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: ~~915-563-1713~~

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Camille Reynolds
Company Name: ETGI
Company Address: 2540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882
Fax No: (505) 397-4701
Sampler Signature: Justin Frisk

Project Name: TNM 98-05A
Project #: E02026
Project Loc: Lea County, NM
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled (2003)	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	[illegible]	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 (Hold)	RUSH TAT (Pre-Schedule)	Standard TAT
0307500 01	Northeast Quad Biomound-9	9-18-03	1024	1	X									X					X				X		
02	Southeast Quad Biomound-10	9-18-03	1038	↓	↓									↓					↓				↓		
03	Northwest Quad Biomound-11	9-18-03	1047	↓	↓									↓					↓				↓		
04	Southwest Quad Biomound-12	9-18-03	1059	↓	↓									↓					↓				↓		

Special Instructions:
* Fax TPH Results and hold for BTEX

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: Rec 1°C

Relinquished by	Date	Time	Received by	Date	Time
Justin Frisk	9/19	9:45	[signature]	9/19	9:45
[signature]	9/19	13:00	Received by ELOT: [signature]	9-19-03	1300

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240
505/397/4701

Order#: G0306894
Project: EO 2026
Project Name: TNM 98-05 A
Location: Lea County N.M.

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0306894-01	NE Biomound 5	SOIL	6/30/03 9:50	7/3/03 10:23	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 14.5 C		
0306894-02	NW Biomound 6	SOIL	6/30/03 10:15	7/3/03 10:23	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 14.5 C		
0306894-03	SE Biomound 7	SOIL	6/30/03 10:41	7/3/03 10:23	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 14.5 C		
0306894-04	SW Biomound 8	SOIL	6/30/03 11:08	7/3/03 10:23	4 oz glass	ice
	Lab Testing: 8015M	Rejected: No		Temp: 14.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0306894
Project: EO 2026
Project Name: TNM 98-05 A
Location: Lea County N.M.

Lab ID: 0306894-01
Sample ID: NE Biomound 5

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		7/7/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	52.8	10.0
DRO, >C12-C35	561	10.0
TOTAL, C6-C35	614	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	111%	70	130
1-Chlorooctadecane	108%	70	130

Lab ID: 0306894-02
Sample ID: NW Biomound 6

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		7/7/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	130	10.0
DRO, >C12-C35	2,280	10.0
TOTAL, C6-C35	2410	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	106%	70	130
1-Chlorooctadecane	108%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0306894
Project: EO 2026
Project Name: TNM 98-05 A
Location: Lea County N.M.

Lab ID: 0306894-03
Sample ID: SE Biomound 7

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		7/7/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	67.9	10.0
DRO, >C12-C35	1,680	10.0
TOTAL, C6-C35	1748	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	105%	70	130
1-Chlorooctadecane	107%	70	130

Lab ID: 0306894-04
Sample ID: SW Biomound 8

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		7/7/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	29.4	10.0
DRO, >C12-C35	578	10.0
TOTAL, C6-C35	607	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	107%	70	130
1-Chlorooctadecane	105%	70	130

Approval: Jeanne McMurrey 07-10-03
Raland K. Tuttle, Lab Director, QA Officer — Date
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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306894

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006104-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006104-03		952	791	83.1%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006104-04		952	800	84.%	1.1%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006104-05		1000	953	95.3%	

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Camille Reynolds
Company Name: ETGT
Company Address: 2540 W. Marland
City/State/Zip: Hobbs NM, 88240
Telephone No: (505) 397-4882 Fax No: (505) 397-4701
Sampler Signature: Eli Jaquez

Project Name: TNM 98-05A
Project #: EO 2026
Project Loc: Lea County, NM
PO #:

LAB # (lab use only): 030694

FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP/TOTAL: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
NE Biomound 5	6-30-2003	9:50	1	X									X					X						X
NW Biomound 6	6-30	10:15	1	X									X					X						X
SE Biomound 7	6-30	10:41	1	X									X					X						X
SW Biomound 8	6-30	11:08	1	X									X					X						X

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: 4oz glass

Relinquished by:	Date	Time	Received by:	Date	Time
Eli Jaquez	7/3/03	10:23			
Relinquished by:	Date	Time	Received by ELOT: Amy Anderson	7/3/03	10:23

14.5°C

ANALYTICAL REPORT

Prepared for:

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Project:	TNM 98-05A
PO#:	
Order#:	G0308259
Report Date:	01/02/2004

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#: G0308259
Project: EO 2026
Project Name: TNM 98-05A
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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0308259-01	NE Biomond-13	SOIL	12/31/03 9:00	12/31/03 11:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 2.5 C		
0308259-02	NW Biomond-14	SOIL	12/31/03 9:17	12/31/03 11:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 2.5 C		
0308259-03	SE Biomond-15	SOIL	12/31/03 9:34	12/31/03 11:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 2.5 C		
0308259-04	SW Biomound-16	SOIL	12/31/03 9:10	12/31/03 11:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 2.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0308259
Project: EO 2026
Project Name: TNM 98-05A
Location: Lea County, NM

Lab ID: 0308259-01
Sample ID: NE Biomond-13

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/31/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	18.7	10.0
DRO, >C12-C35	1,100	10.0
TOTAL, C6-C35	1,119	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	84%	70	130
1-Chlorooctadecane	79%	70	130

Lab ID: 0308259-02
Sample ID: NW Biomond-14

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/31/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	21.7	10.0
DRO, >C12-C35	979	10.0
TOTAL, C6-C35	1,001	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	84%	70	130
1-Chlorooctadecane	81%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, NM 88240

Order#: G0308259
Project: EO 2026
Project Name: TNM 98-05A
Location: Lea County, NM

Lab ID: 0308259-03
Sample ID: SE Biomond-15

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/31/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	**17.6**	10.0
DRO, >C12-C35	**1,550**	10.0
TOTAL, C6-C35	**1,568**	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	**121%**	**70**	**130**
1-Chlorooctadecane	**121%**	**70**	**130**

Lab ID: 0308259-04
Sample ID: SW Biomound-16

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/31/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	**<10.0**	10.0
DRO, >C12-C35	**1,000**	10.0
TOTAL, C6-C35	**1,000**	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	**103%**	**70**	**130**
1-Chlorooctadecane	**103%**	**70**	**130**

Approval: Raland K Tuttle 1-02-04
Date

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

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0308259

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0007869-02			<10.0		
CONTROL SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0007869-03		952	871	91.5%	
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0308259-01	1120	952	1995	91.9%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0308259-01	1120	952	2116	104.6%	5.9%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0007869-05		1000	1013	101.3%	

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Camille Reynolds
Company Name: ETGI
Company Address: 2540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882 Fax No: (505) 397-4701
Sampler Signature:

Project Name: TNM 98-05A
Project #: 20 2026
Project Loc: Lea County, NM
PO #:

0308259

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers 4oz Glass	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TCLP Volatiles	TCLP Semivolatiles	TCLP Pesticides/PCBs	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TOTAL: Metals: Ag As Ba Cd Cr Pb Se Hg	Volatiles	Semivolatiles	TPH TX 1005/1005	TPH 8015/DRO/GRO	RUSH TAT (Pre-Schedule) X Standard TAT
-01	NE Biomond - 13	12/31	9:00	1	X									X											X
-02	NW Biomond - 14		9:17	1	X									X											X
-03	SE Biomond - 15		9:34	1	X									X											X
-04	SW Biomound - 16		9:10	1	X									X											X

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
2.5°C

Relinquished by:	Date	Time	Received by:	Date	Time
	12/31/08	12:25			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne McMurray	12-31-03	1125

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Plains All American Pipeline, L.P.
Plains All American EH & S
1301 S. County Road 1150
Midland, TX 79706-4476

