AP - 012

STAGE 1 & 2 REPORTS

DATE:
Oct. 2005

PLAINS PIPELINE

October 6, 2005

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

Re: Plains Pipeline Soil Closure Request
TNM 98-05B
EMS No.: TNM 98-05B
Section 26, T21S, R37E
Lea County, New Mexico

AP-12

Dear Mr. Martin:

Please find attached for your approval the Soil Closure Request for the TNM 98-05B release site located in Section 26, T21S, and R37E in Lea County, New Mexico. The Soil Closure Request details activities conducted for soil remediation at 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

Cc: Larry Johnson, NMOCD, Hobbs Office

Enclosure

SOIL CLOSURE REQUEST

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

Prepared For:

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

NOVA
safety and environmental

Prepared By:

NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703

October 2005

Curt D.Stanley
Project Manager

Todd K. Choban
Vice President, Technical Services

Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

NOVA Safety and Environmental (NOVA) is pleased to submit this Soil Closure Report for the TNM 98-05B (also known as TNM 98-05) crude oil release site. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) and Link Energy, is now the responsibility of Plains Marketing, L.P. (Plains).

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

Recent site activities at the TNM-98-05B site were proposed by Plains in the Site Restoration Work plan and Proposed Closure Strategy Report dated February 2005. This work plan was approved by NMOCD in a letter dated April 6, 2005.

2.0 SUMMARY OF RECENT ACTIVITIES

2.1 Excavation and Sampling Activities

On May 19-20, 2005, two backhoes were utilized to excavate additional impacted soil, previously identified through analysis, from the North wall, South wall and floor of the existing excavation. A site map is included as Figure 2. Approximately 350 cubic yards (cy) of overburden and hydrocarbon impacted soil was removed from the walls and floor of the excavation. The soil was segregated into hydrocarbon impacted and non impacted stockpiles for future blending and backfilling of the excavation. The determination of impacted versus non impacted soils was made through visual and olfactory means, as well as a Photo-Ionization Device (PID). Upon completion of the excavation, four discreet samples were collected from each quadrant of the excavation floor, two discreet samples were collected from the North wall and three samples were collected from the South wall of the excavation. The samples were delivered to TraceAnalysis of Lubbock, TX for determination of benzene, toluene, ethylbenzene and xylene (BTEX), using EPA method 8021b and for total petroleum hydrocarbons (TPH) using EPA method modified 8015M (DRO/GRO). The analytical results of the May 20, 2005 sampling event are shown in Table 1; the laboratory reports are included in Appendix A. The analytical results indicated that all collected samples were below the NMOCD regulatory threshold for BTEX and TPH, with the exception of the sample collected from the northeast floor quadrant, which exhibited a TPH concentration of 902 mg/Kg.

On June 1, 2005, additional impacted soil was excavated from the northeast floor quadrant and stockpiled for future blending and excavation backfill. On June 1, 2005, having completed the additional excavation, a discreet sample was collected from the newly excavated area and delivered to TraceAnalysis for BTEX and TPH determination, using the analytical methods previously used. The analytical results indicated the northeast quadrant sample was below the NMOCD threshold for all constituents of BTEX and TPH.

Analytical results in all areas of the excavation, except for a small quantity of hydrocarbon stained soil surrounding monitor well MW-1, confirmed the absence of hydrocarbon impact in the soil at the TNM-98-05B site. Ms. Camille Reynolds of Plains contacted Mr. Ed Martin of the NMOCD office in Santa Fe concerning the small quantity of stained soil surrounding Monitor well MW-1. Ms. Reynolds requested that these soils be allowed to remain in place, believing that the removal of the soil could jeopardize the integrity of the monitor well, which is adjacent to the leak source. Mr. Ed Martin of the NMOCD approved Ms. Reynolds request in an email dated May 23, 2005. Figure 3 illustrates the various stages of excavation within the site, as well as samples locations.

On June 20-22, 2005, heavy equipment was mobilized to backfill the excavation using stockpiled soil at the site. The soil stockpiled during September 2001 excavation activities were placed in the bottom of the excavation, as requested by the NMOCD in the approval letter dated April 6, 2005. These stockpiled soils were sampled on November 26, 2004 and analysis indicated BTEX and TPH concentrations were below NMOCD regulatory guidelines. Analytical results and laboratory reports were included in the Site Restoration Work plan and Proposed Closure Strategy Report dated February 2005. Impacted soils excavated during the May and June 2005 excavation activities were blended with overburden located on site and placed in the excavation, on top of the acceptable backfill soil. The surface of the excavation was then contoured to match the topographic grade.

On July 5, 2005, the backfilled excavation was sampled for BTEX using EPA 8021b, and TPH using EPA method 8015 modified DRO/GRO. In addition, at the request of the NMOCD Hobbs Office, samples were also collected for Chloride analysis. Discreet samples (labeled NE-1, SE-1, SW-1, NW-1) were collected in each quadrant of the surface layer of the former excavation. Samples were delivered to TraceAnalysis in Lubbock, Texas and analyzed for BTEX and TPH using methods described above. The analytical results indicate BTEX levels were below the New Mexico regulatory threshold and TPH concentrations were above the regulatory levels, with regard to the DRO parameter ranging from 281 to 492 mg/Kg. Analysis for Chlorides indicated levels ranging from 10.8 to 11.8 mg/Kg. Figure 4 illustrates the backfilled excavation and confirmation surface sample locations.

On August 5, 2005, Microblaze was applied to the soil filling the former excavation, as well as the surrounding soil. During the following weeks southeast New Mexico received adequate rain, ensuring soil moisture and the viability of the microbes. On August 23, 2005 the backfilled excavation was tilled by NOVA employees.

On September 7, 2005 the surface layer of the former excavation was resampled utilizing the same sampling methodology used during the July 5, 2005 soil sampling event. Samples were delivered to TraceAnalysis in Lubbock, Texas and analyzed for TPH using methods described above. The analytical results indicate total TPH concentrations below the regulatory levels, ranging from <50 to 74.7 mg/Kg. Figure 4 illustrates the confirmation surface sample locations.

In summary, the analytical results indicate the stockpiled soil utilized as excavation backfill at the TNM-98-05B site, is below the New Mexico regulatory guideline of 100 mg/Kg TPH. The analytical results further indicate soil currently contained in the sidewalls and floor of the excavation is below the New Mexico regulatory threshold stated above. Plains, having

successfully remediated the soil issues at the TNM-98-05B site, as set forth by *The Guidelines for Remediation of Leaks, Spills and Releases*, (NMOCD, 1993) is requesting soil closure.

2.2 Monitor Well Plugging and Abandonment

On July 5, 2005, Five (5) monitor wells (MW-6 through 10) were plugged and abandoned at the TNM-98-05B site. Please refer to the NMOCD letters to Ms. Camille Reynolds of Plains Marketing dated April 6, 2005 and June 21, 2005 concerning the disposition of these monitor wells.

The monitor wells were plugged and abandoned by Environmental Plus, Inc. of Eunice, New Mexico, a licensed water well driller in the State of New Mexico. The monitor wells were plugged utilizing guidelines set forth by the office of the New Mexico State Engineer.

Attempts to remove the two-inch polyvinyl chloride (PVC) casing from monitor wells MW-6, MW-7, MW-8, MW-9 and MW-10 were unsuccessful. The casing was removed from the ground surface to a depth of approximately eighteen (18) inches below ground surface.

The five monitor wells were each filled with appropriately hydrated bentonite hole plug to total depth of approximately 65 feet. Topsoil was placed above the plug to complete the procedure.

The former monitor well locations are as follows:

- MW-6, 32 degrees, 27' 03.80" N, 103 degrees, 08' 31.49" W
- MW-7, 32 degrees, 27' 03.63" N, 103 degrees, 08' 32.10" W
- MW-8, 32 degrees, 27' 04.16" N, 103 degrees, 08' 32.38" W
- MW-9, 32 degrees, 27' 05.20" N, 103 degrees, 08' 31.80" W
- MW-10, 32 degrees, 27' 04.93" N, 103 degrees, 08' 30.24" W

3.0 SITE CLOSURE REQUEST

Plains respectfully requests the NMOCD consider this site for soil closure. A groundwater closure request will follow after eight successive quarterly groundwater sampling events have demonstrated that hydrocarbon concentrations are below regulatory guidelines.

4.0 QA/QC PROCEDURES

4.1 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 photo ionization 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 TraceAnalysis, in Lubbock, 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.

4.2 DECONTAMINATION OF EQUIPMENT

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

4.3 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.

5.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Soil 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 Marketing, L.P.. 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 Marketing, L.P.

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

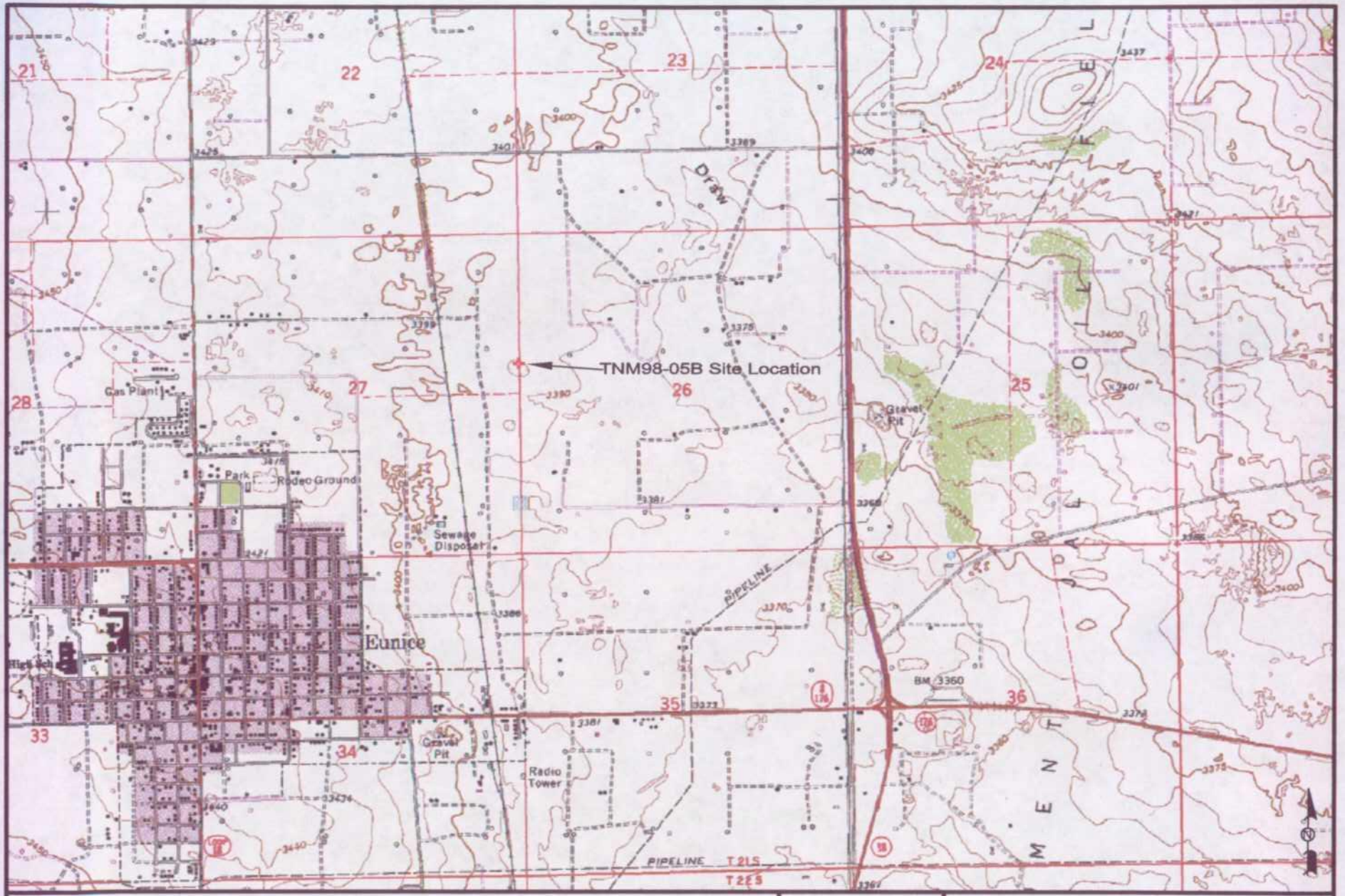
Copy 2 to:
Paul Sheeley and Larry Johnson
New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

