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ANNUAL MONITORING REPORT

YEAR(S):



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

April 19, 2006

Ms. Camille Reynolds Plains Marketing, L.P. 3112 West Highway 82 Lovington, NM 88260

RE: 2005 Annual Monitoring Report Plains TNM 98-05A Site NE/4 NW/4 Section 26, Township 21 South, Range 37 East Lea County, New Mexico Plains EMS Number: TNM 98-05A NMOCD File Number: AP-0012

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report submitted on behalf of Plains Marketing, L.P. (Plains) by NOVA Safety and Environmental. This report is hereby accepted and approved with the following understandings and conditions:

Plains will continue to monitor the groundwater at the site and report the associated activities during 2006 on the 2006 Annual Monitoring Report due to be submitted to this office by April 1, 2007.

NMOCD approval does not relieve Plains of liability should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Martin

Edwin E. Martin Environmental Bureau

Copy: NMOCD, Hobbs Curt Stanley, NOVA 2005 ANNUAL MONITORING REPORT

 \mathbf{NO}

TNM 98-05A NE 1/4 NW 1/4 OF SECTION 26, TOWNSHIP 21 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS EMS NUMBER: TNM-98-05A **NMOCD Reference AP-12**

Report is on the L-Drive

AP-12

Prepared for:

PLAINS MARKETING L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002

Prepared By:

NOVA Safety and Environmental 2057 Commerce Street Midland, Texas 79703

March 2006

Curt D. Stanley Project Manager

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Figure 3B - Groundwater Concentration and Inferred PSH Map June 7, 2005

Figure 3C – Groundwater Concentration and Inferred PSH Map September 7, 2005

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ENCLOSED ON DATA DISK

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INTRODUCTION

NOVA Safety and Environmental (NOVA) on behalf of Plains Pipeline, L.P. (Plains) has prepared this 2005 Annual Groundwater Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc. (ETGI). This report is intended to be viewed as a complete document with figures, attachments, tables, and text. The report presents the results of four quarterly groundwater monitoring/sampling events conducted at the TNM 98-05A crude oil release site (the site), located in Lea County, New Mexico. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. For reference, the Site Location Map is provided as Figure 1.

Groundwater gauging and sampling was conducted during each quarter of 2005 to assess the levels and extent of Phase Separated Hydrocarbons (PSH) and dissolved phase constituents. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells are not sampled if a measurable thickness of PSH is detected during gauging activities. Manual product abatement is performed on a monthly basis on monitor wells known to contain a measurable thickness of PSH.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately two miles northeast of the town of Eunice. New Mexico. The legal description of the site is Section 26, Township 21 South, Range 37 East (Figutre 1). On February 5, 1998 an estimated 38 barrels of crude oil was released from a six (6) inch crude oil pipeline. Approximately four (4) barrels were recovered during the emergency response The release was attributed to internal corrosion of the pipeline. The Release activities. Notification and Corrective Action Form (C-141) is provided as Appendix A. Approximately 3,300 cubic yards of impacted soil was excavated and applied to an on-site treatment cell. In December 2004, a Site Restoration Work Plan and Proposed Soil Closure Strategy Report was submitted to the NMOCD. The report was approved by the NMOCD in a letter dated June 2, 2005. In October 2005, additional excavation along the east sidewall was completed, the excavation was backfilled with remediated treatment cell soil and the site was graded to match the surrounding topography. In December 2005, a Soil Closure Request was submitted to the NMOCD and this request was approved by the NMOCD in a letter dated January 31, 2006. Plains will take no further action with regard to soil remediation at the TNM-98-05A site, unless directed by the NMOCD.

During the October 2005 excavation backfilling activities, monitor well MW-4 was damaged. The damaged monitor well (MW-4) was not sampled during the fourth quarter 2005 sampling event. Plains will submit a written request to plug and abandon monitor well MW-4 in the first quarter of 2006.

During the October 2005 excavation backfilling activities, the upper fifteen (15) feet of casing in

monitor well MW-1 was inadvertently pushed out of vertical alignment. The vertical displacement of the casing did not allow a standard size bailer to be used for groundwater sampling during the fourth quarter of 2005. On January 12, 2006, monitor well MW-1 was sampled utilizing a small diameter bailer and the analytical results are presented in this 2005 Annual Monitoring Report.

There are currently eleven monitor wells on-site. Monitor well MW-11 was installed on December 1, 2004 for delineation purposes. Manual product recovery (when present) is being conducted on a monthly basis.

FIELD ACTIVITIES

During the reporting period, a measurable thickness of PSH was detected in monitor wells MW-2 and MW-11 * on January 10, 2005 and September 7, 2005, respectively. A sheen was reported in monitor wells MW-1, MW-2, MW-4, MW-9 and MW-10 throughout most of the reporting period. PSH thicknesses ranged from 0.01 feet in monitor well MW-11 * to a maximum of 0.08 feet observed in monitor well MW-2. Table 1 displays the groundwater gauging and PSH thickness data for the reporting period. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

* Monitor well MW-11 gauging data collected on September 7, 2005 indicates a PSH thickness of 0.01 feet; this appears to be incongruous based on prior and subsequent data and historical trends.

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004. The table below illustrates the current groundwater sampling schedule approved by the NMOCD.