Project: No Project
Project Number: 98-05A
Location: Lea, NM

Lab Order Number: 4I01007

Report Date: 09/08/04

Plains All American EH & S	Project: No Project	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 98-05A	Reported:
Midland TX, 79706-4476	Project Manager: Plains All American Pipeline, L.P.	09/08/04 11:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NE Quad 0-6 inch	4I01007-01	Soil	08/27/04 09:30	09/01/04 14:47
NE Quad 1'	4I01007-02	Soil	08/27/04 09:50	09/01/04 14:47
NE Quad 2'	4I01007-03	Soil	08/27/04 10:21	09/01/04 14:47
NW Quad 0'6 inch	4I01007-04	Soil	08/27/04 09:35	09/01/04 14:47
NW Quad 1'	4I01007-05	Soil	08/27/04 09:55	09/01/04 14:47
NW Quad 2'	4I01007-06	Soil	08/27/04 10:35	09/01/04 14:47
SW Quad 0-6 inch	4I01007-07	Soil	08/27/04 09:45	09/01/04 14:47
SW Quad 1'	4I01007-08	Soil	08/27/04 10:07	09/01/04 14:47
SW Quad 2'	4I01007-09	Soil	08/27/04 10:47	09/01/04 14:47
SE Quad 0-6 inch	4I01007-10	Soil	08/27/04 09:40	09/01/04 14:47
SE Quad 1'	4I01007-11	Soil	08/27/04 10:00	09/01/04 14:47
SE Quad 2'	4I01007-12	Soil	08/27/04 11:03	09/01/04 14:47

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NE Quad 0-6 inch (4I01007-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*78.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.4 %*	*70-130*		"	"	"	"	
NE Quad 1' (4I01007-02) Soil									
Gasoline Range Organics C6-C12	**24.4**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**1010**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1030**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	
NE Quad 2' (4I01007-03) Soil									
Gasoline Range Organics C6-C12	**49.7**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**1820**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1870**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*82.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
NW Quad 0'6 inch (4I01007-04) Soil									
Gasoline Range Organics C6-C12	**11.4**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**1080**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1090**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*121 %*	*70-130*		"	"	"	"	
NW Quad 1' (4I01007-05) Soil									
Gasoline Range Organics C6-C12	**J [7.55]**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	J
Diesel Range Organics >C12-C35	**553**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**553**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*115 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: No Project	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 98-05A	**Reported:**
Midland TX, 79706-4476	Project Manager: Plains All American Pipeline, L.P.	09/08/04 11:46

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NW Quad 2' (4I01007-06) Soil									
Gasoline Range Organics C6-C12	**12.0**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**147**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**159**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*73.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.4 %*	*70-130*		"	"	"	"	
SW Quad 0-6 inch (4I01007-07) Soil									
Gasoline Range Organics C6-C12	ND	20.0	mg/kg dry	2	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**340**	20.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**340**	20.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*29.8 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*33.0 %*	*70-130*		"	"	"	"	*S-06*
SW Quad 1' (4I01007-08) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*73.2 %*	*70-130*		"	"	"	"	
SW Quad 2' (4I01007-09) Soil									
Gasoline Range Organics C6-C12	**35.8**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	**1610**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1650**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	
SE Quad 0-6 inch (4I01007-10) Soil									
Gasoline Range Organics C6-C12	**J [8.82]**	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	J
Diesel Range Organics >C12-C35	**547**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**547**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*70.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*82.6 %*	*70-130*		"	"	"	"	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SE Quad 1' (4I01007-11) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*72.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*76.8 %*	*70-130*		"	"	"	"	
SE Quad 2' (4I01007-12) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*70.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*73.2 %*	*70-130*		"	"	"	"	

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NE Quad 0-6 inch (4I01007-01) Soil									
% Solids	80.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NE Quad 1' (4I01007-02) Soil									
% Solids	89.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NE Quad 2' (4I01007-03) Soil									
% Solids	92.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NW Quad 0'6 inch (4I01007-04) Soil									
% Solids	91.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NW Quad 1' (4I01007-05) Soil									
% Solids	85.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NW Quad 2' (4I01007-06) Soil									
% Solids	76.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 0-6 inch (4I01007-07) Soil									
% Solids	68.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 1' (4I01007-08) Soil									
% Solids	70.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 2' (4I01007-09) Soil									
% Solids	89.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SE Quad 0-6 inch (4I01007-10) Soil									
% Solids	91.0		%	1	EI40711	09/02/04	09/02/04	% calculation	

Plains All American EH & S	Project: No Project	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 98-05A	Reported:
Midland TX, 79706-4476	Project Manager: Plains All American Pipeline, L.P.	09/08/04 11:46

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SE Quad 1' (4I01007-11) Soil									
% Solids	83.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SE Quad 2' (4I01007-12) Soil									
% Solids	71.0		%	1	EI40711	09/02/04	09/02/04	% calculation	

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Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI40207 - Solvent Extraction (GC)										
Blank (EI40207-BLK1)				Prepared: 09/02/04 Analyzed: 09/06/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*37.3*		*mg/kg*	*50.0*		*74.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.9*		*"*	*50.0*		*83.8*	*70-130*			
LCS (EI40207-BS1)				Prepared: 09/02/04 Analyzed: 09/07/04						
Gasoline Range Organics C6-C12	444	10.0	mg/kg wet	500		88.8	75-125			
Diesel Range Organics >C12-C35	504	10.0	"	500		101	75-125			
Total Hydrocarbon C6-C35	948	10.0	"	1000		94.8	75-125			
Surrogate: 1-Chlorooctane	*55.7*		*mg/kg*	*50.0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.0*		*"*	*50.0*		*128*	*70-130*			
Calibration Check (EI40207-CCV1)				Prepared: 09/02/04 Analyzed: 09/07/04						
Gasoline Range Organics C6-C12	442		mg/kg	500		88.4	80-120			
Diesel Range Organics >C12-C35	551		"	500		110	80-120			
Total Hydrocarbon C6-C35	993		"	1000		99.3	80-120			
Surrogate: 1-Chlorooctane	*64.7*		*"*	*50.0*		*129*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.7*		*"*	*50.0*		*127*	*70-130*			
Matrix Spike (EI40207-MS1)	**Source: 4I01007-01**			Prepared: 09/02/04 Analyzed: 09/07/04						
Gasoline Range Organics C6-C12	571	10.0	mg/kg dry	625	ND	91.4	75-125			
Diesel Range Organics >C12-C35	647	10.0	"	625	ND	104	75-125			
Total Hydrocarbon C6-C35	1220	10.0	"	1250	ND	97.6	75-125			
Surrogate: 1-Chlorooctane	*42.4*		*mg/kg*	*50.0*		*84.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.7*		*"*	*50.0*		*81.4*	*70-130*			
Matrix Spike Dup (EI40207-MSD1)	**Source: 4I01007-01**			Prepared: 09/02/04 Analyzed: 09/07/04						
Gasoline Range Organics C6-C12	583	10.0	mg/kg dry	625	ND	93.3	75-125	2.08	20	
Diesel Range Organics >C12-C35	667	10.0	"	625	ND	107	75-125	3.04	20	
Total Hydrocarbon C6-C35	1250	10.0	"	1250	ND	100	75-125	2.43	20	
Surrogate: 1-Chlorooctane	*43.7*		*mg/kg*	*50.0*		*87.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.6*		*"*	*50.0*		*83.2*	*70-130*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI40711 - General Preparation (Prep)										
Blank (EI40711-BLK1)				Prepared & Analyzed: 09/02/04						
% Solids	100		%							
Duplicate (EI40711-DUP1)		Source: 4H31009-01		Prepared & Analyzed: 09/02/04						
% Solids	93.0		%		94.0			1.07	20	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 9-08-04

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

Plains All American [Plains Marketing, L. P. ~ Plains Pipeline, L. P.]