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

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

Copy 5 to:
NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703
cstanley@novatraining.cc

Figures

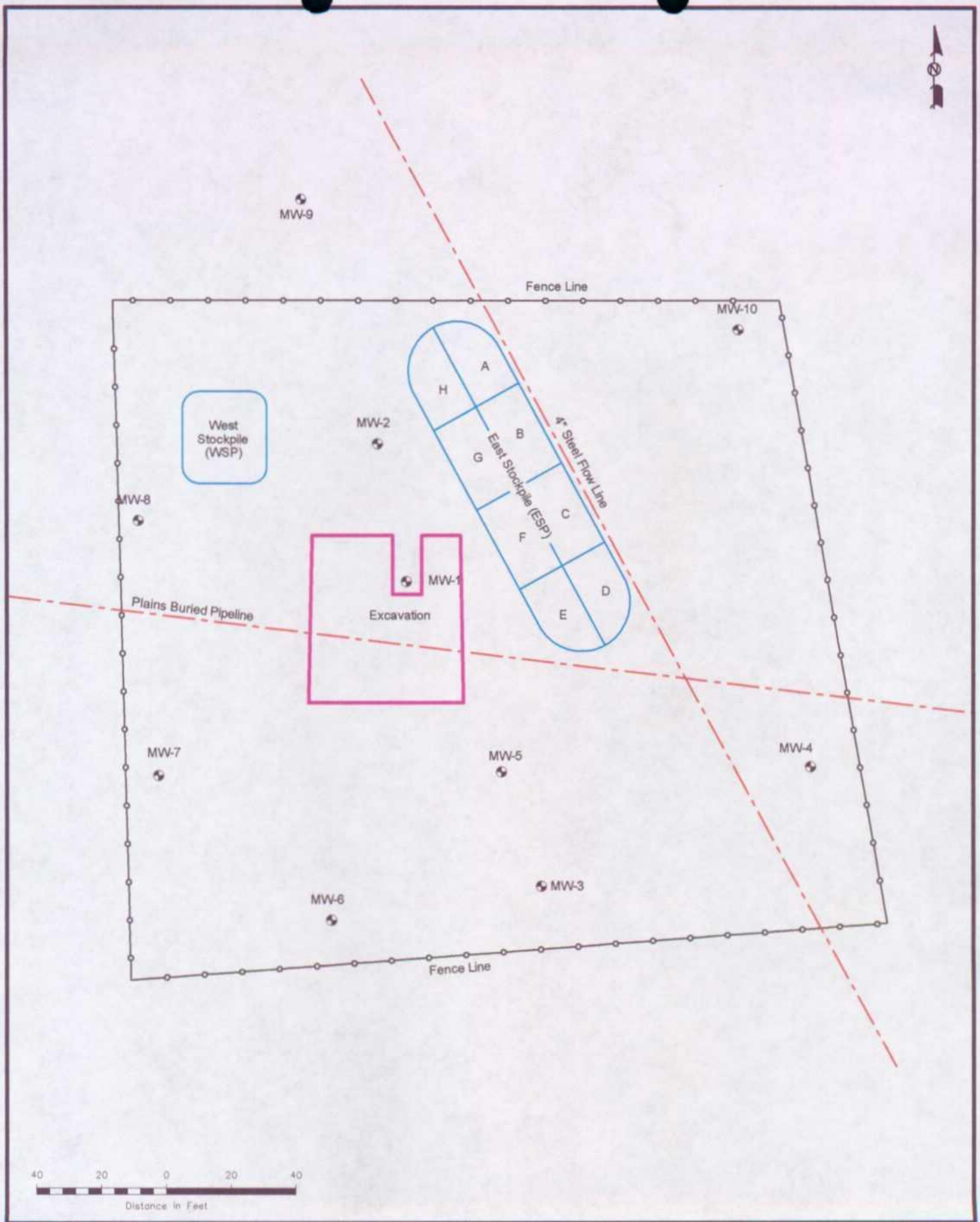


NE 1/4, NW 1/4, Sec. 26, T21S, R37E
32° 27' 03.8 N, 103°, 08', 30.3" W

Figure 1
Site Location Map
Plains Marketing, L.P.
TNM98-05B
Lea County, NM

NOVA Safety and Environmental

NOVA safety and environmental	Scale: NTS	Prep By: CDS	Checked By: TKC
	December 21, 2004	



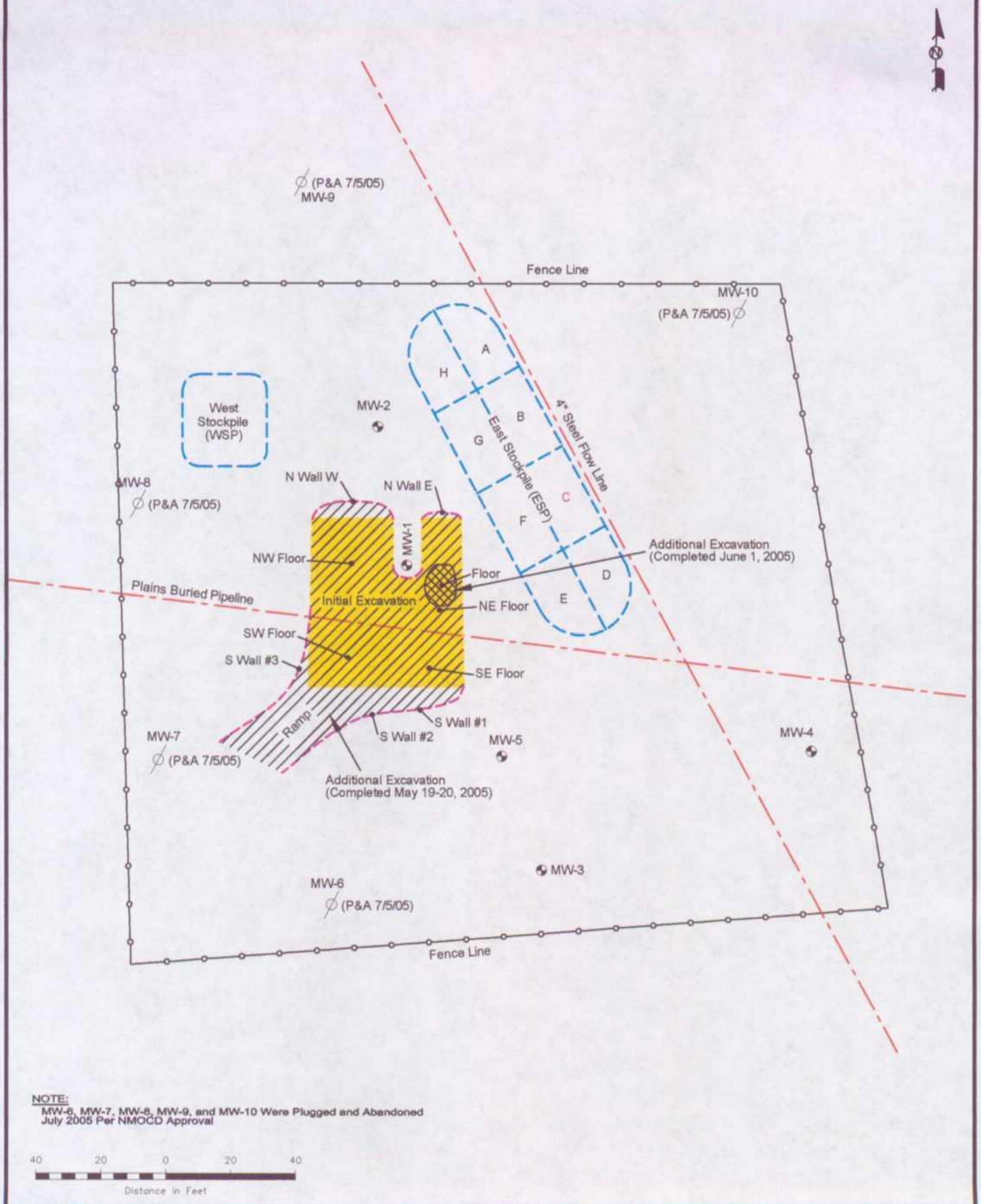
Legend:

- Monitor Well Location
- Fence

Figure 2
Site Map
(As of May 18, 2005)
Plains Marketing, L.P.
TNM98-05B
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 40'	Prep By: CDS	Checked By: TKC
October 4, 2005		



NOTE:
MW-6, MW-7, MW-8, MW-9, and MW-10 Were Plugged and Abandoned July 2005 Per NMOCD Approval

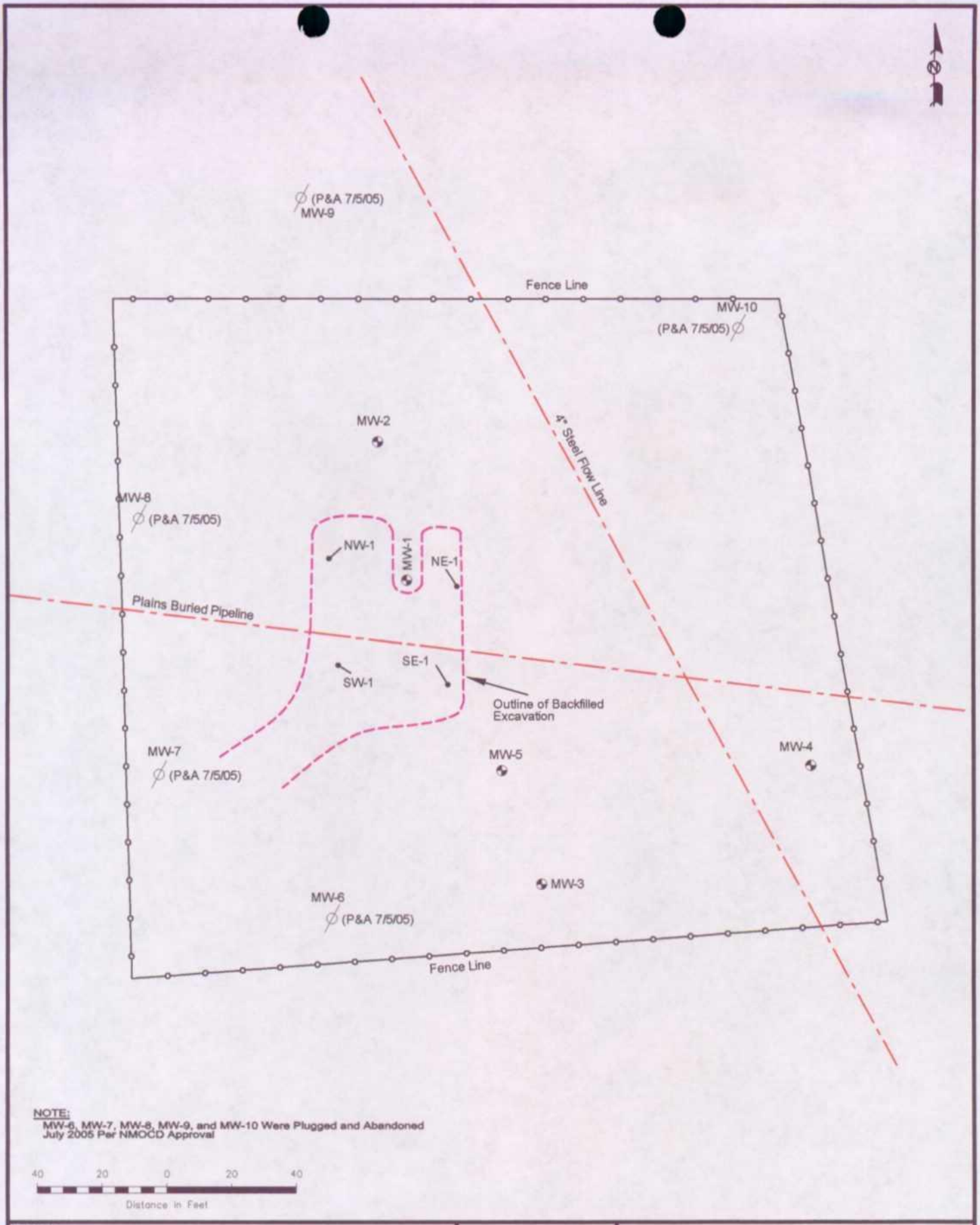
40 20 0 20 40
Distance in Feet

Legend:
- Monitor Well Location
- Fence
- P&A - Plugged and Abandoned Monitor Well
- Initial Excavation
- Additional Excavation (completed May 19-20, 2005)
- Additional Excavation (completed June 1, 2005)