Sample Location	Sampling Schedule	
MW-1	Quarterly	
MW-2	Quarterly	
MW-3	Quarterly	
MW-4	Quarterly	
MW-5	Annual	
MW-6	Semi-annual	
MW-7 Semi-annual		
MW-8	Annual	
MW-9	Quarterly	
MW-10	Quarterly	
MW-11	Quarterly	

Quarterly sampling events for the calendar year 2005 were performed on March 7, June 7, September 7, and December 14. Each quarterly sampling event consisted of gauging all wells and purging and sampling monitor wells as per the approved sampling schedule. Monitor wells containing a measurable thickness of PSH were not sampled. During each sampling event, the

monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy of Lovington, New Mexico, utilizing a licensed disposal facility (NMOCD AO SWD-730).

The inferred groundwater gradient is depicted on Figures 2A through 2D. Groundwater elevation contours, generated from gauging data acquired during each quarterly sampling event of 2005, indicates a general groundwater gradient of 0.002 feet/foot to the southeast, as measured between monitor wells MW-5 and MW-6. Groundwater elevation data for the calendar year 2005 is provided in Table 1. Historic groundwater elevation data beginning at project inception is enclosed on the enclose data disk.

LABORATORY RESULTS

Monitor wells MW-1 and MW-4 were not sampled in the fourth quarter of 2005, due to damage sustained during backfilling activities. Monitor well MW-11 was not sampled in the third quarter of 2005, due to gauging data collected on September 8, 2005, indicating a PSH thickness of 0.01 feet. The third quarter gauging data collected at monitor well MW-11 appears to be congruous based on prior and subsequent data and historical trends.

Groundwater samples collected during the 2005 groundwater sampling events were delivered to Trace Analysis, Inc. of Lubbock, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method SW846-8021b.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2005 monitoring period indicates benzene and BTEX constituent concentrations are below NMOCD regulatory standards in monitor wells MW-3, MW-5, MW-6, MW-7 and MW-8 and MW-11. The results indicate the benzene concentration was above regulatory standards in monitor wells MW-4 during the second and third quarters and MW-9 during the first, second and third quarters, but below BTEX constituent regulatory standards. As discussed above, monitor wells MW-1 and MW-4 could not be sampled in the fourth quarter 2005 due to damaged sustained during excavation backfilling operations. The data indicates benzene and BTEX constituent concentrations above regulatory standards were detected in monitor wells MW-1, MW-2 and MW-10 in all quarters of 2005. Monitor well MW-1 was sampled on January 12, 2006, utilizing a small diameter bailer and the analytical results are presented in this 2005 Annual Monitoring Report.

A listing of BTEX constituent concentrations for each 2005 quarterly sampling event is summarized in Table 2. Copies of the laboratory reports generated during this reporting period are provided on the enclosed data disk. Quarterly groundwater sample results reflecting benzene and BTEX constituent concentrations and inferred PSH extent maps are depicted on Figures 3A through 3D.

SUMMARY

This report presents the results of four groundwater monitoring and sampling events for the annual monitoring period of calendar year 2005. Detectable or measurable amounts of PSH were encountered in two (2) of the eleven (11) on site monitor wells (MW-2 and MW-11*) during this reporting period.

* Monitor well MW-11 gauging data collected on September 7, 2005 indicates a PSH thickness of 0.01 feet; this appears to be incongruous based on prior and subsequent data and historical trends.

Groundwater elevation contours, generated from water level measurements acquired during the quarterly sampling events of 2005, indicated a general gradient to the southeast.

Benzene and BTEX constituent concentrations were below NMOCD regulatory standards in six (6) of the eleven (11) site monitor wells during the reporting period. Benzene concentrations were above NMOCD regulatory standards, but below the BTEX constituent concentration guidelines for a least two (2) quarters of 2005, in two (2) of the eleven (11) site monitor wells. Benzene and BTEX constituent concentrations were above the NMOCD regulatory standards in three (3) of the eleven (11) site monitor wells. Monitor well MW-1 was not sampled on December 14, 2005 due to damage sustained during backfilling operations, but was sampled on January 12, 2006 with NMOCD approval and the analytical results are presented in this 2005 Annual Monitoring Report.

ANTICIPATED ACTIONS

Plains will continue to monitor and perform quarterly groundwater sampling activities at the site. Plains will submit a groundwater and site closure request to the NMOCD when groundwater analytical results demonstrate groundwater contaminant concentrations are below the regulatory standards for the required eight (8) consecutive quarters.