PLAINS ALL AMERICAN GP LLC | PLAINS PIPELINE, L.P. | PLAINS Marketing, L.P.

CHAIN-OF-CUSTODY and ANALYSIS REQUEST

Lab Order ID #:

Contact: Camille Reynolds	Phone: 505/441-0965	Project # or Name: 98-05A
Company Name: Plains	Fax #:	Project Location: Delrose Scott
Address:	Email: CJReynolds@PAA-P.com	Project Location: Lea, NM
invoice To: Plains EH&S 5805 E. Hwy 80, Midland, TX 79706	Sampler: Camille Reynolds, Daniel Bryant	Sampler Signature: Daniel Bryant

Turnaround Time (Business Days): **Anything but Normal requires EH&S Mgr. Approval**

☑ Normal ☐ 24 hr. ☐ 2 days ☐ 3 days ☐ Other

Reporting Limits: ☑ Normal ☐ MDL ☐ MQL ☐ PQL ☐ Special

Lab ID (Lab use only)	Field Code	Matrix	Date/Time	# Containers	Preservatives: HCl HN03 H2SO4 NaOH Ice None	MTBE 8021B	BTEX 8021B *	TX 1005	TPH 8015M	PAH 8270C	TCLP Volatiles	TCLP Semi-Volatiles	TCLP Pesticides	RCI	GCMS Volatiles 8260B	GCMS Semi-vols 8270C	BOD, TSS, pH
4I01004	7 PM 9-01-04																
-01	NE Quad 0-6"	Soil	8/27/04 09:30	1	Ice		X		X								
02	NE Quad 1'		09:50	1					X								
03	NE Quad 2'		10:21	1					X								
04	NW Quad 0-6"		09:35	1					X								
05	NW Quad 1'		09:55	1					X								
06	NW Quad 2'		10:35	1					X								
07	SW Quad 0-6"		09:45	1					X								
08	SW Quad 1'		10:07	1					X								
09	SW Quad 2'		10:47	1					X								
10	SE Quad 0-6"		09:40	1					X								
11	SE Quad 1'		10:00	1					X								
12	SE Quad 2'		11:03	1					X								

Submittal of samples constitutes agreement to Terms and Conditions on this COC.

Relinquished by: Date: Time:	Received at lab by: Date: Time:
Daniel Bryant 9/1/04 14:47	Vicky Keene 9/1/04 14:47

Lab Use Only

Intact:	Headspace:	Temp:	Login Review:
yes	no	-6.0°C	40z glass

* Hold BTEX analysis until verbal on TPH.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Plains All American

Date/Time: 9/1/04 14:47

Order #: _____

Initials: CDK

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-6.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

Summary Report

Curt Stanley
Nova Safety & Environmental
5023 Commerce
Midland, TX 79703

Report Date: December 8, 2004

Work Order: 4120711

Project Location: Southeast of Monument, NM
Project Name: TNM-98-05A
Project Number: TNM-98-05A

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49820	MW-11 @ 30'	soil	2004-12-01	16:20	2004-12-07
49823	MW-11 @ 45'	soil	2004-12-01	16:54	2004-12-07

	BTEX				TPH DRO	TPH GRO
Sample - Field Code	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
49820 - MW-11 @ 30'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00
49823 - MW-11 @ 45'	<0.0100	<0.0100	<0.0100	<0.0100	<50.0	<1.00

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

Curt Stanley
Nova Safety & Environmental
5023 Commerce
Midland, TX 79703

Report Date: December 8, 2004

Work Order: 4120711

Project Location: Southeast of Monument, NM
Project Name: TNM-98-05A
Project Number: TNM-98-05A

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
49820	MW-11 @ 30'	soil	2004-12-01	16:20	2004-12-07
49823	MW-11 @ 45'	soil	2004-12-01	16:54	2004-12-07

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

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

Dr. Blair Leftwich, Director

Analytical Report

Sample: 49820 - MW-11 @ 30'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14490	Date Analyzed:	2004-12-07	Analyzed By:	MS
Prep Batch:	12802	Date Prepared:	2004-12-07	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
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)		0.881	mg/Kg	10	0.100	88	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.901	mg/Kg	10	0.100	90	63.1 - 105

Sample: 49820 - MW-11 @ 30'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14478	Date Analyzed:	2004-12-07	Analyzed By:	BP
Prep Batch:	12791	Date Prepared:	2004-12-07	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		130	mg/Kg	1	150	86	69.8 - 106.1

Sample: 49820 - MW-11 @ 30'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14492	Date Analyzed:	2004-12-07	Analyzed By:	MS
Prep Batch:	12802	Date Prepared:	2004-12-07	Prepared By:	MS

Parameter	Flag	RL 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)		0.955	mg/Kg	10	0.100	96	0 - 160
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	0 - 174

Sample: 49823 - MW-11 @ 45'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14490	Date Analyzed:	2004-12-07	Analyzed By:	MS
Prep Batch:	12802	Date Prepared:	2004-12-07	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
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)		0.895	mg/Kg	10	0.100	89	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.913	mg/Kg	10	0.100	91	63.1 - 105

Sample: 49823 - MW-11 @ 45'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14478	Date Analyzed:	2004-12-07	Analyzed By:	BP
Prep Batch:	12791	Date Prepared:	2004-12-07	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		120	mg/Kg	1	150	80	69.8 - 106.1

Sample: 49823 - MW-11 @ 45'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14492	Date Analyzed:	2004-12-07	Analyzed By:	MS
Prep Batch:	12802	Date Prepared:	2004-12-07	Prepared By:	MS

Parameter	Flag	RL 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)		0.968	mg/Kg	10	0.100	97	0 - 160
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	0 - 174

Method Blank (2) QC Batch: 14478

Parameter	Flag	Result	Units	RL
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		154	mg/Kg	1	150	103	69.8 - 106.1

Method Blank (1) QC Batch: 14490

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)		1.00	mg/Kg	10	0.100	100	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.675	mg/Kg	10	0.100	67	36.6 - 112

Method Blank (1) QC Batch: 14492

Parameter	Flag	Result	Units	RL
GRO		2.17	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	10	0.100	109	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.778	mg/Kg	10	0.100	78	50.7 - 113

Laboratory Control Spike (LCS-2) QC Batch: 14478

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	270	249	mg/Kg	1	250	<12.0	108	8	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	147	139	mg/Kg	1	150	98	93	69.8 - 106.1

Laboratory Control Spike (LCS-1) QC Batch: 14490

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.948	0.968	mg/Kg	10	0.100	<0.0333	95	2	79.8 - 114	9.4
Toluene	0.928	0.950	mg/Kg	10	0.100	<0.0353	93	2	79.7 - 115	7.5
Ethylbenzene	0.968	0.992	mg/Kg	10	0.100	<0.0339	97	2	78.7 - 116	8

continued ...

control spikes continued...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Xylene	2.72	2.79	mg/Kg	10	0.300	<0.103	91	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)	1.00	1.04	mg/Kg	10	0.100	100	104	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.948	0.998	mg/Kg	10	0.100	95	100	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 14492

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	10.0	12.3	mg/Kg	10	1.00	<0.381	100	21	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)	0.886	1.01	mg/Kg	10	0.100	89	101	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.990	0.998	mg/Kg	10	0.100	99	100	72.2 - 119

Matrix Spike (MS-2) QC Batch: 14478 Spiked Sample: 49823

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	230	200	mg/Kg	1	250	<12.0	92	14	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	146	127	mg/Kg	1	150	97	85	69.8 - 106.1

Matrix Spike (MS-1) QC Batch: 14492 Spiked Sample: 49805

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	10.3	10.7	mg/Kg	10	1.00	<0.381	103	4	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)	0.862	0.875	mg/Kg	10	0.1	86	88	0 - 160
4-Bromofluorobenzene (4-BFB)	1.14	1.16	mg/Kg	10	0.1	114	116	0 - 174