Figure 3
Excavation Stages and Sampling Locations
Plains Marketing, L.P.
TNM 98-05B
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 40	Prep By: CDS	Checked By: TKC
October 3,2005		



NOTE:
MW-6, MW-7, MW-8, MW-9, and MW-10 Were Plugged and Abandoned July 2005 Per NMOCD Approval

40 20 0 20 40
Distance in Feet

Legend:
- Monitor Well Location
- Fence
- P&A - Plugged and Abandoned Monitor Well
- Outline of Backfilled Excavation

Figure 4
Confirmation Surface Sample Locations
Plains Marketing, L.P.
TNM 98-05B
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 40'	Prep By: CDG	Checked By: TKC
October 3,2005		

Tables

TABLE 1

CONCENTRATIONS OF BTEX AND TPH IN EXCAVATION SOIL SAMPLES
TNM 98-05B
PLAINS MARKETING, L.P.
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O-XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
Regulatory Levels		**5 mg/Kg**				**50 mg/Kg**			**100 mg/Kg**
Excavation Walls	05/08/02	<0.025	0.266	0.275	492	**492.541**	**711**	**896**	**1,607**
Excavation Btm	05/08/02	<0.025	0.028	<0.025	58.2	**58.228**	<10.0	35.3	35
Stockpile East	05/08/02	<0.025	0.026	0.243	513	**513.269**	**1540**	**1680**	**3,220**
Stockpile West	05/08/02	<0.025	0.178	0.137	318	**318.315**	**895**	**1080**	**1,975**
Excavation S. Wall	11/14/02	<0.025	0.885	7.46	11.4	19.745	**781**	**4900**	**5,681**
Excavation N. Wall	11/14/02	<0.025	<0.025	0.112	0.136	0.248	20.8	**186**	**207**
Excavation W. Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10
Excavation E. Wall	11/14/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10
Excavation Btm.Comp.	04/16/03	<0.025	<0.025	0.044	0.106	0.15	21.1	**232**	**253**
ESP-A	11/26/2004	<0.01	0.0634	<0.01	0.0114	0.0748	<50	<1.0	<50
ESP-B	11/26/2004	<0.01	0.199	0.0117	<0.01	0.2107	<50	<1.0	<50
ESP-C	11/26/2004	<0.01	0.26	<0.01	0.0105	0.275	<50	<1.0	<50
ESP-D	11/26/2004	<0.01	0.114	<0.01	<0.01	0.114	<50	<1.0	<50
ESP-E	11/26/2004	<0.01	0.0835	<0.01	<0.01	0.0835	<50	<1.0	<50
ESP-F	11/26/2004	<0.050	0.258	<0.050	<0.050	0.258	<50	<5.0	<50
ESP-H	11/26/2004	<0.10	0.56	<0.10	<0.10	0.56	**109**	<.10.0	**109**
ESP-H	11/26/2004	<0.01	0.0626	<0.01	0.0164	0.079	<50	<1.0	<50
WSP	11/26/2004	<0.050	0.297	<0.050	<0.050	0.297	73.9	<5.0	73.9
SW Floor	5/20/2005	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	22.8	22.8
NW Floor	5/20/2005	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	44.5	44.5
NE Floor	5/20/2005	<0.0250	<0.0250	0.027	0.1004	0.1274	13.5	**888**	**902**
SE Floor	5/20/2005	<0.0250	<0.0250	<0.0250	0.0386	0.0386	<10	23.2	23.2
N Wall W	5/20/2005	<0.2050	<0.2050	<0.2050	<0.2050	<0.2050	<10	<10	<10
N Wall E	5/20/2005	<0.0250	<0.0250	0.0371	0.1363	0.1734	<10	<10	<10
S Wall #1	5/20/2005	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	<10	<10
S Wall #2	5/20/2005	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	18.6	18.6
S Wall #3	5/20/2005	<0.0250	<0.0250	<0.0250	0.0594	0.0594	<10	<10	<10

TABLE 1

CONCENTRATIONS OF BTEX AND TPH IN EXCAVATION SOIL SAMPLES
TNM 98-05B
PLAINS MARKETING, L.P.
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021B, 5030					Methods: EPA SW 846-8015M		
		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P,O-XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)
Regulatory Levels		**5 mg/Kg**				**50 mg/Kg**			**100 mg/Kg**
*Floor	6/1/2005	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<10	15.1	15.1
SE-1	7/5/2005	<0.01	<0.01	<0.01	<0.01	<0.01	<1	**492**	**492**
NE-1	7/5/2005	<0.01	<0.01	<0.01	<0.01	<0.01	<1	**281**	**281**
SW-1	7/5/2005	<0.01	<0.01	<0.01	<0.01	<0.01	<1	**336**	**336**
NW-1	7/5/2005	<0.01	<0.01	<0.01	<0.01	<0.01	<1	**340**	**340**
NW-1	9/7/2005						<1.00	<50.0	<50
NE-1	9/7/2005						<1.00	74.7	74.7
SW-1	9/7/2005						<1.00	52.8	52.8
SE-1	9/7/2005						<1.00	<50.0	<50

* Sample collected from same area as NE Floor Sample (5/20/05) after addition excavation

Appendices

Appendix A
Laboratory Reports

2056

FILE

ANALYTICAL REPORT

Prepared for:

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

Project:	TNM 98-05
Order#:	G0203315
Report Date:	05/13/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0203315
Project: EOT 2056C
Project Name: TNM 98-05
Location: Eunice, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0203315-01	Excavation Walls	Soil	5/8/02 15:30	5/9/02 10:30	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 0 C		
0203315-02	Excavation Bottom	Soil	5/8/02 15:45	5/9/02 10:30	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 0 C		
0203315-03	Stockpile East	Soil	5/8/02 16:00	5/9/02 10:30	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 0 C		
0203315-04	Stockpile West	Soil	5/8/02 16:20	5/9/02 10:30	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203315
Project: EOT 2056C
Project Name: TNM 98-05
Location: Eunice, NM

Lab ID: 0203315-01
Sample ID: Excavation Walls

8015M

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	896	10.0
GRO, C6-C12	711	10.0
TOTAL, C6-C35	1607	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 22:00	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	275	25.0
Toluene	266	25.0
p/m-Xylene	492	25.0
o-Xylene	310	25.0

Lab ID: 0203315-02
Sample ID: Excavation Bottom

8015M

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	35.3	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	35.3	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: C0203315
Project: EOT 2056C
Project Name: TNM 98-05
Location: Eunice, NM

Lab ID: 0203315-02
Sample ID: Excavation Bottom

8021B/5030 BTEX

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

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	27.7	25.0
p/m-Xylene	58.2	25.0
o-Xylene	<25.0	25.0

Lab ID: 0203315-03
Sample ID: Stockpile East

8015M

Method 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	1540	10.0
TOTAL, C6-C35	3220	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#: G0203315
Project: EOT 2056C
Project Name: TNM 98-05
Location: Eunice, NM

Lab ID: 0203315-03
Sample ID: Stockpile East

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 22:44	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	243	25.0
Toluene	26.4	25.0
p/m-Xylene	513	25.0
o-Xylene	277	25.0

Lab ID: 0203315-04
Sample ID: Stockpile West

8015M

Method 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	1080	10.0
GRO, C6-C12	895	10.0
TOTAL, C6-C35	1975	10.0

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds	Order#: C0203315
Environmental Technology Group, Inc.	Project: EOT 2056C
2540 W. Marland	Project Name: TNM 98-05
Hobbs, NM 88240	Location: Eunice, NM

Lab ID: 0203315-04
Sample ID: Stockpile West

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001667-02		5/9/02 23:06	1	25	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25.0	25.0
Ethylbenzene	137	25.0
Toluene	178	25.0
p/m-Xylene	318	25.0
o-Xylene	140	25.0

Approval: Raland K. Tuttle, Lab Director, QA Officer — Date 5/13/02
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#: G0203315

BLANK Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001644-02			<10.0		
MS Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0203314-01	0	952	1170	122.9%	
MSD Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0203314-01	0	952	1010	106.1%	14.7%
SRM Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001644-05		1000	1140	114.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203315

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.%	

COC 062 Page of

Environmental Technology Group, Inc.

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

4800 West Wall, Midland, TX 79703, Tel (915) 522-1139, Fax (915) 520-4310
2540 West Marland, Hobbs, NM 88242, Tel (505) 397-4852, 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 98-05
Project Location: EUNICE, NM
EOTT Leak Number:
ETGI Project Number: EOT 2056C
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	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
020315-01	EXCAVATION WALLS	1	4oz		X						X		5-8	1530	X		X									
02	EXCAVATION BOTTOM													1545												
03	STOCKPILE EAST													1600												
04	STOCKPILE WEST													1620												

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

Received by: Date: Time:
Received at Lab by: Jana McMurray Date: 5-9-2 Time: 1030

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

FILE

ANALYTICAL REPORT

Prepared for:

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

Project:	TNM 98-05
PO#:	EO2056
Order#:	G0205067
Report Date:	11/22/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0205067
Project: EO2056
Project Name: TNM 98-05
Location: Eunice, NM

FILE

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
0205067-01	Excavation S. Side Wall Comp	SOIL	11/14/02 16:09	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 2.0 C		
0205067-02	Excavation N. Side Wall Comp	SOIL	11/14/02 16:01	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 2.0 C		
0205067-03	Excavation W. Side Wall Comp	SOIL	11/14/02 13:48	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 2.0 C		
0205067-04	Excavation E. Side Wall Comp	SOIL	11/14/02 15:54	11/19/02 17:15	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: 2.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205067
Project: EO2056
Project Name: TNM 98-05
Location: Eunice, NM

Lab ID: 0205067-01
Sample ID: Excavation S. Side Wall Comp

8015M

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

FILE

Parameter	Result mg/kg	RL
GRO, C6-C12	781	10.0
DRO, >C12-C35	4,900	10.0
TOTAL, C6-C35	5,681	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	132%	70	130
1-Chlorooctadecane	152%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 2:01	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	7.46	0.025
Toluene	0.885	0.025
p/m-Xylene	11.4	0.025
o-Xylene	6.04	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	110%	80	120
Bromofluorobenzene	121%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205067
Project: EQ2056
Project Name: TNM 98-05
Location: Eunice, NM

Lab ID: 0205067-02
Sample ID: Excavation N. Side Wall 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	20.8	10.0
DRO, >C12-C35	186	10.0
TOTAL, C6-C35	207	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	112%	70	130
1-Chlorooctadecane	109%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 10:16	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	0.112	0.025
Toluene	<0.025	0.025
p/m-Xylene	0.136	0.025
o-Xylene	0.072	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	101%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds		Order#:	G0205067
Environmental Technology Group, Inc.		Project:	EO2056
2540 W. Marland		Project Name:	TNM 98-05
Hobbs, NM 88240		Location:	Eunice, NM

Lab ID: 0205067-03
Sample ID: Excavation W. Side Wall 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	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	114%	70	130
1-Chlorooctadecane	112%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003839-02		11/21/02 9:00	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	80	120
Bromofluorobenzene	98%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Camille Reynolds		Order#:	G0205067
Environmental Technology Group, Inc.		Project:	EO2056
2540 W. Marland		Project Name:	TNM 98-05
Hobbs, NM 88240		Location:	Eunice, NM

Lab ID: 0205067-04
Sample ID: Excavation E. Side Wall 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	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	110%	70	130
1-Chlorooctadecane	104%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003844-02		11/21/02 18:23	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	87%	80	120
Bromofluorobenzene	88%	80	120

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 Biezughe, 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#: G0205067