LIMITATIONS

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

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DISTRIBUTION

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Figures



















Tables



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TABLE 1 2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP TNM 98-05A LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	01/03/05	3390.57	sheen	35.01	0.00	3,355,56
	01/10/05	3390.57	sheen	35.21	0.00	3,355.36
	01/17/05	3390.57	sheen	35.19	0.00	3,355.38
	01/24/05	3390.57	sheen	35.17	0.00	3,355.40
	01/31/05	3390.57	sheen	35.29	0.00	3,355.28
	02/07/05	3390.57	sheen	35.21	0.00	3,355.36
	02/14/05	3390.57	sheen	35.28	0.00	3,355.29
	02/21/03	3390.57	sheen	35.25	0.00	3,355.32
	03/07/05	3390.57	silcen	35.07	0.00	3,355.50
	03/07/05	3390.57	sheen	35.07	0.00	3,355.50
	03/16/05	3390.57	sheen	35.00	0.00	3,355.57
	03/21/05	3390.57	sheen	34.95	0.00	3,355.62
	03/28/05	3390.57	sheen	35.04	0.00	3,355.53
	04/04/05	3390.57	sheen	35.07	0.00	3,355.50
	04/13/05	3390.57	sheen	35.09	0.00	3,355.48
	04/18/05	3390.57	sheen	35.10	0.00	3,355.47
	05/23/05	3390.57	sheen	35.24	0.00	3,355.33
	06/07/05	3390.57	-	35.05	0.00	3,333.32
	07/26/05	3390.37	sheen	35.20	0.00	3,333.37
	08/25/05	3390.57	sheen	35.05	0.00	3 355 34
	09/07/05	3390.57	sheen	35.20	0.00	3,355.37
	09/26/05	3390.57	sheen	35.35	0.00	3,355.22
Monitor well ri	ser was extended ar	nd resurveyed - note ele	vation change			
	11/14/05	3391.62	sheen	49.84	0.00	3,341.78
	12/14/05	3391.62		46.80	0.00	3,344.82
	12/28/05	3391.62	sheen	46.55	0.00	3,345.07
MW-2	01/03/05	3390.85	sheen	46.59	0.00	3,344.26
	01/10/05	3390.85	47.10	47.18	0.08	3,343.74
	01/1//05	3390.85	sheen	40./0	0.00	3,344.09
	01/24/05	3390.85	sheen	40.82	0.00	3 344.05
	02/07/05	3390.85	sheen	46.81	0.00	3,343.90
	02/14/05	3390.85	sheen	46.93	0.00	3 343 92
	02/21/05	3390.85	sheen	46.87	0.00	3,343,98
	02/28/05	3390.85	sheen	46.90	0.00	3,343.95
	03/07/05	3390.85	-	46.75	0.00	3,344.10
	03/07/05	3390.85	sheen	46.75	0.00	3,344.10
	03/16/05	3390.85	sheen	46.58	0.00	3,344.27
	03/21/05	3390.85	sheen	46.52	0.00	3,344.33
	03/28/05	3390.85	sheen	46.67	0.00	3,344.18
	04/04/05	3390.85	sheen	46.66	0.00	3,344.19
	04/13/05	3390.85	sheen	40.07	0.00	3,544.18
h	05/22/05	3300.05	sneen	40.04	0.00	3,344.21
	05/23/05	3390.85	SHEEH	40.09	0.00	3 344 19
	06/21/05	3390.85	sheen	46.83	0.00	3.344.02
	07/26/05	3390.85	sheen	46.69	0.00	3,344.16
	08/25/05	3390.85	sheen	46.71	0.00	3,344.14
	09/07/05	3390.85		46.68	0.00	3,344.17
	09/26/05	3390.85	sheen	46.78	0.00	3,344.07
	11/14/05	3390.85	sheen	46.51	0.00	3,344.34
	12/14/05	3390.85	<u> </u>	46.09	0.00	3,344.76
	12/28/05	3390.85	sheen	45.81	0.00	3,345.04
M31/ 2	02/07/05	2201.09		46 70	0.00	2 244 30
141 44 - 3	05/07/05	3391.08		40.78	0.00	3,344.30
	09/07/05	3391.08	·	46.78	0.00	3 344 30
	12/14/05	3391.08	· · ·	46.25	0.00	3,344.83
			· · · ·	•		
MW-4	12/20/05	3390.81	sheen	46.77	0.00	3,344.04
	12/30/04	3390.81	sheen	46.50	0.00	3,344.31
	01/03/05	3390.81	sheen	46.54	0.00	3,344.27
	01/10/05	3390.81	sheen	46.66	0.00	3,344.15
	01/17/05	3390.81	sheen	46.78	0.00	3,344.03
	01/24/05	3390.81	sheen	40.82	0.00	3,343.99
	02/07/05	3300.81	sheen	40.92	0.00	3,343.89
L	1 02/07/05	3370.01	ancen	1 70.00	0.00	3,545.95