Standard (CCV-4) QC Batch: 14478

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	75 - 125	2004-12-07

Standard (CCV-5) QC Batch: 14478

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	227	91	75 - 125	2004-12-07

Standard (CCV-1) QC Batch: 14490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0951	95	85 - 115	2004-12-07
Toluene		mg/Kg	0.100	0.0966	97	85 - 115	2004-12-07
Ethylbenzene		mg/Kg	0.100	0.100	100	85 - 115	2004-12-07
Xylene		mg/Kg	0.300	0.279	93	85 - 115	2004-12-07

Standard (CCV-2) QC Batch: 14490

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	2004-12-07
Toluene		mg/Kg	0.100	0.0982	98	85 - 115	2004-12-07
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2004-12-07
Xylene		mg/Kg	0.300	0.289	96	85 - 115	2004-12-07

Standard (ICV-1) QC Batch: 14492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.05	105	85 - 115	2004-12-07

Standard (CCV-1) QC Batch: 14492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.873	87	85 - 115	2004-12-07

Report Date: December 8, 2004
TNM-98-05A

Work Order: 4120711
TNM-98-05A

Page Number: 7 of 7
Southeast of Monument, NM

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 4120711

Company Name: NOVA SAFETY & ENVIRON. Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 COMMERCE Fax #: e-mail: 432-520-7701
Contact Person: CURT STANLEY
Invoice to: (If different from above) PLAINS, HOUSTON TX
Project #: TNM-98-05A Project Name: TNM-98-05A
Project Location: SOUTHEAST OF MONUMENT, NM Sampler Signature: C. Stanley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE (2004)	TIME
49818	MW-11 @ 20'	1	4oz		X							X		12/1	16:09
820	MW-11 @ 25'														16:15
821	MW-11 @ 30'														16:20
822	MW-11 @ 35'														16:30
823	MW-11 @ 40'														16:42
824	MW-11 @ 45'														16:54
825	MW-11 @ 48'														17:00

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH ~~418.1/TX1005~~ MOD 8015 DRO/GRO	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B/624	GC/MS Semi Vol 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content	Turn Around Time if different from standard	Hold
																		X
																		X
	X	X																
																		X
																		X
	X	X																
																		X

Relinquished by: C. Stanley Date: 12/6/04 Time: 4:16 PM
Received by: Helen Shelton Date: 12/06/04 Time: 1616
Relinquished by: Helen Shelton Date: 12/06/04 Time: 1930
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Brenda Ward Date: 12/7/04 Time: 11:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4°C
Log-in Review

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Jones Star P120 3848

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

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Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 4120711

Company Name: NOVA SAFETY & ENVIRON.
Phone #: 432-520-7720
Address: (Street, City, Zip) 2057 COMMERCE
Fax #: 432-520-7701
e-mail:
Contact Person: CURT STANLEY
Invoice to: (If different from above) PLAINS, HOUSTON, TX
Project #: TNM-98-05A
Project Name: TNM-98-05A
Project Location: SOUTHEAST OF MONUMENT, NM
Sampler Signature: C. Stanley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE (2004)	TIME	MTBE 8021B/602	BTEX 8021B/602 DW	TPH 418.1/TX1005 MOD 8015 DRO/GRO	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
49818	MW-11 @ 20'	1	4oz		X							X		12/1	16:09																			X
819	MW-11 @ 25'	↓	↓		↓							↓		↓	16:15																			X
820	MW-11 @ 30'	↓	↓		↓							↓		↓	16:20		X	X																
821	MW-11 @ 35'	↓	↓		↓							↓		↓	16:30																			X
822	MW-11 @ 40'	↓	↓		↓							↓		↓	16:42																			X
823	MW-11 @ 45'	↓	↓		↓							↓		↓	16:54		X	X																
824	MW-11 @ 48'	↓	↓		↓							↓		↓	17:00																			X

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
C. Stanley	12/6/04	4:16PM	Helen Shelton	12/06/04	1616
Helen Shelton	12/06/04	1930			
			Received at Laboratory by: Brenda Ward	12/7/04	11:45

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 4°C
Log-in Review

REMARKS:
☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed
12/9 [illegible]

Carrier # Lone Star P120 3848

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 7 samples

ORIGINAL COPY

Appendix B
Geosynthetic Clay Liner Specifications Sheet

GSE STANDARD PRODUCTS

Product Data Sheet

Bentofix® Thermal Lock® EC GCL

Bentofix® Thermal Lock® "EC" geosynthetic clay liner (GCL) is a lightly needlepunched reinforced composite comprised of a uniform layer of granular sodium bentonite encapsulated between a woven and a nonwoven geotextile. It is intended for use on relatively flat slope surfaces where minimal internal shear strength is required.

Product Specifications

GEOTEXTILE PROPERTIES	TEST METHOD	FREQUENCY	VALUE (ENGLISH)	VALUE (SI)
Product Code			BFIX1000EC	
Cap Nonwoven, Mass/Unit Area	ASTM D 5261	1/200,000 ft² (1/20,000 m²)	3.0 oz/yd² Typical	100 g/m² Typical
Bottom Scrim Woven, Mass/Unit Area	ASTM D 5261	1/200,000 ft² (1/20,000 m²)	3.1 oz/yd² Typical	105 g/m² Typical
BENTONITE PROPERTIES				
Swell Index	ASTM D 5890	1/100,000 lb (50,000 kg)	24 ml/2 g min	24 ml/2 g min
Moisture Content	ASTM D 4643	1/100,000 lb (50,000 kg)	12% max	12% max
Fluid Loss	ASTM D 5891	1/100,000 lb (50,000 kg)	18 ml max	18 ml max
FINISHED GCL PROPERTIES				
Bentonite, Mass/Unit Area[1]	ASTM D 5993	1/40,000 ft² (1/4,000 m²)	0.75 lb/ft² MARV	3.66 kg/m² MARV
Tensile Properties, Tensile Strength[4] Grab Strength[4] Grab Elongation[3]	 ASTM D 6768 ASTM D 4632 ASTM D 4632	1/40,000 ft² (1/4,000 m²)	 30 lb/in MARV 80 lb Typical 100% Typical	 5 kN/m MARV 354 N Typical 100% Typical
Peel Strength[5]	ASTM D 4632 ASTM D 6496	1/40,000 ft² (1/4,000 m²)	5 lb Typical 0.8 lb/in Typical	22 N Typical 140 N/m Typical
Hydraulic Conductivity[6]	ASTM D 5084	1/Week	5×10^{-11} m/sec max	5×10^{-11} m/sec max
Index Flux[6]	ASTM D 5887	1/Week	1×10^{-8} m³/m²/sec max	1×10^{-8} m³/m²/sec max
Internal Shear Strength[7]	ASTM D 6243	Periodically	100 psf Typical	4.8 kPa Typical
ROLL DIMENSIONS				
Width x Length	Typical	Every Roll	15.5 ft x 150 ft	4.7 m x 45.7 m
Area per Roll	Typical	Every Roll	2,325 ft²	216 m²
Packaged Weight	Typical	Every Roll	2,600 lb	1,179 kg

NOTES:

- [1] Oven-dried measurement. Equates to 0.84 lb/ft² (4.1 kg/m²) when indexed to a 12% moisture content.
- [3] Measured at maximum peak, in weakest principal direction. Elongation is provided for reference only.
- [4] Modified to use a 4 in (100 mm) wide grip. The maximum peak of five specimens averaged.
- [5] 4 in (100 mm) wide sample, average of 5 specimens.
- [6] Typical peak value for specimen hydrated for 24 hours and sheared under a 200 psf (9.6 kPa) normal stress.