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#: G0205067

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003839-02			<0.025		
Benzene-mg/kg	0003844-02			<0.025		
Ethylbenzene-mg/kg	0003839-02			<0.025		
Ethylbenzene-mg/kg	0003844-02			<0.025		
Toluene-mg/kg	0003839-02			<0.025		
Toluene-mg/kg	0003844-02			<0.025		
p/m-Xylene-mg/kg	0003839-02			<0.025		
p/m-Xylene-mg/kg	0003844-02			<0.025		
o-Xylene-mg/kg	0003839-02			<0.025		
o-Xylene-mg/kg	0003844-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0205067-04	0	0.1	0.098	98.%	
Benzene-mg/kg	0205068-01	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg	0205067-04	0	0.1	0.104	104.%	
Ethylbenzene-mg/kg	0205068-01	0	0.1	0.098	98.%	
Toluene-mg/kg	0205067-04	0	0.1	0.101	101.%	
Toluene-mg/kg	0205068-01	0	0.1	0.096	96.%	
p/m-Xylene-mg/kg	0205067-04	0	0.2	0.220	110.%	
p/m-Xylene-mg/kg	0205068-01	0	0.2	0.208	104.%	
o-Xylene-mg/kg	0205067-04	0	0.1	0.105	105.%	
o-Xylene-mg/kg	0205068-01	0	0.1	0.099	99.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0205067-04	0	0.1	0.096	96.%	2.1%
Benzene-mg/kg	0205068-01	0	0.1	0.094	94.%	2.2%
Ethylbenzene-mg/kg	0205067-04	0	0.1	0.102	102.%	1.9%
Ethylbenzene-mg/kg	0205068-01	0	0.1	0.100	100.%	2.%
Toluene-mg/kg	0205067-04	0	0.1	0.100	100.%	1.%
Toluene-mg/kg	0205068-01	0	0.1	0.097	97.%	1.%
p/m-Xylene-mg/kg	0205067-04	0	0.2	0.217	108.5%	1.4%
p/m-Xylene-mg/kg	0205068-01	0	0.2	0.211	105.5%	1.4%
o-Xylene-mg/kg	0205067-04	0	0.1	0.104	104.%	1.%
o-Xylene-mg/kg	0205068-01	0	0.1	0.100	100.%	1.%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0003839-05		0.1	0.094	94.%	
Benzene-mg/kg	0003844-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg	0003839-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg	0003844-05		0.1	0.105	105.%	
Toluene-mg/kg	0003839-05		0.1	0.098	98.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205067

SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Toluene-mg/kg	0003844-05		0.1	0.104	104.%	
p/m-Xylene-mg/kg	0003839-05		0.2	0.212	106.%	
p/m-Xylene-mg/kg	0003844-05		0.2	0.224	112.%	
o-Xylene-mg/kg	0003839-05		0.1	0.100	100.%	
o-Xylene-mg/kg	0003844-05		0.1	0.106	106.%	

Environmental Lab of Texas, Inc.

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

COC#197 1 of 1

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] for Camille Reynolds

Project Name: TNM 98-05
Project #: E02056
Project Loc: Eunice, NM
PO #:

(JAM) as per R.Eidson

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	TDS / TCLP / 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
	~~[illegible] Comp~~	~~11/14/02~~	~~[illegible]~~	~~1~~	~~X~~									~~X~~					~~X~~				~~X~~		
	~~[illegible] Comp~~	~~11/14/02~~	~~[illegible]~~	~~1~~	~~X~~									~~X~~					~~X~~				~~X~~		
205067-01	Excavation S. Side Wall Comp	11-14-02	16:09	1	X									X					X				X		
02	Excavation N. Side Wall Comp	11-14-02	1601	1	X									X					X				X		
03	Excavation W. Side Wall Comp	11-14-02	1348	1	X									X					X				X		
04	Excavation E. Side Wall Comp	11-14-02	1554	1	X									X					X				X		

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments: 2.0 °C

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/19/02	14:42	[signature]	11-19-02	1442
Relinquished by: [signature]	11/19/02	1715	Received by ELOT: Jeanne McMurrey	11-19-02	1715

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

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

Order#: G0205067

Project: TNM 98-05

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Excavation S. Side	0205067-01	SOIL	11/14/2002	11/19/2002
Excavation N. Side	0205067-02	SOIL	11/14/2002	11/19/2002
Excavation W. Side	0205067-03	SOIL	11/14/2002	11/19/2002
Excavation E. Side	0205067-04	SOIL	11/14/2002	11/19/2002

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0205067-01)

Surrogate recoveries on the 8015 TPH are outside control limits due to matrix interference from coeluting compounds. (0205067-01)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Rolanda Reed Date: 11-22-02

Environmental Lab of Texas I, Ltd.

ANALYTICAL REPORT

Prepared for:

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

Project:	TNM 98-05
PO#:	
Order#:	G0306301
Report Date:	04/22/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0306301
Project: EO 2056
Project Name: TNM 98-05
Location: Lea County, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0306301-01	Excavation Bottom Comp.	SOIL	4/16/03 14:06	4/18/03 16:34	4 oz glass	Ice

Lab Testing: **Rejected:** No **Temp:** 6.0 C

8015M
8021B/5030 BTEX

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306301
Project: EO 2056
Project Name: TNM 98-05
Location: Lea County, NM

Lab ID: 0306301-01
Sample ID: Excavation Bottom Comp.

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		4/21/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	**21.1**	10.0
DRO, >C12-C35	**232**	10.0
TOTAL, C6-C35	**253**	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	**126%**	**70**	**130**
1-Chlorooctadecane	**119%**	**70**	**130**

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0005278-02		4/21/03 19:31	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	**<0.025**	0.025
Toluene	**<0.025**	0.025
Ethylbenzene	**0.044**	0.025
p/m-Xylene	**0.106**	0.025
o-Xylene	**<0.025**	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	**92%**	**80**	**120**
Bromofluorobenzene	**97%**	**80**	**120**

Approval: Raland K Tuttle 4-22-03
Raland K. Tuttle, Lab Director, QA Officer — 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#: G0306301

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0005277-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0005277-03		1000	921	92.1%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0005277-04		1000	895	89.5%	2.9%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0005277-05		1000	765	76.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306301

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0005278-02			<0.025		
Toluene-mg/kg	0005278-02			<0.025		
Ethylbenzene-mg/kg	0005278-02			<0.025		
p/m-Xylene-mg/kg	0005278-02			<0.025		
o-Xylene-mg/kg	0005278-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0306309-02	0	0.1	0.108	108.%	
Toluene-mg/kg	0306309-02	0	0.1	0.105	105.%	
Ethylbenzene-mg/kg	0306309-02	0	0.1	0.102	102.%	
p/m-Xylene-mg/kg	0306309-02	0	0.2	0.211	105.5%	
o-Xylene-mg/kg	0306309-02	0	0.1	0.102	102.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0306309-02	0	0.1	0.099	99.%	8.7%
Toluene-mg/kg	0306309-02	0	0.1	0.096	96.%	9.%
Ethylbenzene-mg/kg	0306309-02	0	0.1	0.093	93.%	9.2%
p/m-Xylene-mg/kg	0306309-02	0	0.2	0.191	95.5%	10.%
o-Xylene-mg/kg	0306309-02	0	0.1	0.093	93.%	9.2%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0005278-05		0.1	0.102	102.%	
Toluene-mg/kg	0005278-05		0.1	0.097	97.%	
Ethylbenzene-mg/kg	0005278-05		0.1	0.092	92.%	
p/m-Xylene-mg/kg	0005278-05		0.2	0.189	94.5%	
o-Xylene-mg/kg	0005278-05		0.1	0.092	92.%	

Environmental Lab of 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: Camille Reynolds

Project Name: TNM 98-05
Project #: E02056
Project Loc: Lea County, nm
PO #:

LAB # (lab use only) 0306301	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)	Analyze For: TCLP / TOTAL: TDS / TCLP / SAR / ESP	TPH 418.1	TPH TX 1005/1005	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	Excavation Bottom Comp.	4-16	1406	1	X									X					X				X		X

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 6.0°C
Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Reynolds	4-18-03	1330	Elr Taylor	4/18/03	13:30
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Elr Taylor	4/18/03	16:34	Jeanne McMurrey	4-18-03	16:34

Summary Report

Craig Eschberger
Nova Safety & Environmental
5023 Commerce
Midland, TX 79703

Report Date: December 7, 2004

Work Order: 4113008

Project Location: Lea County
Project Name: TNM 98-05
Project Number: TNM 98-05

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49254	ESP A	soil	2004-11-26	12:00	2004-11-30
49255	ESP B	soil	2004-11-26	12:05	2004-11-30
49256	ESP C	soil	2004-11-26	12:10	2004-11-30
49257	ESP D	soil	2004-11-26	12:15	2004-11-30
49258	ESP E	soil	2004-11-26	12:20	2004-11-30
49259	ESP F	soil	2004-11-26	12:25	2004-11-30
49260	ESP G	soil	2004-11-26	12:30	2004-11-30
49261	ESP H	soil	2004-11-26	12:35	2004-11-30
49262	West SP	soil	2004-11-26	00:00	2004-11-30

	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)
49254 - ESP A	<0.0100	0.0634	<0.0100	0.0114	<50.0	<1.00
49255 - ESP B	<0.0100	0.199	0.0117	<0.0100	<50.0	<1.00
49256 - ESP C	<0.0100	0.260	<0.0100	0.0105	<50.0	<1.00
49257 - ESP D	<0.0100	0.114	<0.0100	<0.0100	<50.0	<1.00
49258 - ESP E	<0.0100	0.0835	<0.0100	<0.0100	<50.0	<1.00
49259 - ESP F	<0.0500	0.258	<0.0500	<0.0500	<50.0	<5.00
49260 - ESP G	<0.100	0.560	<0.100	<0.100	109	<10.0
49261 - ESP H	<0.0100	0.0626	<0.0100	0.0164	<50.0	<1.00
49262 - West SP	<0.0500	0.297	<0.0500	<0.0500	73.9	<5.00

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Craig Eschberger
Nova Safety & Environmental
5023 Commerce
Midland, TX 79703

Report Date: December 7, 2004

Work Order: 4113008

Project Location: Lea County
Project Name: TNM 98-05
Project Number: TNM 98-05

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
49254	ESP A	soil	2004-11-26	12:00	2004-11-30
49255	ESP B	soil	2004-11-26	12:05	2004-11-30
49256	ESP C	soil	2004-11-26	12:10	2004-11-30
49257	ESP D	soil	2004-11-26	12:15	2004-11-30
49258	ESP E	soil	2004-11-26	12:20	2004-11-30
49259	ESP F	soil	2004-11-26	12:25	2004-11-30
49260	ESP G	soil	2004-11-26	12:30	2004-11-30
49261	ESP H	soil	2004-11-26	12:35	2004-11-30
49262	West SP	soil	2004-11-26	00:00	2004-11-30

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

Dr. Blair Leftwich, Director

Analytical Report

Sample: 49254 - ESP A

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0634	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0114	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.844	mg/Kg	10	0.100	84	63.1 - 105

Sample: 49254 - ESP A

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	95	69.8 - 106.1

Sample: 49254 - ESP A

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.831	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

Sample: 49255 - ESP B

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.199	mg/Kg	10	0.00100
Ethylbenzene		0.0117	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.819	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.847	mg/Kg	10	0.100	85	63.1 - 105

Sample: 49255 - ESP B

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	171	mg/Kg	1	150	114	69.8 - 106.1

Sample: 49255 - ESP B

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.938	mg/Kg	10	0.100	94	0 - 174

Sample: 49256 - ESP C

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

[1] Surrogate recovery out of control chart range but within method limits.

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.260	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0105	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.842	mg/Kg	10	0.100	84	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.925	mg/Kg	10	0.100	92	63.1 - 105

Sample: 49256 - ESP C

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

Parameter	Flag	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		137	mg/Kg	1	150	91	69.8 - 106.1

Sample: 49256 - ESP C

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	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)		0.860	mg/Kg	10	0.100	86	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	0 - 174

Sample: 49257 - ESP D

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.114	mg/Kg	10	0.00100

continued ...

sample 49257 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	10	0.100	80	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.845	mg/Kg	10	0.100	84	63.1 - 105

Sample: 49257 - ESP D

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

Parameter	Flag	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		140	mg/Kg	1	150	94	69.8 - 106.1

Sample: 49257 - ESP D

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	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)		0.833	mg/Kg	10	0.100	83	0 - 160
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	10	0.100	94	0 - 174

Sample: 49258 - ESP E

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0835	mg/Kg	10	0.00100

continued ...

sample 49258 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.914	mg/Kg	10	0.100	91	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	10	0.100	91	63.1 - 105

Sample: 49258 - ESP E

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

Parameter	Flag	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		139	mg/Kg	1	150	93	69.8 - 106.1

Sample: 49258 - ESP E

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	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)		0.913	mg/Kg	10	0.100	91	0 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	0 - 174

Sample: 49259 - ESP F

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14400	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

continued ...

sample 49259 continued...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	[2]	<0.0500	mg/Kg	50	0.00100
Toluene		0.258	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[3]	0.735	mg/Kg	50	0.100	15	60.1 - 104
4-Bromofluorobenzene (4-BFB)	[4]	0.913	mg/Kg	50	0.100	18	63.1 - 105

Sample: 49259 - ESP F

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	86	69.8 - 106.1

Sample: 49259 - ESP F

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[5]	<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.705	mg/Kg	50	0.100	14	0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100	20	0 - 174

Sample: 49260 - ESP G

[2]Sample diluted due to surfactant content.
[3]Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[4]Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[5]Sample diluted due to surfactants.