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TABLE 1

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP TNM 98-05A LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-4	02/14/05	3390.81	sheen	46.89	0.00	3,343.92
	02/21/05	3390.81	sheen	46.92	0.00	3,343.89
	02/28/05	3390.81	sheen	46.96	0.00	3,343.85
	03/07/05	3390.81		46.60	0.00	3,344.21
	03/07/05	3390.81	sheen	46.60	0.00	3,344.21
	03/16/05	3390.81	sheen	46.89	0.00	3,343.92
	03/21/05	3390.81	sheen	46.54	0.00	3,344.27
	03/28/05	3390.81	sheen	40.00	0.00	3,344.15
	04/04/05	3390.81	sheen	40.03	0.00	3,344.18
	04/13/05	3390.81	Sheen	46.63	0.00	3 344.10
	05/23/05	3390.81	sheen	46.03	0.00	3 343 88
	06/07/05	3390.81	-	46 70	0.00	3,344,11
	06/21/05	3390.81	sheen	46.90	0.00	3.343.91
	07/26/05	3390.81	sheen	46.68	0.00	3.344.13
	08/25/05	3390.81	sheen	46.69	0.00	3,344.12
	09/07/05	3390.81	sheen	46.73	0.00	3,344.08
	09/26/05	3390.81	sheen	46.88	0.00	3,343.93
Monitor well w	as damaged during	backfilling operations	· · ·			
	11/14/05		sheen	46.49	0.00	
Monitor well w	as repaired and resu	urveyed - note change i	n elevation			
		3390.94	-		0.00	3,390.94
	12/14/05	3390.94	Could not San	plè - obstructe	1	
	12/28/05	3391.94	DRY	43.40		3,348.54
MW-5	03/07/05	3391.53	· ·	47.14	0.00	3,344.39
	06/07/05	3391.53	-	47.07	0.00	3,344.46
	0907/05	3391.53	-	47.05	0.00	3,344.48
	12/14/05	3391.53		46.60	0.00	3,344.93
<u>MW-6</u>	03/07/05	3391.14	-	47.05	0.00	3,344.09
	06/07/05	3391.14	-	47.20	0.00	3,343.94
	09/07/05	3391.14	··	47.28	0.00	3,343.86
······································	12/14/05	3391.14		46.51	0.00	3,344.63
	03/07/05	3301.21		47.00	0.00	3 344 21
	06/07/05	3391.21		47.00	0.00	3 344 07
	09/07/05	3391.21		47.22	0.00	3 343 99
	12/14/05	3391.21		46.48	0.00	3 344 73
		.	A	.		
MW-8	03/07/05	3391.14	-	46.97	0.00	3,344.17
	06/07/05	3391.14	-	47.12	0.00	3,344.02
	09/07/05	3391.14	-	47.19	0.00	3,343.95
	12/14/05	3391.14	•	46.47	0.00	3,344.67
		-				
MW-9	03/07/05	3391.47	-	47.25	0.00	3,344.22
	06/07/05	3391.47	sheen	47.23	0.00	3,344.24
	09/07/05	3391.47	sheen	47.23	0.00	3,344.24
	12/14/05	3391.47	-	46.65	0.00	3,344.82
MW 10	01/02/05	3301.26	chaan	46.07	0.00	3 344 20
LVI VV - I U	01/10/05	3391.20	sheen	40.97	0.00	3,344.29
	01/17/05	3391.20	sheen	47.17	0.00	3 344 07
	01/24/05	3391.26	sheen	47.17	0.00	3 344 04
	01/31/05	3391.26	sheen	47.32	0.00	3.343.94
	02/07/05	3391.26	sheen	47.26	0.00	3.344.00
	02/14/05	3391.26	sheen	47.30	0.00	3,343.96
	02/21/05	3391.26	sheen	47.31	0.00	3,343.95
	02/28/05	3391.26	sheen	47.33	0.00	3,343.93
	03/07/05	3391.26	-	47.17	0.00	3,344.09
	03/07/05	3391.26	sheen	47.17	0.00	3,344.09
	03/16/05	3391.26	sheen	47.00	0.00	3,344.26
	03/21/05	3391.26	sheen	46.94	0.00	3,344.32
	03/28/05	3391.26	sheen	47.07	0.00	3,344.19
	04/04/05	3391.26	sheen	46.10	0.00	3,345.16
	04/13/05	3391.26	sheen	46.13	0.00	3,345.13
	04/18/05	3391.26	sheen	47.02	0.00	3,344.24
	05/23/05	3391.20	sheen	47.30	0.00	3 343.90
	06/21/05	3301.20	sheen	47.11	0.00	3 3/2 00
	00/21/00	JJ71.40	Sheen	71.41	0.00	

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2005 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP TNM 98-05A LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-10	07/26/05	3391.26	sheen	47.04	0.00	3,344.22
	08/25/05	3391.26	sheen	47.14	0.00	3,344.12
	09/07/05	3391.26	-	47.18	0.00	3,344.08
	09/26/05	3391.26	sheen	47.25	0.00	3,344.01
	11/14/05	3391.26	sheen	46.95	0.00	3,344.31
	12/14/05	3391.26		46.52	0.00	3,344.74
<u>MW-11</u>	03/07/05	3390.73	-	46.95	0.00	3,343.78
	06/07/05	3390.73	-	46.62	0.00	3,344.11
*	09/07/05	3390.73	46.65	46.66	0.01	3,344.08
	09/26/05	3390.73	sheen	46.78	0.00	3,343.95
	12/14/05	3390.73	-	46.00	0.00	3,344.73

* Monitor well MW-11 gauging data collected on September 7, 2006 indicates a PSH thickness of 0.01 feet, this data appears to be incongruous based on prior and subsequent data and historical trends.