DS044ec R08/05/03

Americas	GSE Lining Technology, Inc.	Houston, Texas	800-435-2008	281-443-8564	Fax: 281-230-8650
Europe/Middle East/Africa	GSE Lining Technology GmbH	Hamburg, Germany		49-40-767420	Fax: 49-40-7674233
Asia/Pacific	GSE Lining Technology Company Ltd.	Bangkok, Thailand		66-2-937-0091	Fax: 66-2-937-0097

This product data sheet is also available on our website at:

www.gseworld.com

Appendix C:
Release Notification and Corrective Action
(Form C-141)

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 South First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

98-05A

Form C-141
Originated 2/13/97

Submit 2 copies to Appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action
OPERATOR

☒ Initial Report ☐ Final Report

Name	Contact
Texas-New Mexico Pipe Line Company	Edwin H. Gripp
Address	**Telephone No.**
Box 60028	915-947-9000
Facility Name	**Facility Type**
San Angelo, TX 76906	pipe line

Surface Owner	Mineral Owner	Lease No.
Nadine Owen		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	26	21S	37E					Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Sour Crude	38 barrels	4 barrels
Source of Release	**Date and Hour of Occurrence**	**Date and Hour of Discovery**
6" gathering line	Unknown	2/5/98; 10:25 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?**	
	Linda Williams (Clerk #4)	
By Whom?	**Date and Hour**	
Johnny W. Chapman	2/5/98; 3:00 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse.**	
	N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Internal Corrosion
Leak successfully clamped off.

Describe Area Affected and Cleanup Action Taken.*
Approximately 1260 sq.ft. pasture land.
Contaminated soil will be excavated and put on plastic.

Describe General Conditions Prevailing (Temperature, Precipitation, etc.).*
Cloudy; 60 degrees

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
Signature: Edwin H. Gripp
Printed Name: Edwin H. Gripp
Title: District Manager
Date: 2/12/98 Phone: 915-947-9000

OIL CONSERVATION DIVISION

Approved by District Supervisor:
Approval Date: Expiration Date:
Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary

State Corp. Commission Hazardous Waste Section

PLAINS PIPELINE

May 18, 2005

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

Re: Plains Pipeline Addendum to the Site Restoration Work Plan
and Soil Closure Strategy
TNM 98-05A Release Site
Section 21, T21S, R37E
Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your approval the Addendum to the Site Restoration Work Plan and Proposed Soil Closure Strategy, dated May 11, 2005, for the TNM 98-05A site located in Section 21 of Township 21 South, and Range 37 East of Lea County, New Mexico. The Work Plan details site activities conducted as per NMOCD request for soil closure of the site.

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

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American Pipeline

Enclosure

May 18, 2005

Mr. Ed Martin
New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Addendum to the TNM-98-05A Site Restoration Work Plan and Proposed Soil Closure Strategy
Section 21, T-21-S, R-37-E
Plains EMS # TNM-98-05A
Lea County, NM

Dear Mr. Martin,

NOVA Safety and Environmental (NOVA), on behalf of Plains Marketing, L.P. (Plains) respectfully submits the following Addendum to the TNM-98-05A *Site Restoration Work Plan and Proposed Soil Closure Strategy* report dated December 2004. The site is located in Section 26, T-21-S, R-37E in Lea County, NM.

On April 22, 2005, on behalf of Plains and at the request of New Mexico Oil Conservation Division (NMOCD), NOVA sampled the treatment cell at the Plains TNM-98-05A release site. NOVA sampled each of the four (4) quadrants using a six (6) point composite sampling methodology. The samples were collected at depths of zero to six inches (0-6"), one (1) foot and two (2) feet.

The twelve (12) samples were analyzed by TraceAnalysis, Inc. of Lubbock, Texas. The samples were analyzed for total petroleum hydrocarbon (TPH) utilizing EPA method 8015 modified GRO/DRO. The sample exhibiting the highest TPH was analyzed by TraceAnalysis for benzene, toluene, ethyl-benzene and xylene (BTEX) utilizing EPA method 8021b. The analytical results of the April 22, 2005 treatment cell sampling event are summarized in table 1 and are included as Attachment 1. Laboratory results are provided as Attachment 2.

Review of the analytical results indicates TPH ranges from 340 mg/Kg to 1080 mg/Kg in the DRO parameter and ranges from <1 mg/Kg to 10.8 mg/Kg in the GRO parameter. The total TPH results range from 340 mg/Kg to 1091 mg/Kg. The sample from the northeast quadrant at a depth of two (2) feet, exhibited the highest TPH result of 1099 mg/Kg TPH and was submitted for BTEX analysis. Analytical results indicate that this sample was below the reporting threshold of 0.01 mg/Kg for all constituents of BTEX.

Contingent on NMOCD approval, Plains is prepared to begin field activities and perform the corrective actions as summarized in the *Site Restoration Work Plan and*

Proposed Soil Closure Strategy Report dated December 2004. Upon completion of the field activities, Plains will submit a final Soil Closure Report to the NMOCD, documenting the results of confirmation soil samples, installation of the liner (photographic documentation) and final topography restoration. Please note that groundwater remediation activities will continue until such a time that the site meets the NMOCD groundwater standards.

Sincerely,

Curt D. Stanley

Curt D. Stanley
Project Manager
NOVA Safety and Environmental

Cc:
Camille Reynolds, Plains Marketing, L.P., Lovington, NM
cjreynolds@paalp.com
Jeff Dann, Plains Marketing, L.P., Houston, TX
jpdann@paalp.com
NOVA Safety and Environmental, Midland, TX
cstanley@novatraining.cc

Attachments:
Attachment #1 - Table 1 – Soil concentrations of BTEX and TPH – Excavation and Soil Treatment Cell.
Attachment #2 - Analytical Reports
Attachment #3 – Form C-141 – Release Notification and Corrective Action

Attachment A:
Table 1
Soil Concentrations of BTEX and TPH – Excavation and Soil Treatment Cell

TABLE 1

SOIL CONCENTRATIONS OF BTEX AND TPH - EXCAVATION and SOIL TREATMENT CELL
TNM 98-05A
PLAINS MARKETING, L.P.