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	14435	Date Analyzed:	2004-12-03	Analyzed By:	MS
Prep Batch:	12753	Date Prepared:	2004-12-03	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	[6]	<0.100	mg/Kg	100	0.00100
Toluene		0.560	mg/Kg	100	0.00100
Ethylbenzene		<0.100	mg/Kg	100	0.00100
Xylene		<0.100	mg/Kg	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[7]	0.715	mg/Kg	100	0.100	7	60.1 - 104
4-Bromofluorobenzene (4-BFB)	[8]	0.877	mg/Kg	100	0.100	9	63.1 - 105

Sample: 49260 - ESP G

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		109	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		147	mg/Kg	1	150	98	69.8 - 106.1

Sample: 49260 - ESP G

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14437	Date Analyzed:	2004-12-03	Analyzed By:	MS
Prep Batch:	12753	Date Prepared:	2004-12-03	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[9]	<10.0	mg/Kg	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.680	mg/Kg	100	0.100	7	0 - 160
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	100	0.100	10	0 - 174

Sample: 49261 - ESP H

[6]Diluted due to surfactant content.
[7]Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[8]Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[9]Sample diluted due to surfactant content.

Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5035
QC Batch: 14435 | Date Analyzed: 2004-12-03 | Analyzed By: MS
Prep Batch: 12753 | Date Prepared: 2004-12-03 | Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		0.0626	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		0.0164	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	10	0.100	82	60.1 - 104
4-Bromofluorobenzene (4-BFB)		0.794	mg/Kg	10	0.100	79	63.1 - 105

Sample: 49261 - ESP H

Analysis: TPH DRO | Analytical Method: Mod. 8015B | Prep Method: N/A
QC Batch: 14356 | Date Analyzed: 2004-11-30 | Analyzed By: BP
Prep Batch: 12682 | Date Prepared: 2004-11-30 | Prepared By: DS

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		133	mg/Kg	1	150	89	69.8 - 106.1

Sample: 49261 - ESP H

Analysis: TPH GRO | Analytical Method: S 8015B | Prep Method: S 5035
QC Batch: 14437 | Date Analyzed: 2004-12-03 | Analyzed By: MS
Prep Batch: 12753 | Date Prepared: 2004-12-03 | 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)		1.26	mg/Kg	10	0.100	126	0 - 160
4-Bromofluorobenzene (4-BFB)		0.894	mg/Kg	10	0.100	89	0 - 174

Sample: 49262 - West SP

Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5035
QC Batch: 14400 | Date Analyzed: 2004-12-02 | Analyzed By: MS
Prep Batch: 12722 | Date Prepared: 2004-12-02 | Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	[10]	<0.0500	mg/Kg	50	0.00100
Toluene		0.297	mg/Kg	50	0.00100
Ethylbenzene		<0.0500	mg/Kg	50	0.00100
Xylene		<0.0500	mg/Kg	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[11]	0.823	mg/Kg	50	0.100	16	60.1 - 104
4-Bromofluorobenzene (4-BFB)	[12]	0.915	mg/Kg	50	0.100	18	63.1 - 105

Sample: 49262 - West SP

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	14356	Date Analyzed:	2004-11-30	Analyzed By:	BP
Prep Batch:	12682	Date Prepared:	2004-11-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		73.9	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	69.8 - 106.1

Sample: 49262 - West SP

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	14401	Date Analyzed:	2004-12-02	Analyzed By:	MS
Prep Batch:	12722	Date Prepared:	2004-12-02	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	[13]	<5.00	mg/Kg	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.808	mg/Kg	50	0.100	16	0 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	50	0.100	20	0 - 174

Method Blank (1) QC Batch: 14356

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

[10]Sample diluted due to surfactant content.
[11]Low TFT surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[12]Low BFB surrogate recovery due to matrix interference. ICV/CCV surrogate recovery shows the method to be in control.
[13]Sample diluted due to surfactants.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	69.8 - 106.1

Method Blank (1) QC Batch: 14400

Parameter	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.001
Toluene		<0.0100	mg/Kg	0.001
Ethylbenzene		<0.0100	mg/Kg	0.001
Xylene		<0.0100	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.716	mg/Kg	10	0.100	72	36.6 - 112

Method Blank (1) QC Batch: 14401

Parameter	Flag	Result	Units	RL
GRO		2.11	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.729	mg/Kg	10	0.100	73	50.7 - 113

Method Blank (1) QC Batch: 14435

Parameter	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.001
Toluene		<0.0100	mg/Kg	0.001
Ethylbenzene		<0.0100	mg/Kg	0.001
Xylene		<0.0100	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.990	mg/Kg	10	0.100	99	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.698	mg/Kg	10	0.100	70	36.6 - 112

Method Blank (1) QC Batch: 14437

Parameter	Flag	Result	Units	RL
GRO		<1.00	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.779	mg/Kg	10	0.100	78	50.7 - 113

Laboratory Control Spike (LCS-1) QC Batch: 14356

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	236	233	mg/Kg	1	250	<12.0	94	1	78.7 - 117.6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	132	128	mg/Kg	1	150	88	85	69.8 - 106.1

Laboratory Control Spike (LCS-1) QC Batch: 14400

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.938	0.969	mg/Kg	10	0.100	<0.0333	94	3	79.8 - 114	9.4
Toluene	0.974	0.978	mg/Kg	10	0.100	<0.0353	97	0	79.7 - 115	7.5
Ethylbenzene	0.993	0.989	mg/Kg	10	0.100	<0.0339	99	0	78.7 - 116	8
Xylene	2.80	2.78	mg/Kg	10	0.300	<0.103	93	1	78.7 - 118	7.9

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.960	1.05	mg/Kg	10	0.100	96	105	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.926	0.944	mg/Kg	10	0.100	93	94	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 14401

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.64	11.3	mg/Kg	10	1.00	<0.381	96	16	72 - 124	21

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.934	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.984	1.02	mg/Kg	10	0.100	98	102	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 14435

continued ...

control spikes continued...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.978	0.956	mg/Kg	10	0.100	<0.0333	98	2	79.8 - 114	9.4
Toluene	0.958	0.937	mg/Kg	10	0.100	<0.0353	96	2	79.7 - 115	7.5
Ethylbenzene	0.990	0.968	mg/Kg	10	0.100	<0.0339	99	2	78.7 - 116	8
Xylene	2.78	2.72	mg/Kg	10	0.300	<0.103	93	2	78.7 - 118	7.9

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.01	0.992	mg/Kg	10	0.100	101	99	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.954	0.933	mg/Kg	10	0.100	95	93	72.2 - 111

Laboratory Control Spike (LCS-1) QC Batch: 14437

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.55	9.96	mg/Kg	10	1.00	<0.381	96	4	72 - 124	21

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.927	0.905	mg/Kg	10	0.100	93	90	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.994	0.991	mg/Kg	10	0.100	99	99	72.2 - 119

Matrix Spike (MS-1) QC Batch: 14356 Spiked Sample: 49259

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	[14]	295	253	mg/Kg	1	250	<12.0	118	15	67.7 - 110.5	20

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	[15]	163	134	mg/Kg	1	150	109	89	69.8 - 106.1

Matrix Spike (MS-1) QC Batch: 14400 Spiked Sample: 49254

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	[16][17]	0.818	0.676	mg/Kg	10	0.100	<0.0333	82	19	63.5 - 98.6	12
Toluene		0.889	0.710	mg/Kg	10	0.100	<0.0353	89	22	65.8 - 102	11.4

continued...

[14]Spike recovery out of control chart range but within method limits.
[15]Surrogate recovery out of control chart range but within method limits.
[16]RPD out. LCS/LCSD show the analysis to be in control.
[17]RPD out. LCS/LCSD show the analysis to be in control.

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ethylbenzene	0.891	0.730	mg/Kg	10	0.100	<0.0339	89	20	66.6 - 106	10.5
Xylene	2.52	2.05	mg/Kg	10	0.300	<0.103	84	20	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.859	0.727	mg/Kg	10	0.1	86	73	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.919	0.744	mg/Kg	10	0.1	92	74	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14401 Spiked Sample: 49254

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	12.1	14.2	mg/Kg	10	1.00	<0.381	121	16	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.09	1.43	mg/Kg	10	0.1	109	143	0 - 160
4-Bromofluorobenzene (4-BFB)	1.06	1.02	mg/Kg	10	0.1	106	102	0 - 174

Matrix Spike (MS-1) QC Batch: 14435 Spiked Sample: 49466

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.794	0.839	mg/Kg	10	0.100	<0.0333	79	6	63.5 - 98.6	12
Toluene	0.838	0.852	mg/Kg	10	0.100	<0.0353	83	2	65.8 - 102	11.4
Ethylbenzene	0.891	0.900	mg/Kg	10	0.100	<0.0339	89	1	66.6 - 106	10.5
Xylene	2.52	2.57	mg/Kg	10	0.300	<0.103	84	2	67.4 - 108	10.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.853	0.807	mg/Kg	10	0.1	85	81	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.908	0.946	mg/Kg	10	0.1	91	95	63.1 - 105

Matrix Spike (MS-1) QC Batch: 14437 Spiked Sample: 49261

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	11.5	12.2	mg/Kg	10	1.00	0.649	108	6	0 - 182	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.01	1.08	mg/Kg	10	0.1	101	108	0 - 160

continued ...

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	0.960	1.02	mg/Kg	10	0.1	96	102	0 - 174

Standard (ICV-1) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	294	118	75 - 125	2004-11-30

Standard (CCV-1) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	232	93	75 - 125	2004-11-30

Standard (CCV-2) QC Batch: 14356

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	230	92	75 - 125	2004-11-30

Standard (ICV-1) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

Standard (CCV-1) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.100	100	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0975	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.288	96	85 - 115	2004-12-02

Standard (CCV-2) QC Batch: 14400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0989	99	85 - 115	2004-12-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2004-12-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2004-12-02
Xylene		mg/Kg	0.300	0.285	95	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.02	102	85 - 115	2004-12-02

Standard (CCV-1) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.04	104	85 - 115	2004-12-02

Standard (CCV-2) QC Batch: 14401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2004-12-02

Standard (ICV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0979	98	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0963	96	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0993	99	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.280	93	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0950	95	85 - 115	2004-12-03
Toluene		mg/Kg	0.100	0.0953	95	85 - 115	2004-12-03
Ethylbenzene		mg/Kg	0.100	0.0967	97	85 - 115	2004-12-03
Xylene		mg/Kg	0.300	0.276	92	85 - 115	2004-12-03

Standard (ICV-1) QC Batch: 14437

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.978	98	85 - 115	2004-12-03

Standard (CCV-1) QC Batch: 14437

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.992	99	85 - 115	2004-12-03

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 4113008

Company Name: PLAINS
Phone #:
Address: (Street, City, Zip) HOUSTON
Fax #:
Contact Person:
Invoice to: (If different from above)
Project #: TNM 98-05
Project Name: TNM 98-05
Project Location: Lea County
Sampler Signature:

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	TPH 418.1/TX1005 mod 8015 (DRO-GRO)	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	Turn Around Time if different from standard	Hold
49254	ESP A	1	4oz		X							X		11/26	12:10		X	X													
55	ESP B	1			X							X			12:05		X	X													
56	ESP C	1			X							X			12:10		X	X													
57	ESP D	1			X							X			12:15		X	X													
58	ESP E	1			X							X			12:20		X	X													
59	ESP F	1			X							X			12:25		X	X													
60	ESP G	1			X							X			12:30		X	X													
61	ESP H	1			X							X			12:35		X	X													
62	West SP	1	1		X							X					X	X													