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TABLE 2

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

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

SW 846-8021B, 5030 SAMPLE SAMPLE ETHYLm, p -0 -LOCATION BENZENE TOLUENE DATE BENZENE XYLENES XYLENE NMOCD REGULATORY 0.01 0.75 0.62 0.75 LIMITS MW-1 03/07/05 16.900 <0.1 1.500 0.644 06/07/05 15.6 < 0.2 1.91 0.807 09/07/05 9.6 < 0.2 1.60 0.553 12/14/05 Not Sampled 01/12/06 1.0 0.242 0.77 0.534 MW-2 03/07/05 6.020 1.510 1.170 1.270 06/07/05 3.96 0.371 1.34 1.13 09/07/05 4.67 0.283 1.21 1.04 12/14/05 0.969 0.327 0.699 0.423 MW-3 03/07/05 < 0.001 < 0.001 < 0.001 < 0.001 06/07/05 0.0064 < 0.001 < 0.001 < 0.001 09/07/05 0.0057 < 0.001 < 0.001 0.001 < 0.005 < 0.005 12/14/05 < 0.005 < 0.005 MW-4 03/07/05 < 0.001 < 0.001 < 0.001 < 0.001 06/07/05 0.0821 0.0023 < 0.001 0.0019 09/07/05 0.0704 0.0045 0.001 0.0024 12/14/05 Not Sampled - well damaged MW-5 03/07/05 Not Sampled Due to Sample Reduction 06/07/05 Not Sampled Due to Sample Reduction 09/07/05 Not Sampled Due to Sample Reduction 12/14/05 < 0.005 < 0.005 < 0.005 < 0.005 MW-6 03/07/05 Not Sampled Due to Sample Reduction 06/07/05 < 0.001 < 0.001 < 0.001 < 0.001 09/07/05 Not Sampled Due to Sample Reduction 12/14/05 < 0.005 < 0.005 < 0.005 < 0.005 MW-7 03/07/05 Not Sampled Due to Sample Reduction 06/07/05 < 0.001 < 0.001 < 0.001 < 0.001 09/07/05 Not Sampled Due to Sample Reduction < 0.005 12/14/05 < 0.005 < 0.005 < 0.005

All concentrations are reported in mg/L

1 of 2

TABLE 2

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

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

			sv	V 846-8021B, 503	0	
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - Xylene
NMOCD REGULATORY LIMITS		0.01	0.75	0.75	0.	62
MW-8	03/07/05	Not Sample	d Due to Samp	ole Reduction		
	06/07/05	Not Sample	d Due to Samp	ole Reduction		
	09/07/05	Not Sample	d Due to Samp	ole Reduction		
	12/14/05	< 0.005	< 0.005	< 0.005	<0.	005
MW-9	03/07/05	0.016	< 0.005	0.024	0.055	
	06/07/05	0.0499	0.0183	0.0856	0.150	
	09/07/05	0.0123	0.0073	0.0454	0.063	
	12/14/05	< 0.005	< 0.005	0.0186	0.0149	
MW-10	03/07/05	5.690	0.491	0.984	0.9	08
	06/07/05	4.35	0.0618	0.510	0.2	.64
	09/07/05	5.63	<0.2	1.790	1.1	80
	12/14/05	2.32	< 0.05	< 0.05	0.168	
					·······	
MW-11	03/07/05	< 0.001	< 0.001	< 0.001	<0.	001
	06/07/05	< 0.001	< 0.001	< 0.001	<0.	001
	09/07/05	Not Sampled				
	12/14/05	< 0.005	< 0.005	< 0.005	<0.	005

All concentrations are reported in mg/L

Concentrations in bold exceed NMOCD Groundwater Cleanup Limits

Appendices

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

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resi, nm 30210 (nt/ct 11] - (305) 394-5178	Santa Fe, New	Mexico 87505		- Ica -		Appropr	lace Dis
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NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

April 19, 2006

Ms. Camille Reynolds Plains Marketing, L.P. 3112 West Highway 82 Lovington, NM 88260

RE: 2005 Annual Monitoring Report Plains TNM 98-05B Site NE/4 NW/4 Section 26, Township 21 South, Range 37 East Lea County, New Mexico Plains EMS Number: TNM 98-05B NMOCD File Number: AP-0012

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report submitted on behalf of Plains Marketing, L.P. (Plains) by NOVA Safety and Environmental. This report is hereby accepted and approved with the following understandings and conditions:

Plains will continue to monitor the groundwater at the site and report the associated activities during 2006 on the 2006 Annual Monitoring Report due to be submitted to this office by April 1, 2007.

NMOCD approval does not relieve Plains of liability should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Martino

Edwin E. Martin Environmental Bureau

Copy: NMOCD, Hobbs Curt Stanley, NOVA

2005 ANNUAL MONITORING REPORT

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TNM 98-05B NE ¼ NW ¼ of SECTION 26, TOWNSHIP 21 SOUTH, RANGE 37 EAST LEA COUNTY, NEW MEXICO PLAINS EMS: TNM-98-05B-KNOWN NMOCD Reference AP-012

PREPARED FOR:

PLAINS MARKETING L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002

Prepared By:

NOVA Safety and Environmental 2057 Commerce Street

Midland, Texas 79703

March 2006

nt U. Stenle

Curt D. Stanley Project Manager

Vodel Khol

Todd K. Choban, P.G. Vice President Technical Service

safety and environmental

TABLE OF CONTENTS

INTRODUCTION	1
SITE DESCRIPTION AND BACKGROUND INFORMATION	1
FIELD ACTIVITIES	2
LABORATORY RESULTS	3
SUMMARY	3
ANTICIPATED ACTIONS	4
LIMITATIONS	4
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FIGURES

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Figure 1 – Site Location Map
Figure 2A – Inferred Groundwater Gradient Map March 7, 2005
Figure 2B – Inferred Groundwater Gradient Map June 24, 2005
Figure 2C – Inferred Groundwater Gradient Map September 7, 2005
Figure 2D – Inferred Groundwater Gradient Map December 2, 2005