All concentrations are in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030				EPA SW 846-8015M		
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	GRO C6-C10	DRO >C10-C28	TOTAL TPH C6-C28
Initial Excavation Composites								
Excavation Walls	05/08/02	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	0.0
Excavation Bottom	05/08/02	<0.025	<0.025	<0.025	<0.025	<10.0	39.3	39.3
Excavation Soil Samples								
Excavation Westside Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	0.0
Excavation Southside Wall	11/14/02	<0.025	0.079	0.065	0.263	<10.0	<10.0	0.0
Excavation Northside Wall	11/14/02	<0.025	0.028	0.026	0.084	<10.0	29.8	29.8
Excavation Eastside Wall	11/14/02	<0.025	0.035	0.034	0.100	<10.0	831	**831.0**
Bio_Treatment Cell - Soil Samples								
Bio-Mound North East	05/08/02	<0.025	<0.025	<0.025	0.116	868	1680	2,548.0
Bio-Mound North West	05/08/02	0.060	0.268	0.080	0.326	349	392	741.0
Bio-Mound South East	05/08/02	<0.025	0.191	0.092	0.225	405	559	964.0
Bio-Mound South West	05/08/02	<0.025	0.142	0.090	0.440	848	1260	2,108.0
S.W. Biomound Comp	11/14/02	<0.025	0.042	0.040	0.142	22.7	1530	1,552.7
N.W. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	0.043	37.4	1480	1,517.4
S. E. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	<0.025	39.6	2180	2,219.6
N. E. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	<0.025	75.7	2260	2,335.7
N.E. Biomound - 1	03/04/03	na	na	na	na	124	1460	1,584.0
N.W. Biomound - 2	03/04/03	na	na	na	na	115	1890	2,005.0
S.W. Biomound - 3	03/04/03	na	na	na	na	52.6	1250	1,302.6
S.E. Biomound - 4	03/04/03	na	na	na	na	24.8	658	682.8
N.E. Biomound - 5	06/30/03	na	na	na	na	52.8	561	613.8
N.W. Biomound - 6	06/30/03	na	na	na	na	130	2280	2,410.0
S.E. Biomound - 7	06/30/03	na	na	na	na	67.9	1680	1,747.9
S.W. Biomound - 8	06/30/03	na	na	na	na	29.4	578	607.4
N.E. Biomound - 9	09/18/03	na	na	na	na	22.3	1140	1,162.3
S.E. Biomound - 10	09/18/03	na	na	na	na	<10.0	747	747.0
N.W. Biomound - 11	09/18/03	na	na	na	na	<10.0	1020	1,020.0
S.W. Biomound - 12	09/18/03	na	na	na	na	14.6	1770	1,784.6
N.E. Biomound - 13	12/31/03	na	na	na	na	18.7	1100	1,118.7
N.W. Biomound - 14	12/31/03	na	na	na	na	21.7	979	1,000.7
S.E. Biomound - 15	12/31/03	na	na	na	na	17.6	1550	1,567.6
S.W. Biomound - 16	12/31/03	na	na	na	na	<10.0	1000	1,000.0
NE Quad 0-6-in	08/27/04	na	na	na	na	ND	ND	ND
NE Quad 1 ft.	08/27/04	na	na	na	na	24.4	1,010	1,030
NE Quad 2 ft.	08/27/04	na	na	na	na	49.7	1,820	1,870
NW Quad 0-6-in	08/27/04	na	na	na	na	11.4	1,080	1,090
NW Quad 1 ft.	08/27/04	na	na	na	na	J(7.55)	553	553
NW Quad 2 ft.	08/27/04	na	na	na	na	12	147	159
SW Quad 6-in	08/27/04	na	na	na	na	ND	340	340
SW Quad 1 ft.	08/27/04	na	na	na	na	ND	ND	ND
SW Quad 2 ft.	08/27/04	na	na	na	na	35.8	1,610	1,650
SE Quad 0-6-in	08/27/04	na	na	na	na	J(8.82)	547	547
SE Quad 1 ft.	08/27/04	na	na	na	na	ND	ND	ND
SE Quad 2 ft.	08/27/04	na	na	na	na	ND	ND	ND
NE Quad 0-6-in	04/22/05	na	na	na	na	<1	924	924
NE Quad 1 ft.	04/22/05	na	na	na	na	3	536	539
NE Quad 2 ft.	04/22/05	na	na	na	na	11	1080	1091
NW Quad 0-6-in	04/22/05	na	na	na	na	<2	1040	1040

TABLE 1

SOIL CONCENTRATIONS OF BTEX AND TPH - EXCAVATION and SOIL TREATMENT CELL
TNM 98-05A
PLAINS MARKETING, L.P.

All concentrations are in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030				EPA SW 846-8015M		
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	GRO C6-C10	DRO >C10-C28	TOTAL TPH C6-C28
NW Quad 1 ft.	04/22/05	na	na	na	na	<2	580	580
NW Quad 2 ft.	04/22/05	na	na	na	na	6	524	530
SW Quad 6-in	04/22/05	na	na	na	na	<5	988	988
SW Quad 1 ft.	04/22/05	na	na	na	na	<1	495	495
SW Quad 2 ft.	04/22/05	na	na	na	na	<1	340	340
SE Quad 0-6-in	04/22/05	na	na	na	na	<2	758	758
SE Quad 1 ft.	04/22/05	na	na	na	na	<2	467	467
SE Quad 2 ft.	04/22/05	na	na	na	na	<2	674	674

na = not analyzed ND = Non Detect

Attachment B:
Analytical Reports

Summary Report

Curt Stanley
Nova Safety & Environmental
2057 Commerce St.
Midland, TX 79703

Report Date: May 9, 2005

Work Order: 5042711

Project Location: Eunice
Project Name: 9805-A
Project Number: TNM 9805-A

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
60989	NE Quad 0-6	soil	2005-04-22	14:30	2005-04-27
60990	NE Quad 1'	soil	2005-04-22	14:50	2005-04-27
60991	NE Quad 2'	soil	2005-04-22	15:20	2005-04-27
60992	NW Quad 0-6	soil	2005-04-22	14:35	2005-04-27
60993	NW Quad 1'	soil	2005-04-22	14:55	2005-04-27
60994	NW Quad 2'	soil	2005-04-22	15:30	2005-04-27
60995	SW Quad 0-6	soil	2005-04-22	14:40	2005-04-27
60996	SW Quad 1'	soil	2005-04-22	15:00	2005-04-27
60997	SW Quad 2'	soil	2005-04-22	15:40	2005-04-27
60998	SE Quad 0-6	soil	2005-04-22	14:45	2005-04-27
60999	SE Quad 1'	soil	2005-04-22	15:10	2005-04-27
61000	SE Quad 2'	soil	2005-04-22	15:50	2005-04-27

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)	TX1005 C6-C12 (mg/Kg)	TX1005 >C12-C28 (mg/Kg)
60989 - NE Quad 0-6	**924**	<1.00	<250	**1150**
60990 - NE Quad 1'	**536**	**2.75**	<50.0	**653**
60991 - NE Quad 2'	**1080**	**10.8**	<250	**1320**
60992 - NW Quad 0-6	**1040**	<2.00	<250	**1290**
60993 - NW Quad 1'	**580**	<2.00	<50.0	**712**
60994 - NW Quad 2'	**524**	**5.63**	<50.0	**639**
60995 - SW Quad 0-6	**988**	<5.00	<250	**1230**
60996 - SW Quad 1'	**495**	<1.00	<50.0	**610**
60997 - SW Quad 2'	**340**	<1.00	<50.0	**418**
60998 - SE Quad 0-6	**758**	<2.00	<250	**940**
60999 - SE Quad 1'	**467**	<2.00	<50.0	**571**
61000 - SE Quad 2'	**674**	<2.00	<50.0	**826**

Sample: 60991 - NE Quad 2'

Param	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.00100
Toluene		<0.0100	mg/Kg	0.00100
Ethylbenzene		<0.0100	mg/Kg	0.00100

continued ...

sample 60991 continued ...

Param	Flag	Result	Units	RL
Xylene		<0.0100	mg/Kg	0.00100

Analytical and Quality Control Report

Curt Stanley
Nova Safety & Environmental
2057 Commerce St.
Midland, TX 79703

Report Date: May 9, 2005

Work Order: 5042711

Project Location: Eunice
Project Name: 9805-A
Project Number: TNM 9805-A

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
60989	NE Quad 0-6	soil	2005-04-22	14:30	2005-04-27
60990	NE Quad 1'	soil	2005-04-22	14:50	2005-04-27
60991	NE Quad 2'	soil	2005-04-22	15:20	2005-04-27
60992	NW Quad 0-6	soil	2005-04-22	14:35	2005-04-27
60993	NW Quad 1'	soil	2005-04-22	14:55	2005-04-27
60994	NW Quad 2'	soil	2005-04-22	15:30	2005-04-27
60995	SW Quad 0-6	soil	2005-04-22	14:40	2005-04-27
60996	SW Quad 1'	soil	2005-04-22	15:00	2005-04-27
60997	SW Quad 2'	soil	2005-04-22	15:40	2005-04-27
60998	SE Quad 0-6	soil	2005-04-22	14:45	2005-04-27
60999	SE Quad 1'	soil	2005-04-22	15:10	2005-04-27
61000	SE Quad 2'	soil	2005-04-22	15:50	2005-04-27

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.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 60989 - NE Quad 0-6

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	Result	RL Result	Units	Dilution	RL
DRO			**924**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	217	mg/Kg	5	30.0	145	62.8 - 115

Sample: 60989 - NE Quad 0-6

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	Result	RL 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)		0.850	mg/Kg	10	0.100	85	10 - 160
4-Bromofluorobenzene (4-BFB)		0.848	mg/Kg	10	0.100	85	10 - 174