Relinquished by: Date: 11/29/04 Time: 1645
Received by: Helen Shelton Date: 11/29/04 Time: 1645
Relinquished by: Helen Shelton Date: 11/29/04 Time: 1730
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Vicki Date: 11-30-04 Time: 9:13

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

ORIGINAL COPY

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

REMARKS:
Please CC - Reports to C Eschberger @ NOVATraining.com CC

☐ Check If Special Reporting Limits Are Needed

Carrier # Lone Star 912003857

9 samples-HS

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 411300 8

Company Name: PLAINS — Phone #:

Address: (Street, City, Zip) HOUSTON — Fax #:

Contact Person:

Invoice to: (if different from above)

Project #: TNM 98-05 — Project Name: TNM 98-05

Project Location: LEA County — Sampler Signature: Gary Sm

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
9254	ESP A	1	40Z		X							X		11/26	12:10
55	ESP B	1													12:05
56	ESP C	1													12:10
57	ESP D	1													12:15
58	ESP E	1													12:20
59	ESP F	1													12:25
60	ESP G	1													12:30
61	ESP H	1													12:35
62	West SP	1	1												

ANALYSIS REQUEST	MTBE 8021B/602	BTEX 8021B/602	TPH ~~418.1/TX1005~~ MOD 8015 (DRO-GRO)	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	Turn Around Time if different from standard	Hold
9254	X	X	X														
55	X	X	X														
56	X	X	X														
57	X	X	X														
58	X	X	X														
59	X	X	X														
60	X	X	X														
61	X	X	X														
62	X	X	X														

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Gary Sm	11/29/04	1645	Helen Shelton	11/29/04	1645
Helen Shelton	11/29/04	1730	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Vicki Crum	11-30-04	9:13

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

9 samples HS

ORIGINAL COPY

LAB USE ONLY

Intact (Y) / N

Headspace Y / N

Temp 4° C

Log-in Review

REMARKS:

Please CC - Reports to C Eschberger @ NOVATraining.com CC

☐ Check If Special Reporting Limits Are Needed

12/7 GP

Carrier # Fed Ex 9120 3857

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: TNM9805B

Project Number: TNM9805B

Location: Eunice, NM

Lab Order Number: 5E23010

Report Date: 05/26/05

Plains All American EH & S	Project: TNM9805B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM9805B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/26/05 15:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW Floor	5E23010-01	Soil	05/20/05 14:10	05/23/05 14:10
NW Floor	5E23010-02	Soil	05/20/05 14:00	05/23/05 14:10
NE Floor	5E23010-03	Soil	05/20/05 14:20	05/23/05 14:10
SE Floor	5E23010-04	Soil	05/20/05 14:30	05/23/05 14:10
N Wall W	5E23010-05	Soil	05/20/05 14:40	05/23/05 14:10
N Wall E	5E23010-06	Soil	05/20/05 14:50	05/23/05 14:10
S Wall #1	5E23010-07	Soil	05/20/05 15:00	05/23/05 14:10
S Wall #2	5E23010-08	Soil	05/20/05 15:10	05/23/05 14:10
S Wall #3	5E23010-09	Soil	05/20/05 15:20	05/23/05 14:10

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

Plains All American EH & S	Project: TNM9805B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM9805B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/26/05 15:41

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SW Floor (5E23010-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	**22.8**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**22.8**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*94.4 %*	*70-130*		"	"	"	"	
NW Floor (5E23010-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	**44.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**44.5**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.0 %*	*70-130*		"	"	"	"	
NE Floor (5E23010-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0270**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0736**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0268**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**13.5**	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	**888**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**902**	10.0	"	"	"	"	"	"	

Plains All American EH & S	Project: TNM9805B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM9805B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/26/05 15:41

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NE Floor (5E23010-03) Soil									
Surrogate: 1-Chlorooctane		*98.2 %*	*70-130*		*EE52302*	*05/23/05*	*05/23/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*110 %*	*70-130*		"	"	"	"	
SE Floor (5E23010-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	**J [0.0121]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0386**	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	**23.2**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**23.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*94.2 %*	*70-130*		"	"	"	"	
N Wall W (5E23010-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/26/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.0 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: TNM9805B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM9805B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/26/05 15:41

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N Wall E (5E23010-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0371**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0996**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0367**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*89.8 %*	*70-130*		"	"	"	"	
S Wall #1 (5E23010-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.4 %*	*70-130*		"	"	"	"	
S Wall #2 (5E23010-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*83.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	**18.6**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**18.6**	10.0	"	"	"	"	"	"	

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

Plains All American EH & S	Project: TNM9805B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM9805B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/26/05 15:41

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S Wall #2 (5E23010-08) Soil									
Surrogate: 1-Chlorooctane		*94.4 %*	*70-130*		*EE52302*	*05/23/05*	*05/23/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*93.2 %*	*70-130*		"	"	"	"	
S Wall #3 (5E23010-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52502	05/25/05	05/25/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0210]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0594**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0229]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*80.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE52302	05/23/05	05/23/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.2 %*	*70-130*		"	"	"	"	

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

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SW Floor (5E23010-01) Soil									
% Moisture	**2.7**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
NW Floor (5E23010-02) Soil									
% Moisture	**2.7**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
NE Floor (5E23010-03) Soil									
% Moisture	**2.8**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
SE Floor (5E23010-04) Soil									
% Moisture	**8.6**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
N Wall W (5E23010-05) Soil									
% Moisture	**7.0**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
N Wall E (5E23010-06) Soil									
% Moisture	**1.5**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
S Wall #1 (5E23010-07) Soil									
% Moisture	**7.8**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
S Wall #2 (5E23010-08) Soil									
% Moisture	**4.1**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	
S Wall #3 (5E23010-09) Soil									
% Moisture	**2.0**	0.1	%	1	EE52311	05/24/05	05/24/05	% calculation	

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 EE52302 - Solvent Extraction (GC)										
Blank (EE52302-BLK1)				Prepared & Analyzed: 05/23/05						
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	*42.9*		*mg/kg*	*50.0*		*85.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.9*		*"*	*50.0*		*73.8*	*70-130*			
LCS (EE52302-BS1)				Prepared & Analyzed: 05/23/05						
Gasoline Range Organics C6-C12	460	10.0	mg/kg wet	500		92.0	75-125			
Diesel Range Organics >C12-C35	484	10.0	"	500		96.8	75-125			
Total Hydrocarbon C6-C35	944	10.0	"	1000		94.4	75-125			
Surrogate: 1-Chlorooctane	*39.2*		*mg/kg*	*50.0*		*78.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.5*		*"*	*50.0*		*79.0*	*70-130*			
Calibration Check (EE52302-CCV1)				Prepared & Analyzed: 05/23/05						
Gasoline Range Organics C6-C12	463		mg/kg	500		92.6	80-120			
Diesel Range Organics >C12-C35	510		"	500		102	80-120			
Total Hydrocarbon C6-C35	973		"	1000		97.3	80-120			
Surrogate: 1-Chlorooctane	*46.6*		*"*	*50.0*		*93.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.4*		*"*	*50.0*		*76.8*	*70-130*			
Matrix Spike (EE52302-MS1)	**Source: 5E23003-01**			Prepared & Analyzed: 05/23/05						
Gasoline Range Organics C6-C12	490	10.0	mg/kg dry	529	ND	92.6	75-125			
Diesel Range Organics >C12-C35	546	10.0	"	529	ND	103	75-125			
Total Hydrocarbon C6-C35	1040	10.0	"	1060	ND	98.1	75-125			
Surrogate: 1-Chlorooctane	*48.2*		*mg/kg*	*50.0*		*96.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.4*		*"*	*50.0*		*80.8*	*70-130*			
Matrix Spike Dup (EE52302-MSD1)	**Source: 5E23003-01**			Prepared & Analyzed: 05/23/05						
Gasoline Range Organics C6-C12	455	10.0	mg/kg dry	529	ND	86.0	75-125	7.41	20	
Diesel Range Organics >C12-C35	556	10.0	"	529	ND	105	75-125	1.81	20	
Total Hydrocarbon C6-C35	1010	10.0	"	1060	ND	95.3	75-125	2.93	20	
Surrogate: 1-Chlorooctane	*48.1*		*mg/kg*	*50.0*		*96.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.3*		*"*	*50.0*		*76.6*	*70-130*			

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 EE52502 - EPA 5030C (GC)										
Blank (EE52502-BLK1)			Prepared & Analyzed: 05/25/05							
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*86.2*		*ug/kg*	*100*		*86.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*85.8*		"	*100*		*85.8*	*80-120*			
LCS (EE52502-BS1)			Prepared & Analyzed: 05/25/05							
Benzene	104		ug/kg	100		104	80-120			
Toluene	95.3		"	100		95.3	80-120			
Ethylbenzene	97.7		"	100		97.7	80-120			
Xylene (p/m)	220		"	200		110	80-120			
Xylene (o)	107		"	100		107	80-120			
Surrogate: a,a,a-Trifluorotoluene	*103*		"	*100*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		"	*100*		*114*	*80-120*			
Calibration Check (EE52502-CCV1)			Prepared & Analyzed: 05/25/05							
Benzene	105		ug/kg	100		105	80-120			
Toluene	93.7		"	100		93.7	80-120			
Ethylbenzene	91.1		"	100		91.1	80-120			
Xylene (p/m)	199		"	200		99.5	80-120			
Xylene (o)	97.4		"	100		97.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*107*		"	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*97.8*		"	*100*		*97.8*	*80-120*			
Matrix Spike (EE52502-MS1)	**Source: 5E23006-11**		Prepared & Analyzed: 05/25/05							
Benzene	105		ug/kg	100	ND	105	80-120			
Toluene	94.7		"	100	ND	94.7	80-120			
Ethylbenzene	95.9		"	100	ND	95.9	80-120			
Xylene (p/m)	213		"	200	ND	106	80-120			
Xylene (o)	102		"	100	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	*107*		"	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*118*		"	*100*		*118*	*80-120*			

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 EE52502 - EPA 5030C (GC)										
Matrix Spike Dup (EE52502-MSD1)	**Source: 5E23006-11**			Prepared & Analyzed: 05/25/05						
Benzene	99.1		ug/kg	100	ND	99.1	80-120	5.78	20	
Toluene	90.8		"	100	ND	90.8	80-120	4.20	20	
Ethylbenzene	91.9		"	100	ND	91.9	80-120	4.26	20	
Xylene (p/m)	202		"	200	ND	101	80-120	4.83	20	
Xylene (o)	96.1		"	100	ND	96.1	80-120	5.96	20	
Surrogate: a,a,a-Trifluorotoluene	*99.0*		"	*100*		*99.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		"	*100*		*114*	*80-120*			

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 EE52311 - General Preparation (Prep)										
Blank (EE52311-BLK1)				Prepared & Analyzed: 05/24/05						
% Moisture	ND	0.1	%							
Duplicate (EE52311-DUP1)	**Source: 5E20009-01**			Prepared & Analyzed: 05/24/05						
% Moisture	3.1	0.1	%		2.8			10.2	20	

Notes and Definitions

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: 5/26/2005

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 Sanchez, Lab Tech.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CURT STANLEY
Company Name: NOVA SAFETY & ENVIRONMENTAL
Company Address: 2057 COMMERCE
City/State/Zip: MIDLAND, TX 79703
Telephone No: 432-570-7720 Fax No: 432-520-7701
Sampler Signature: C.D. Stanley Curt Stanley

Project Name: TNM-98-05R
Project #: TNM9805R
Project Loc: EUNICE, NM.
PO #:

BILL TO PLAINS

SE23010

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 (8015) 1005 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX (8021B) 5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) Standard TAT
-01	SW FLOOR	5/20/05	14:10	1	X									X		X							X			
-02	NW FLOOR		14:00																							
-03	NE FLOOR		14:20																							
-04	SE FLOOR		14:30																							
-05	N WALL W		14:40																							
-06	N WALL E		14:50																							
-07	S WALL #1		15:00																							
-08	S WALL #2		15:10																							
-09	S WALL #3		15:20																							