Figure 3A – Groundwater Concentration Map March 7, 2005

Figure 3B – Groundwater Concentration Map June 24, 2005

Figure 3C – Groundwater Concentration Map September 7, 2005

Figure 3D - Groundwater Concentration Map December 2, 2005

TABLES

Table 1 – 2005 Groundwater Elevation Data Table 2 – 2005 Concentrations of BTEX in Groundwater

APPENDICES

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

ENCLOSED ON DATA DISK

2005 Annual Report (Text) 2005 Tables 1 and 2 (Groundwater Elevation and BTEX Concentration Data) Figures 1, 2A-2D, 3A-3D 2005 Laboratory Reports Historical Groundwater Elevation Data Historic Groundwater Analytical Results

INTRODUCTION

NOVA Safety and Environmental (NOVA) on behalf of Plains Pipeline, L.P. (Plains) has prepared this 2005 Annual Groundwater Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA, having previously been managed by Environmental Technology Group, Inc. (ETGI). This report is intended to be viewed as a complete document with figures, attachments, tables, and text. The report presents the results of four quarterly groundwater monitoring/sampling events conducted at the TNM 98-05B (also known as TNM 98-05) crude oil release site (the site), located in Lea County, New Mexico. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) who became Link Energy, is now the responsibility of Plains. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2005 to assess the levels and extent of dissolved phase hydrocarbons. The groundwater monitoring events consisted of measuring static water levels in the monitor wells, and purging and sampling of each well exhibiting sufficient recharge. Phase Separated Hydrocarbons (PSH) were not detected in any of the on site monitor wells, during the reporting period.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The site is located approximately two (2) 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 while the pipeline was operated by Texas New Mexico Pipeline Company (TNM). An estimated 49 barrels of crude oil was released from the pipeline, of which approximately three barrels were recovered during the emergency response activities. The release was attributed to external corrosion of the pipeline.

In summary, investigative and remedial activities have included a shallow soil investigation utilizing a Geo-Probe[®] soil boring machine, a deeper soil investigation utilizing a drilling rig, excavation of crude oil affected soils, and a groundwater investigation whereby ten (10) monitor wells were installed at the site.

In February 2005, NOVA on behalf of Plains, submitted a Site Restoration Work Plan and Proposed Soil Closure Strategy Report to the NMOCD. This report proposed field activities necessary to complete soil remediation and restore surface conditions at the TNM 98-05B site. On April 6, 2005, Plains received NMOCD approval to initiate the above referenced work plan. On May 19 and 20, 2005, Plains contractors excavated previously identified impacted soil from the sidewalls and floor of the excavation. On June 1, 2005, additional impacted soil was removed from the floor of the excavation. Analytical results from confirmation soil samples collected from the sidewalls and floor of the excavation indicated Total Petroleum Hydrocarbon (TPH) and Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations were below the NMOCD regulatory standards. On June 20-22, 2005, the excavation was backfilled with stockpiled on-site soil and the surface was contoured to fit the surrounding topography. On September 7, 2005, additional confirmation soil samples collected from the surface of the former

excavation indicated BTEX constituent concentrations and TPH were below NMOCD regulatory standards.

On July 5, 2005, monitor wells MW-6 through MW-10 were plugged and abandoned with NMOCD approval by a licensed State of New Mexico water well driller. The monitor wells were plugged as directed by the NMOCD. There are currently five (5) monitor wells (MW-1 through MW-5) on site

In September, 2005, a Soil Closure Request was submitted to the NMOCD and soil closure was approved by the NMOCD in correspondence to Plains, dated November 3, 2005.

FIELD ACTIVITIES

During the reporting period, no PSH was encountered in any of the site monitor wells.

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended by NMOCD correspondence dated June 21, 2005:

Sample Location	Sampling Schedule
MW-1	Quarterly
MW-2	Quarterly
MW-3	Quarterly
MW-4	Quarterly
MW-5	Quarterly
MW-6	Plugged and Abandoned (July 5, 2005)
MW-7	Plugged and Abandoned (July 5, 2005)
MW-8	Plugged and Abandoned (July 5, 2005)
MW-9	Plugged and Abandoned (July 5, 2005)
MW-10	Plugged and Abandoned (July 5, 2005)

Quarterly sampling events for the calendar year 2005 were performed on March 7, June 24, September 7 and December 2. Each quarterly sampling event consisted of gauging all wells (MW-1 through MW-10 in the first quarter and MW-1 through MW-5 in second, third and fourth quarters) and purging and sampling monitor wells as per the approved sampling schedule. During each sampling event, the monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Key Energy of Hobbs, New Mexico, utilizing a licensed disposal facility (NMOCD AO SWD-730).

The inferred groundwater gradient, constructed from measurements collected from the monitor wells during each quarterly sampling event, is depicted on Figures 2A through 2D. Groundwater elevation contours, generated from gauging data acquired during each quarterly sampling event
of 2005, indicates a general groundwater gradient of 0.002 feet/foot to the southeast as measured between monitor wells MW-2 and MW-4. Groundwater elevation data for the calendar year 2005 is provided in Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

LABORATORY RESULTS

Groundwater samples collected during the 2005 sampling events were delivered to Trace Analysis, Inc. of Lubbock, Texas for determination BTEX constituent concentrations by EPA Method SW846-8021b.