Sample: 60989 - NE Quad 0-6

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	Result	RL Result	Units	Dilution	RL
C6-C12			<250	mg/Kg	5	50.0
>C12-C28			**1150**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	270	mg/Kg	5	30.0	180	73.8 - 148

Sample: 60990 - NE Quad 1'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

[1] High surrogate recovery due to peak interference.
[2] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**536**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		170	mg/Kg	1	150	113	62.8 - 115

Sample: 60990 - NE Quad 1'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**2.75**	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.766	mg/Kg	10	0.100	77	10 - 160
4-Bromofluorobenzene (4-BFB)		0.787	mg/Kg	10	0.100	79	10 - 174

Sample: 60990 - NE Quad 1'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**653**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		211	mg/Kg	1	150	141	73.8 - 148

Sample: 60991 - NE Quad 2'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	17919	Date Analyzed:	2005-05-07	Analyzed By:	AG
Prep Batch:	15792	Sample Preparation:	2005-05-06	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
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)	[3]	0.586	mg/Kg	10	0.100	59	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.583	mg/Kg	10	0.100	58	36.6 - 112

Sample: 60991 - NE Quad 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1080**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[4]	279	mg/Kg	5	30.0	186	62.8 - 115

Sample: 60991 - NE Quad 2'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**10.8**	mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.12	mg/Kg	20	0.100	56	10 - 160
4-Bromofluorobenzene (4-BFB)		0.757	mg/Kg	20	0.100	38	10 - 174

Sample: 60991 - NE Quad 2'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<250	mg/Kg	5	50.0
>C12-C28		**1320**	mg/Kg	5	50.0

[3]Low surrogate recovery. Sample non-detect, result bias low.
[4]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[5]	348	mg/Kg	5	30.0	232	73.8 - 148

Sample: 60992 - NW Quad 0-6

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1040**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[6]	305	mg/Kg	5	30.0	203	62.8 - 115

Sample: 60992 - NW Quad 0-6

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.748	mg/Kg	20	0.100	37	10 - 160
4-Bromofluorobenzene (4-BFB)		0.774	mg/Kg	20	0.100	39	10 - 174

Sample: 60992 - NW Quad 0-6

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<250	mg/Kg	5	50.0
>C12-C28		**1290**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[7]	380	mg/Kg	5	30.0	253	73.8 - 148

[5]High surrogate recovery due to peak interference.
[6]High surrogate recovery due to peak interference.
[7]High surrogate recovery due to peak interference.

Sample: 60993 - NW Quad 1'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**580**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1	150	106	62.8 - 115

Sample: 60993 - NW Quad 1'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.812	mg/Kg	20	0.100	41	10 - 160
4-Bromofluorobenzene (4-BFB)		0.736	mg/Kg	20	0.100	37	10 - 174

Sample: 60993 - NW Quad 1'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**712**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		198	mg/Kg	1	150	132	73.8 - 148

Sample: 60994 - NW Quad 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**524**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	62.8 - 115

Sample: 60994 - NW Quad 2'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**5.63**	mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.716	mg/Kg	20	0.100	36	10 - 160
4-Bromofluorobenzene (4-BFB)		0.741	mg/Kg	20	0.100	37	10 - 174

Sample: 60994 - NW Quad 2'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**639**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		166	mg/Kg	1	150	110	73.8 - 148

Sample: 60995 - SW Quad 0-6

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**988**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[8]	244	mg/Kg	5	30.0	163	62.8 - 115

Sample: 60995 - SW Quad 0-6

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.930	mg/Kg	50	0.100	19	10 - 160
4-Bromofluorobenzene (4-BFB)		0.820	mg/Kg	50	0.100	16	10 - 174

Sample: 60995 - SW Quad 0-6

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<250	mg/Kg	5	50.0
>C12-C28		**1230**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[9]	303	mg/Kg	5	30.0	202	73.8 - 148

Sample: 60996 - SW Quad 1'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**495**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[10]	174	mg/Kg	1	150	116	62.8 - 115

[8]High surrogate recovery due to peak interference.
[9]High surrogate recovery due to peak interference.
[10]High surrogate recovery due to peak interference.

Sample: 60996 - SW Quad 1'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

Parameter	Flag	RL 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)		0.715	mg/Kg	10	0.100	72	10 - 160
4-Bromofluorobenzene (4-BFB)		0.738	mg/Kg	10	0.100	74	10 - 174

Sample: 60996 - SW Quad 1'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**610**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		216	mg/Kg	1	150	144	73.8 - 148

Sample: 60997 - SW Quad 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**340**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[11]	177	mg/Kg	1	150	118	62.8 - 115

Sample: 60997 - SW Quad 2'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17745	Date Analyzed:	2005-04-28	Analyzed By:	JG
Prep Batch:	15640	Sample Preparation:	2005-04-28	Prepared By:	JG

[11] High surrogate recovery due to peak interference.

Parameter	Flag	RL 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)		1.27	mg/Kg	10	0.100	127	10 - 160
4-Bromofluorobenzene (4-BFB)		0.775	mg/Kg	10	0.100	78	10 - 174

Sample: 60997 - SW Quad 2'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**418**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		220	mg/Kg	1	150	147	73.8 - 148

Sample: 60998 - SE Quad 0-6

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**758**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[12]	291	mg/Kg	5	30.0	194	62.8 - 115

Sample: 60998 - SE Quad 0-6

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17800	Date Analyzed:	2005-04-30	Analyzed By:	AG
Prep Batch:	15680	Sample Preparation:	2005-04-30	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	20	0.100

[12]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	20	0.100	53	10 - 160
4-Bromofluorobenzene (4-BFB)		0.957	mg/Kg	20	0.100	48	10 - 174

Sample: 60998 - SE Quad 0-6

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<250	mg/Kg	5	50.0
>C12-C28		**940**	mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[13]	362	mg/Kg	5	30.0	241	73.8 - 148

Sample: 60999 - SE Quad 1'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**467**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		147	mg/Kg	1	150	98	62.8 - 115

Sample: 60999 - SE Quad 1'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17800	Date Analyzed:	2005-04-30	Analyzed By:	AG
Prep Batch:	15680	Sample Preparation:	2005-04-30	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.719	mg/Kg	20	0.100	36	10 - 160
4-Bromofluorobenzene (4-BFB)		0.647	mg/Kg	20	0.100	32	10 - 174

[13] High surrogate recovery due to peak interference.

Sample: 60999 - SE Quad 1'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
C6-C12		<50.0		mg/Kg	1	50.0
>C12-C28		**571**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		182	mg/Kg	1	150	122	73.8 - 148

Sample: 61000 - SE Quad 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	17715	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15614	Sample Preparation:	2005-04-27	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**674**		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[14]	220	mg/Kg	1	150	147	62.8 - 115

Sample: 61000 - SE Quad 2'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	17800	Date Analyzed:	2005-04-30	Analyzed By:	AG
Prep Batch:	15680	Sample Preparation:	2005-04-30	Prepared By:	MT

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<2.00		mg/Kg	20	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.732	mg/Kg	20	0.100	37	10 - 160
4-Bromofluorobenzene (4-BFB)		0.745	mg/Kg	20	0.100	37	10 - 174

Sample: 61000 - SE Quad 2'

Analysis:	TX1005	Analytical Method:	TX1005	Prep Method:	N/A
QC Batch:	17704	Date Analyzed:	2005-04-27	Analyzed By:	DS
Prep Batch:	15603	Sample Preparation:	2005-04-27	Prepared By:	DS

[14]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
C6-C12		<50.0	mg/Kg	1	50.0
>C12-C28		**826**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[15]	273	mg/Kg	1	150	182	73.8 - 148