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
4oz jars
16.5°C

Special Instructions:
PLEASE FAX RESULTS, FOLLOWED BY HARDCOPY

Relinquished by:	Date	Time	Received by:	Date	Time
C.D. Stanley	5/23/05	2:10			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Connie Kelley	5/23/05	2:10

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Nova Safety

Date/Time: 5/23/05 2:20

Order #: 5E23010

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	6.5 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	none
Container labels legible and intact?	Yes	No	n/a
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:

wrote on lid

Variance Documentation:

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

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Delrose Scott #98-05B

Project Number: TNM 98-05B

Location: Near Eunice, NM

Lab Order Number: 5F02008

Report Date: 06/07/05

Plains All American EH & S	Project: Delrose Scott #98-05B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM 98-05B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/07/05 14:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Floor	5F02008-01	Soil	06/01/05 14:22	06/02/05 13:50

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

Plains All American EH & S	Project: Delrose Scott #98-05B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM 98-05B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/07/05 14:07

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Floor (5F02008-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50315	06/03/05	06/03/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50304	06/03/05	06/03/05	EPA 8015M	
Diesel Range Organics >C12-C35	**15.1**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**15.1**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*89.0 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: Delrose Scott #98-05B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM 98-05B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/07/05 14:07

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Floor (5F02008-01) Soil									
% Moisture	**7.2**	0.1	%	1	EF50301	06/02/05	06/03/05	% calculation	

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

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 EF50304 - Solvent Extraction (GC)										
Blank (EF50304-BLK1)				Prepared & Analyzed: 06/03/05						
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	*37.1*		*mg/kg*	*50.0*		*74.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.3*		*"*	*50.0*		*78.6*	*70-130*			
LCS (EF50304-BS1)				Prepared & Analyzed: 06/03/05						
Gasoline Range Organics C6-C12	460	10.0	mg/kg wet	500		92.0	75-125			
Diesel Range Organics >C12-C35	466	10.0	"	500		93.2	75-125			
Total Hydrocarbon C6-C35	926	10.0	"	1000		92.6	75-125			
Surrogate: 1-Chlorooctane	*35.8*		*mg/kg*	*50.0*		*71.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.6*		*"*	*50.0*		*75.2*	*70-130*			
Calibration Check (EF50304-CCV1)				Prepared & Analyzed: 06/03/05						
Gasoline Range Organics C6-C12	493		mg/kg	500		98.6	80-120			
Diesel Range Organics >C12-C35	520		"	500		104	80-120			
Total Hydrocarbon C6-C35	1010		"	1000		101	80-120			
Surrogate: 1-Chlorooctane	*44.9*		*"*	*50.0*		*89.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*44.6*		*"*	*50.0*		*89.2*	*70-130*			
Matrix Spike (EF50304-MS1)	**Source: 5F02008-01**			Prepared & Analyzed: 06/03/05						
Gasoline Range Organics C6-C12	510	10.0	mg/kg dry	539	ND	94.6	75-125			
Diesel Range Organics >C12-C35	563	10.0	"	539	15.1	102	75-125			
Total Hydrocarbon C6-C35	1070	10.0	"	1080	15.1	97.7	75-125			
Surrogate: 1-Chlorooctane	*47.5*		*mg/kg*	*50.0*		*95.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.2*		*"*	*50.0*		*94.4*	*70-130*			
Matrix Spike Dup (EF50304-MSD1)	**Source: 5F02008-01**			Prepared & Analyzed: 06/03/05						
Gasoline Range Organics C6-C12	507	10.0	mg/kg dry	539	ND	94.1	75-125	0.590	20	
Diesel Range Organics >C12-C35	544	10.0	"	539	15.1	98.1	75-125	3.43	20	
Total Hydrocarbon C6-C35	1050	10.0	"	1080	15.1	95.8	75-125	1.89	20	
Surrogate: 1-Chlorooctane	*49.0*		*mg/kg*	*50.0*		*98.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.7*		*"*	*50.0*		*95.4*	*70-130*			

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 EF50315 - EPA 5030C (GC)										
Blank (EF50315-BLK1)			Prepared & Analyzed: 06/03/05							
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*85.6*		*ug/kg*	*100*		*85.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*82.0*		*"*	*100*		*82.0*	*80-120*			
LCS (EF50315-BS1)			Prepared & Analyzed: 06/03/05							
Benzene	105		ug/kg	100		105	80-120			
Toluene	98.7		"	100		98.7	80-120			
Ethylbenzene	85.6		"	100		85.6	80-120			
Xylene (p/m)	180		"	200		90.0	80-120			
Xylene (o)	81.6		"	100		81.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*103*		*"*	*100*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.7*		*"*	*100*		*92.7*	*80-120*			
Calibration Check (EF50315-CCV1)			Prepared & Analyzed: 06/03/05							
Benzene	106		ug/kg	100		106	80-120			
Toluene	97.7		"	100		97.7	80-120			
Ethylbenzene	85.8		"	100		85.8	80-120			
Xylene (p/m)	184		"	200		92.0	80-120			
Xylene (o)	89.0		"	100		89.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*107*		*"*	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*91.7*		*"*	*100*		*91.7*	*80-120*			
Matrix Spike (EF50315-MS1)	**Source: 5E24006-04**		Prepared & Analyzed: 06/03/05							
Benzene	2590		ug/kg	2500	ND	104	80-120			
Toluene	2440		"	2500	ND	97.6	80-120			
Ethylbenzene	2240		"	2500	ND	89.6	80-120			
Xylene (p/m)	4750		"	5000	ND	95.0	80-120			
Xylene (o)	2360		"	2500	ND	94.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*105*		*"*	*100*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*89.7*		*"*	*100*		*89.7*	*80-120*			

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 EF50315 - EPA 5030C (GC)										
Matrix Spike Dup (EF50315-MSD1)	**Source: 5E24006-04**			Prepared & Analyzed: 06/03/05						
Benzene	2490		ug/kg	2500	ND	99.6	80-120	4.32	20	
Toluene	2330		"	2500	ND	93.2	80-120	4.61	20	
Ethylbenzene	2130		"	2500	ND	85.2	80-120	5.03	20	
Xylene (p/m)	4310		"	5000	ND	86.2	80-120	9.71	20	
Xylene (o)	2250		"	2500	ND	90.0	80-120	4.77	20	
Surrogate: a,a,a-Trifluorotoluene	*102*		"	*100*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*85.7*		"	*100*		*85.7*	*80-120*			

Plains All American EH & S	Project: Delrose Scott #98-05B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM 98-05B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/07/05 14:07

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 EF50301 - General Preparation (Prep)										
Blank (EF50301-BLK1)				Prepared: 06/02/05 Analyzed: 06/03/05						
% Moisture	ND	0.1	%							
Duplicate (EF50301-DUP1)		**Source: 5F01025-01**		Prepared: 06/02/05 Analyzed: 06/03/05						
% Moisture	33.4	0.1	%		38.4			13.9	20	

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

Plains All American EH & S	Project: Delrose Scott #98-05B	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM 98-05B	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/07/05 14:07

Notes and Definitions

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: 6/7/2005

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 Sanchez, Lab Tech.

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: _____

Company Name: NOVA Phone #: 520 7720

Address: (Street, City, Zip) 2057 Commerce Fax #: 7701

Contact Person: REpley repley@novatraining.cc

Invoice to: (If different from above) Plains – Camille Reynolds → Delrose Scott # 98-068

Project #: TNM 98-0513 Known Project Name: ~~TNM 98-0513~~ JMM as per attached email

Project Location: Near EUNICE, NM Sampler Signature: [signature]

FS-02008

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
01	FLOOR	1	4		X							X		6/1/05	1422

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	8021B 8015-Mod	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	Turn Around Time if different from standard	Hold
X	X	X															

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	6/2/05				
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: [signature]	6-02-05	1550

LAB USE ONLY
Intact (Y) N
Headspace Y N
Temp. 4.0° C
Log-in Review

REMARKS: Rec w/ Label & Custody Se

☐ Check If Special Reporting Limits Are Needed

Carrier # _____

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

ORIGINAL COPY

Variance / Corrective Action Report – Sample Log-In

Client: Nova-Plans

Date/Time: 6/2/05 13:50

Order #: 5F02008

Initials: CJR

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	4.0 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:

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
2057 Commerce St.
Midland, TX 79703

Report Date: July 13, 2005

Work Order: 5070715

Project Name: TNM 98-05B
Project Number: TNM 98-05B

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
67449	SE-1	soil	2005-07-05	12:00	2005-07-07
67450	NE-1	soil	2005-07-05	12:07	2005-07-07
67451	SW-1	soil	2005-07-05	12:11	2005-07-07
67452	NW-1	soil	2005-07-05	12:27	2005-07-07

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

Dr. Blair Leftwich, Director

Analytical Report

Sample: 67449 - SE-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19528	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.08	mg/Kg	10	0.100	108	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	36.6 - 112

Sample: 67449 - SE-1

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	19516	Date Analyzed:	2005-07-07	Analyzed By:	WB
Prep Batch:	17136	Sample Preparation:	2005-07-07	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**10.8**	mg/Kg	5	1.00

Sample: 67449 - SE-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19544	Date Analyzed:	2005-07-11	Analyzed By:	DS
Prep Batch:	17173	Sample Preparation:	2005-07-08	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**492**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		204	mg/Kg	1	150	136	57.5 - 139

Sample: 67449 - SE-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19527	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.09	mg/Kg	10	0.100	109	10 - 160
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	10	0.100	107	10 - 174

Sample: 67450 - NE-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19528	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.13	mg/Kg	10	0.100	113	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	10	0.100	111	36.6 - 112

Sample: 67450 - NE-1

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	19516	Date Analyzed:	2005-07-07	Analyzed By:	WB
Prep Batch:	17136	Sample Preparation:	2005-07-07	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11.3**	mg/Kg	5	1.00

Sample: 67450 - NE-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19544	Date Analyzed:	2005-07-11	Analyzed By:	DS
Prep Batch:	17173	Sample Preparation:	2005-07-08	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**281**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		174	mg/Kg	1	150	116	57.5 - 139

Sample: 67450 - NE-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19527	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.15	mg/Kg	10	0.100	115	10 - 160
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	10	0.100	112	10 - 174

Sample: 67451 - SW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19528	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.11	mg/Kg	10	0.100	111	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	10	0.100	107	36.6 - 112

Sample: 67451 - SW-1

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	19516	Date Analyzed:	2005-07-07	Analyzed By:	WB
Prep Batch:	17136	Sample Preparation:	2005-07-07	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**11.8**	mg/Kg	5	1.00

Sample: 67451 - SW-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19544	Date Analyzed:	2005-07-11	Analyzed By:	DS
Prep Batch:	17173	Sample Preparation:	2005-07-08	Prepared By:	DS

Parameter	Flag	Result	RL Result	Units	Dilution	RL
DRO			**336**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		204	mg/Kg	1	150	136	57.5 - 139

Sample: 67451 - SW-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19527	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.13	mg/Kg	10	0.100	113	10 - 160
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	10 - 174

Sample: 67452 - NW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19528	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

Parameter	Flag	Result	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)		1.06	mg/Kg	10	0.100	106	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	36.6 - 112

Sample: 67452 - NW-1

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	19516	Date Analyzed:	2005-07-07	Analyzed By:	WB
Prep Batch:	17136	Sample Preparation:	2005-07-07	Prepared By:	WB

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Chloride			**11.8**	mg/Kg	5	1.00

Sample: 67452 - NW-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19544	Date Analyzed:	2005-07-11	Analyzed By:	DS
Prep Batch:	17173	Sample Preparation:	2005-07-08	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		204	mg/Kg	1	150	136	57.5 - 139

Sample: 67452 - NW-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19527	Date Analyzed:	2005-07-08	Analyzed By:	KB
Prep Batch:	17161	Sample Preparation:	2005-07-08	Prepared By:	KB

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)		1.07	mg/Kg	10	0.100	107	10 - 160
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	10 - 174

Matrix Blank (1) QC Batch: 19516

Parameter	Flag	MDL Result	Units	RL
Chloride		1.75	mg/Kg	1

Method Blank (1) QC Batch: 19527

Parameter	Flag	MDL Result	Units	RL
GRO		2.11	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.956	mg/Kg	10	0.100	96	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.904	mg/Kg	10	0.100	90	50.7 - 113

Method Blank (1) QC Batch: 19528

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)		0.940	mg/Kg	10	0.100	94	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.903	mg/Kg	10	0.100	90	36.6 - 112