Analytical results of BTEX constituent analysis is summarized in Table 2. Copies of the laboratory reports generated during this reporting period are provided on the enclosed data disk. Quarterly groundwater sample results reflecting benzene and BTEX constituent concentrations and inferred PSH extent maps are depicted on Figures 3A through 3D.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2005 monitoring period indicate that benzene and BTEX constituent concentrations are below NMOCD regulatory standards (New Mexico Administrative Code 20.6.2.3103) in all monitor wells with the exception of MW-1. The benzene concentration in MW-1 was above the NMOCD regulatory standard during the second and third quarterly sampling events of 2005. All wells exhibited total BTEX constituent concentrations below applicable NMOCD regulatory standards.

SUMMARY

This report presents the results of annual monitoring and sampling for 2005. Monitor wells MW-6 through MW-10 were plugged and abandoned on June 5, 2005 per NMOCD approval. Currently, there are five (5) monitor wells (MW-1 through MW-5) on site. No detectable or measurable amounts of PSH were encountered during the monitoring events conducted during this reporting period.

Groundwater elevation contours, generated from water level measurements acquired during the quarterly sampling events of 2005, indicated a general gradient of 0.002 feet/foot to the southeast.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2005 monitoring period indicates benzene and BTEX constituent concentrations are below NMOCD regulatory standards in monitor wells MW-2, MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, and MW-10. As stated above, monitor wells MW-6 through MW-10 were plugged and abandoned with NMOCD approval on July 5, 2005. Monitor well MW-1 exhibited benzene concentrations of 0.0122 mg/L and 0.0162 mg/L on June 24, 2005 and September 7, 2005, respectively. There was no PSH measured in any of the monitor wells during the reporting period.

The dissolved phase impact appears to be decreasing, as illustrated in the fourth quarter analytical results from monitor wells MW-1, MW-2 and MW-5.

ANTICIPATED ACTIONS

Monitor well gauging, sampling will continue in 2006.

Plains will submit a Site Closure Request to the NMOCD when groundwater analytical results demonstrate groundwater contaminant concentrations are below the regulatory standards for the required eight (8) consecutive events.

LIMITATIONS

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

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

DISTRIBUTION

: •

Copy 1	Ed Martin New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505
Copy 2:	Larry Johnson and Paul Sheeley New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240
Copy 3:	Camille Reynolds Plains Marketing, L.P. 3112 Highway 82 Lovington, NM cjreynolds@paalp.com
Copy 4:	Jeff Dann Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, TX 77002 jpdann@paalp.com
Copy 5:	NOVA Safety and Environmental 2057 Commerce Street Midland, TX 79703 cstanley@novatraining.cc

Figures

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Tables

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2005 GROUNDWATER ELEVATION DATA

Plains Marketing, LP TNM 98-05B LEA COUNTY, NEW MEXICO

		TOP OF				GROUND
WELL	DATE	CASING	DEPTH TO	DEPTH TO	PSH	WATER
NUMBER	MEASURED	ELEVATION	PRODUCT	WATER	THICKNESS	ELEVATION
MW-1	03/07/05	3393.95	-	48.08	0.00	3345.87
	06/24/05	3393.95	-	47.70	0.00	3346.25
	09/07/05	3393.95	-	47.57	0.00	3346.38
	12/02/05	3393.95	-	47.34	0.00	3346.61
	•••					
MW-2	03/07/05	3394.75	-	48.85	0.00	3345.90
	06/24/05	3394.75	-	48.48	0.00	3346.27
	09/07/05	3394.75	-	48.32	0.00	3346.43
	12/02/05	3394.75	-	48.10	0.00	3346.65
MW-3	03/07/05	3393.58	-	47.86	0.00	3345.72
	06/24/05	3393.58	-	47.50	0.00	3346.08
	09/07/05	3393.58	-	47.36	0.00	3346.22
	12/02/05	3393.58	-	47.14	0.00	3346.44
MW-4	03/07/05	3394.98	-	49.40	0.00	3345.58
	06/24/05	3394.98	-	49.05	0.00	3345.93
	09/07/05	3394.98	-	48.90	0.00	3346.08
	12/02/05	3394.98	-	48.68	0.00	3346.30
MW-5	03/07/05	3393.47	-	47.68	0.00	3345.79
	06/24/05	3393.47	-	47.33	0.00	3346.14
	09/07/05	3393.47	-	47.19	0.00	3346.28
	12/02/05	3393.47	-	46.96	0.00	3346.51
MW-6	03/07/05	3393.41	-	47.57	0.00	3345.84
	07/05/05	Plugged and Ab	andoned			
	: <u>.</u>					
MW-7	03/07/05	3392.96	-	47.02	0.00	3345.94
	07/05/05	Plugged and Ab	andoned			
				· · · · · · · · · · · · · · · · · · ·	ï	
MW-8	07/05/05	Plugged and Ab	andoned	l		
	T		1		· · · · ·	
MW-9	03/07/05	3396.20	<u> </u>	58.21	0.00	3337.99
	07/05/05	Plugged and Ab	andoned			· · · · · · · · · · · · · · · · · · ·
	1		r			
<u>MW-10</u>	03/07/05	3396.23	<u> </u>	50.53	0.00	3345.70
	07/05/05	Plugged and Ab	andoned			

i.

Elevations based on the North American Vertical Datum of 1929.