Method Blank (1) QC Batch: 17704

Parameter	Flag	MDL Result	Units	RL
C6-C12		<7.12	mg/Kg	50
>C12-C28		<13.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	73.8 - 148

Method Blank (1) QC Batch: 17715

Parameter	Flag	MDL Result	Units	RL
DRO		<7.24	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		103	mg/Kg	1	150	69	62.8 - 115

Method Blank (1) QC Batch: 17745

Parameter	Flag	MDL Result	Units	RL
GRO		<0.381	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.875	mg/Kg	10	0.100	88	50.7 - 113

Method Blank (1) QC Batch: 17800

Parameter	Flag	MDL Result	Units	RL
GRO		<0.381	mg/Kg	0.1

[15]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	10	0.100	100	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	10	0.100	85	50.7 - 113

Method Blank (1) QC Batch: 17919

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.829	mg/Kg	10	0.100	83	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.793	mg/Kg	10	0.100	79	36.6 - 112

Laboratory Control Spike (LCS-1) QC Batch: 17704

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
C6-C12	210	204	mg/Kg	1	250	<7.12	84	3	62.1 - 127	20
>C12-C28	206	199	mg/Kg	1	250	<13.0	82	4	66.3 - 134	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	137	134	mg/Kg	1	150	91	89	73.8 - 148

Laboratory Control Spike (LCS-1) QC Batch: 17715

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	206	199	mg/Kg	1	250	<7.24	82	3	68.4 - 128	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	110	107	mg/Kg	1	150	73	72	62.8 - 115

Laboratory Control Spike (LCS-1) QC Batch: 17745

continued ...

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	8.45	8.51	mg/Kg	10	1.00	<0.381	84	1	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)	1.02	1.00	mg/Kg	10	0.100	102	100	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.915	0.902	mg/Kg	10	0.100	92	90	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 17800

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	8.01	8.22	mg/Kg	10	1.00	<0.381	80	3	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)	0.988	0.970	mg/Kg	10	0.100	99	97	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.919	0.914	mg/Kg	10	0.100	92	91	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 17919

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.934	0.952	mg/Kg	10	0.100	<0.0333	93	2	79.8 - 114	20
Toluene	0.925	0.938	mg/Kg	10	0.100	<0.0353	92	1	79.7 - 115	20
Ethylbenzene	0.912	0.931	mg/Kg	10	0.100	<0.0339	91	2	78.7 - 116	20
Xylene	2.69	2.74	mg/Kg	10	0.300	<0.103	90	2	78.7 - 118	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.828	0.841	mg/Kg	10	0.100	83	84	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.831	0.839	mg/Kg	10	0.100	83	84	72 - 111

Matrix Spike (MS-1) QC Batch: 17800 Spiked Sample: 60998

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	7.43	7.69	mg/Kg	20	1.00	<0.763	37	3	10 - 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)	0.773	0.765	mg/Kg	20	0.1	39	38	10 - 160
4-Bromofluorobenzene (4-BFB)	0.825	0.815	mg/Kg	20	0.1	41	41	10 - 174

Standard (ICV-1) QC Batch: 17704

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	205	82	75 - 125	2005-04-27
>C12-C28		mg/Kg	250	203	81	75 - 125	2005-04-27

Standard (CCV-1) QC Batch: 17704

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	204	81	75 - 125	2005-04-27
>C12-C28		mg/Kg	250	201	80	75 - 125	2005-04-27

Standard (CCV-2) QC Batch: 17704

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	208	83	75 - 125	2005-04-27
>C12-C28		mg/Kg	250	205	82	75 - 125	2005-04-27

Standard (ICV-1) QC Batch: 17715

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	202	81	75 - 125	2005-04-27

Standard (CCV-1) QC Batch: 17715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	200	80	75 - 125	2005-04-27

Standard (CCV-2) QC Batch: 17715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	204	81	75 - 125	2005-04-27

Standard (ICV-1) QC Batch: 17745

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.851	85	85 - 115	2005-04-28

Standard (CCV-1) QC Batch: 17745

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.961	96	85 - 115	2005-04-28

Standard (ICV-1) QC Batch: 17800

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.994	99	85 - 115	2005-04-30

Standard (CCV-1) QC Batch: 17800

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.970	97	85 - 115	2005-04-30

Standard (CCV-1) QC Batch: 17919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0947	95	85 - 115	2005-05-07
Toluene		mg/Kg	0.100	0.0932	93	85 - 115	2005-05-07
Ethylbenzene		mg/Kg	0.100	0.0926	93	85 - 115	2005-05-07
Xylene		mg/Kg	0.300	0.275	92	85 - 115	2005-05-07

Standard (CCV-2) QC Batch: 17919

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0909	91	85 - 115	2005-05-07
Toluene		mg/Kg	0.100	0.0894	89	85 - 115	2005-05-07
Ethylbenzene		mg/Kg	0.100	0.0876	88	85 - 115	2005-05-07
Xylene		mg/Kg	0.300	0.258	86	85 - 115	2005-05-07

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5042711

Company Name: Nova Phone #: 432 520 7720

Address: (Street, City, Zip) 2057 Commerce Fax #:

Contact Person: Curt Stanley e-mail:

Invoice to: (If different from above) Plains

Project #: TNM 9805-A Project Name: 9805-A

Project Location: Eunice Sampler Signature: Curt Stanley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
60989	NE Quad 0-6	1	4oz		X							X		4/22/05	1330
990	NE Quad 1'														1500
991	NE Quad 2'														1320
992	NW Quad 0-6														1235
993	NW Quad 1'														1255
994	NW Quad 2'														1330
995	SW Quad 0-6														1240
996	SW Quad 1'														1300
997	SW Quad 2'														1340
998	SE Quad 0-6														1245
999	SE Quad 1'														1310
61000	SE Quad 2'														1350

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B/624	GC/MS Semi Vol 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time if different from standard	Hold
	X	X																			

Relinquished by: Curt Stanley Date: 4/26/05 Time: 900AM Received by: Celina Shelton Date: 4/26/05 Time: 0900

Relinquished by: Celina Shelton Date: 4/26/05 Time: 1930 Received by: Date: Time:

Relinquished by: Date: Time: Received at Laboratory by: Date: Time: 4-27-05 10.00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 15 samples

ORIGINAL COPY

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp 4 °

Log-in Review MK

REMARKS: Hold BTEX until verbal on TPH

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

Carrier # Fine data P139460

Attachment C:
Form C-141
Release Notification and Corrective Action

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 South First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

98-05A

Form C-141
Originated 2/13/97

Submit 2 copies to Appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action
OPERATOR

☒ Initial Report ☐ Final Report

Name	Contact
Texas-New Mexico Pipe Line Company	Edwin H. Gripp
Address	**Telephone No.**
Box 60028	915-947-9000
Facility Name	**Facility Type**
San Angelo, TX 76906	pipe line

Surface Owner	Mineral Owner	Lease No.
Nadine Owen		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	26	21S	37E					Lea

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Sour Crude	38 barrels	4 barrels
Source of Release	**Date and Hour of Occurrence**	**Date and Hour of Discovery**
6" gathering line	Unknown	2/5/98; 10:25 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?**	
	Linda Williams (Clerk #4)	
By Whom?	**Date and Hour**	
Johnny W. Chapman	2/5/98; 3:00 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse.**	
	N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Internal Corrosion

Leak successfully clamped off.

Describe Area Affected and Cleanup Action Taken.*

Approximately 1260 sq.ft. pasture land.

Contaminated soil will be excavated and put on plastic.

Describe General Conditions Prevailing (Temperature, Precipitation, etc.).*

Cloudy; 60 degrees

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: E. H. Gripp (Emp)

Printed Name: Edwin H. Gripp

Title: District Manager

Date: 2/12/98 Phone: 915-947-9000

OIL CONSERVATION DIVISION

Approved by District Supervision

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary

State Corp. Commission Hazardous Waste Section