Method Blank (1) QC Batch: 19544

Parameter	Flag	MDL Result	Units	RL
DRO		<5.35	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	57.5 - 139

Laboratory Control Spike (LCS-1) QC Batch: 19516

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	13.4	13.5	mg/Kg	1	12.5	1.75	93	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 19527

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	10.7	10.9	mg/Kg	10	1.00	<0.381	107	2	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)	1.12	1.05	mg/Kg	10	0.100	112	105	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.987	0.984	mg/Kg	10	0.100	99	98	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 19528

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.974	0.869	mg/Kg	10	0.100	<0.0333	97	11	79.8 - 114	20

continued ...

control spikes continued...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Toluene	0.986	0.880	mg/Kg	10	0.100	<0.0353	99	11	79.7 - 115	20
Ethylbenzene	1.02	0.919	mg/Kg	10	0.100	<0.0339	102	10	78.7 - 116	20
Xylene	3.04	2.72	mg/Kg	10	0.300	<0.103	101	11	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)	0.967	0.932	mg/Kg	10	0.100	97	93	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.979	0.913	mg/Kg	10	0.100	98	91	72 - 111

Laboratory Control Spike (LCS-1) QC Batch: 19544

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	292	277	mg/Kg	1	250	<5.35	117	5	84 - 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
n-Triacontane	134	129	mg/Kg	1	150	89	86	57.5 - 139

Matrix Spike (MS-1) QC Batch: 19516 Spiked Sample: 66647

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	81.5	81.9	mg/Kg	5	12.5	21.7	96	0	60.9 - 143	20

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

Matrix Spike (MS-1) QC Batch: 19527 Spiked Sample: 67449

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	12.2	12.4	mg/Kg	10	1.00	<0.381	122	2	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)	0.975	0.852	mg/Kg	10	0.1	98	85	10 - 160
4-Bromofluorobenzene (4-BFB)	1.22	1.15	mg/Kg	10	0.1	122	115	10 - 174

Matrix Spike (MS-1) QC Batch: 19528 Spiked Sample: 67449

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	[12]	1.08	1.05	mg/Kg	10	0.100	<0.0333	108	3	63.5 - 98.6	20
Toluene	[34]	1.13	1.10	mg/Kg	10	0.100	<0.0353	113	3	65.8 - 102	20
Ethylbenzene	[56]	1.22	1.19	mg/Kg	10	0.100	<0.0339	122	2	66.6 - 106	20
Xylene	[78]	3.65	3.56	mg/Kg	10	0.300	<0.103	122	2	67.4 - 108	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
Trifluorotoluene (TFT)	[910]	1.13	1.05	mg/Kg	10	0.1	113	105	60.1 - 104
4-Bromofluorobenzene (4-BFB)	[11]	1.13	1.05	mg/Kg	10	0.1	113	105	63.1 - 105

Matrix Spike (MS-1) QC Batch: 19544 Spiked Sample: 67382

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	558	582	mg/Kg	1	250	294	106	4	70 - 130	20

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

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	[1213]	259	264	mg/Kg	1	150	173	176	57.5 - 139

Standard (ICV-1) QC Batch: 19516

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2005-07-07

Standard (CCV-1) QC Batch: 19516

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2005-07-07

[1]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[9]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[10]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[11]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[12]High surrogate recovery due to peak interference.
[13]High surrogate recovery due to peak interference.

Standard (ICV-1) QC Batch: 19527

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.962	96	85 - 115	2005-07-08

Standard (CCV-1) QC Batch: 19527

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.956	96	85 - 115	2005-07-08

Standard (ICV-1) QC Batch: 19528

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0959	96	85 - 115	2005-07-08
Toluene		mg/Kg	0.100	0.0961	96	85 - 115	2005-07-08
Ethylbenzene		mg/Kg	0.100	0.0995	100	85 - 115	2005-07-08
Xylene		mg/Kg	0.300	0.296	99	85 - 115	2005-07-08

Standard (CCV-1) QC Batch: 19528

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0981	98	85 - 115	2005-07-08
Toluene		mg/Kg	0.100	0.0989	99	85 - 115	2005-07-08
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-08
Xylene		mg/Kg	0.300	0.301	100	85 - 115	2005-07-08

Standard (ICV-1) QC Batch: 19544

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	276	110	57.5 - 139	2005-07-11

Standard (CCV-1) QC Batch: 19544

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	110	57.5 - 139	2005-07-11

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5070715

Company Name: NOVA
Phone #: 520 7720
Address: (Street, City, Zip) 2057 Commerce
Fax #: 7701
Contact Person: Curt Stanley
Invoice to: (If different from above) Plains
Project #: TNM 98-05B
Project Name: TNM 98-053
Project Location:
Sampler Signature:

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	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH (418.1) TX1005 DRO/GRO	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	CHLORIDES	Turn Around Time if different from standard	Hold
47449	SE-1	1	4		X							X		7/5/05	1200		X	X												X	X		
50	NE-1	1	4		X							X			1207		X	X												X	X		
51	SW-1	1	4		X							X			1211		X	X												X	X		
52	NW-1	1	4		X							X			1227		X	X												X	X		

	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
		7/06/05	1730	Ellen Shelton	7/06/05	1730
	Ellen Shelton	7/06/05	1745			
				Received at Laboratory by:	Date:	Time:
					7/7/05	9:40

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

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier # Fine Arm 9139 4650

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 4 samples HS

ORIGINAL COPY

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

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

Report Date: September 13, 2005

Work Order: 5091208

Project Location: 9805-B
Project Name: 9805-B
Project Number: TNM-9805-B

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
73124	NW-1	soil	2005-09-07	15:46	2005-09-10
73125	NE-1	soil	2005-09-07	15:34	2005-09-10
73126	SW-1	soil	2005-09-07	15:22	2005-09-10
73127	SE-1	soil	2005-09-07	15:05	2005-09-10

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: 73124 - NW-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	21197	Date Analyzed:	2005-09-12	Analyzed By:	JL
Prep Batch:	18606	Sample Preparation:	2005-09-12	Prepared By:	JL

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	50 - 150

Sample: 73124 - NW-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	21209	Date Analyzed:	2005-09-12	Analyzed By:	MT
Prep Batch:	18617	Sample Preparation:	2005-09-12	Prepared By:	MT

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)		1.06	mg/Kg	10	0.100	106	10 - 160
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	10	0.100	101	10 - 174

Sample: 73125 - NE-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	21197	Date Analyzed:	2005-09-12	Analyzed By:	JL
Prep Batch:	18606	Sample Preparation:	2005-09-12	Prepared By:	JL

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**74.7**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	50 - 150

Sample: 73125 - NE-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	21209	Date Analyzed:	2005-09-12	Analyzed By:	MT
Prep Batch:	18617	Sample Preparation:	2005-09-12	Prepared By:	MT

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)		0.854	mg/Kg	10	0.100	85	10 - 160
4-Bromofluorobenzene (4-BFB)		0.975	mg/Kg	10	0.100	98	10 - 174

Sample: 73126 - SW-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	21197	Date Analyzed:	2005-09-12	Analyzed By:	JL
Prep Batch:	18606	Sample Preparation:	2005-09-12	Prepared By:	JL

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**52.8**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	92	50 - 150

Sample: 73126 - SW-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	21209	Date Analyzed:	2005-09-12	Analyzed By:	MT
Prep Batch:	18617	Sample Preparation:	2005-09-12	Prepared By:	MT

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)		1.06	mg/Kg	10	0.100	106	10 - 160
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	10	0.100	109	10 - 174

Sample: 73127 - SE-1

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	21197	Date Analyzed:	2005-09-12	Analyzed By:	JL
Prep Batch:	18606	Sample Preparation:	2005-09-12	Prepared By:	JL

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		142	mg/Kg	1	150	95	50 - 150

Sample: 73127 - SE-1

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	21209	Date Analyzed:	2005-09-12	Analyzed By:	MT
Prep Batch:	18617	Sample Preparation:	2005-09-12	Prepared By:	MT

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)		0.947	mg/Kg	10	0.100	95	10 - 160
4-Bromofluorobenzene (4-BFB)		0.989	mg/Kg	10	0.100	99	10 - 174

Method Blank (1) QC Batch: 21197

Parameter	Flag	MDL Result	Units	RL
DRO		<12.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	50 - 150

Method Blank (1) QC Batch: 21209

Parameter	Flag	MDL Result	Units	RL
GRO		2.10	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.966	mg/Kg	10	0.100	96	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	10	0.100	85	50.7 - 113

Laboratory Control Spike (LCS-1) QC Batch: 21197

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	233	249	mg/Kg	1	250	<12.0	93	7	70 - 130	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	138	134	mg/Kg	1	150	92	89	50 - 150

Laboratory Control Spike (LCS-1) QC Batch: 21209

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.27	9.77	mg/Kg	10	1.00	<0.381	93	5	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)	0.877	0.916	mg/Kg	10	0.100	88	92	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.992	1.01	mg/Kg	10	0.100	99	101	72.2 - 119

Matrix Spike (MS-1) QC Batch: 21197 Spiked Sample: 73129

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	285	277	mg/Kg	1	250	114.9	68	3	70 - 130	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	130	136	mg/Kg	1	150	87	91	50 - 150

Matrix Spike (MS-1) QC Batch: 21209 Spiked Sample: 73124

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.62	9.50	mg/Kg	10	1.00	<0.381	96	1	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)	0.928	0.835	mg/Kg	10	0.1	93	84	10 - 160
4-Bromofluorobenzene (4-BFB)	1.06	0.991	mg/Kg	10	0.1	106	99	10 - 174

Standard (ICV-1) QC Batch: 21197

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	284	114	75 - 125	2005-09-12

Standard (CCV-1) QC Batch: 21197

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	242	97	75 - 125	2005-09-12

Standard (ICV-1) QC Batch: 21209

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.962	96	85 - 115	2005-09-12

Standard (CCV-1) QC Batch: 21209

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.885	88	85 - 115	2005-09-12

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 #_____

Company Name: Nova — Phone #: 432-520-7720

Address: (Street, City, Zip) 2057 Commerce — Fax #: 432-550-7701

Contact Person: Curt Stanley — e-mail:

Invoice to: (if different from above) Plains

Project #: TNM-9805-B — Project Name: 9805-B

Project Location: 9805-B — Sampler Signature:

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	TIME
	NW - 1	1	40g		X							X		9/7/05	1546
	NE - 1	1	40g		X							X			1534
	SW - 1	1	40g		X							X			1522
	SE - 1	1	40g		X							X			1505

MTBE 8021B/602	BTEX 8021B/602	~~TPH 418.1/TX1005~~ 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																			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	9-9-05	1400		9/9/05	1400
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp ____ °

Log-in Review ____

REMARKS:

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

Carrier # Fed Ex

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

CHART COPY

Appendix B
Photographs

Looking Northwest from East wall toward monitor well MW-1

Looking South from Northeast wall toward South wall and ramp,
monitor well MW-1 in foreground

Looking Northwest from east wall toward Northeast quadrant wall, stockpiles at right

.Northeast quadrant floor from east wall

Floor excavation from East wall

Looking North from South wall

Appendix C
Form C-141

District I
625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Marketing, LP	Contact Camille Reynolds
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965
Facility Name TNM 98-05B	Facility Type 6" Steel Pipeline

Surface Owner Delrose Scott	Mineral Owner	Lease No.

LOCATION OF RELEASE

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

Latitude 32° 27' 03.8" **Longitude** 103°08' 30.3"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 49 barrels	Volume Recovered 3 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 02-05-1998	Date and Hour of Discovery 02-05-1998
Was Immediate Notice Given? x Yes ☐ No ☐ Not Required	If YES, To Whom? Linda Williams	
By Whom? Johnny Chapman	Date and Hour 02-05-1998 @15:00	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* External corrosion of 6 inch pipeline.

Describe Area Affected and Cleanup Action Taken.* Aerial extent of surface impact was approximately 100 x 30 feet.
NOTE: This information was obtained from historical EOTT/Link files, Plains acquired EOTT/Link on April 1, 2004 and Plains assumes this information to be correct. The release occurred during the time the pipeline was owned and operated by Texas-New Mexico Pipeline Company.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	Attached ☐
Date: 02/03/2005 Phone:505-441-0965		

Attach Additional Sheets If Necessary