2005 CONCENTRATIONS OF BTEX IN GROUNDWATER

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

All concentrations are reported in mg/L

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SAMPLE LOCATION SAMPLE DATE BENZENE TOLUENE ETHYL- BENZENE m, p- XYLENES 0 XYLENES New Mexico Regulatory Standard 0.01 mg/L 0.75 mg/L 0.75 mg/L 0.75 mg/L Total Xylenes 0.62 mg/L MW-1 03/07/05 <0.001 <0.001 <0.001 <0.001 09/07/05 0.0162 <0.001 <0.003 0.015 12/02/05 0.0018 <0.001 <0.001 <0.001 0%/7/05 0.0014 <0.001 <0.001 <0.001 0%/7/05 0.0014 <0.001 <0.001 <0.001 0%/7/05 <0.001 <0.001 <0.001 <0.001 0%/2/05 <0.001 <0.001 <0.001 <0.001 0%/2/05 <0.001 <0.001 <0.001 <0.001 0%/2/05 Not Sampled Due to Sample Reduction MW-3 03/07/05 <0.001 <0.001 <0.001 0/2/2/05 <0.001 <0.001 <0.001 <0.001 MW-3 03/0				SW	846-8021B, 503	0	
New Mexico Regulatory Standard 0.01 mg/L 0.75 mg/L 0.75 mg/L Total Xylenes 0.62 mg/L MW-1 03/07/05 <0.001 <0.001 <0.001 0.001 MW-1 06/24/05 0.012 <0.001 0.001 0.001 09/07/05 0.0162 <0.001 0.003 0.015 12/02/05 0.0014 <0.001 <0.001 <0.001 MW-2 03/07/05 <0.001 <0.001 <0.001 <0.001 MW-2 03/07/05 <0.001 <0.001 <0.001 <0.001 <0.001 06/24/05 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 MW-3 03/07/05 <0.001 <0.001 <0.001 <0.001 <0.001 MW-3 03/07/05 <0.001 <0.001 <0.001 <0.001 MW-4 03/07/05 <0.001 <0.001 <0.001 <0.001 MW-4 03/07/05 <0.001 <0.001 <0.001 <0.001	SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	0 - XYLENE
MW-1 03/07/05 <0.001	New Mexico Regulatory Standard		0.01 mg/L	0.75 mg/L	0.75 mg/L	Total X 0.62 i	ylenes mg/L
06/24/05 0.0122 <0.001	MW-1	03/07/05	< 0.001	< 0.001	< 0.001	<0.0	001
09/07/05 0.0162 <0.001		06/24/05	0.0122	< 0.001	0.002	0.0	11
12/02/05 0.0038 <0.001		09/07/05	0.0162	< 0.001	0.003	0.0	15
MW-2 03/07/05 0.0014 <0.001 <0.001 <0.001 06/24/05 <0.001		12/02/05	0.0038	< 0.001	<0.001	0.0	02
MW-2 03/07/05 0.0014 <0.001 <0.001 <0.001 09/07/05 <0.001							
06/24/05 <0.001	MW-2	03/07/05	0.0014	< 0.001	<0.001	<0.0	001
09/07/05 <0.001 <0.001 <0.001 <0.001 12/02/05 <0.001		06/24/05	< 0.001	< 0.001	< 0.001	<0.0	001
12/02/05 <0.001		09/07/05	< 0.001	< 0.001	< 0.001	<0.0	001
MW-3 03/07/05 Not Sampled Due to Sample Reduction 06/24/05 Not Sampled Due to Sample Reduction 09/07/05 <0.001		12/02/05	< 0.001	< 0.001	<0.001	<0.0	001
MW-3 03/07/05 Not Sampled Due to Sample Reduction 09/07/05 <0.001							
06/24/05 Not Sampled Due to Sample Reduction 09/07/05 <0.001	MW-3	03/07/05	Not Sampled D	ue to Sample	Reduction		
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12/02/05 <0.001		09/07/05	< 0.001	< 0.001	<0.001	<0.(001
MW-4 03/07/05 <0.001 <0.001 <0.001 <0.001 06/24/05 Not Sampled Due to Sample Reduction 09/07/05 <0.001		12/02/05	< 0.001	< 0.001	< 0.001	<0.(001
MW-4 03/07/05 <0.001 <0.001 <0.001 <0.001 06/24/05 Not Sampled Due to Sample Reduction							
06/24/05 Not Sample Due to Sample Reduction 09/07/05 <0.001	MW-4	03/07/05	< 0.001	<0.001	< 0.001	<0.0	001
09/07/05 <0.001		06/24/05	Not Sampled D	ue to Sample	Reduction		
12/02/05 <0.001 <0.001 <0.001 <0.001 MW-5 03/07/05 0.0054 <0.001		09/07/05	<0.001	< 0.001	<0.001	<0.0	001
MW-5 03/07/05 0.0054 <0.001 <0.001 0.011 06/24/05 <0.001		12/02/05	<0.001	< 0.001	< 0.001	<0.0	001
MW-5 03/07/05 0.0054 <0.001 <0.001 0.001 06/24/05 <0.001							
06/24/05 <0.001 <0.001 <0.001 0.009 09/07/05 <0.001	MW-5	03/07/05	0.0054	< 0.001	< 0.001	0.0	11
09/07/05 <0.001		06/24/05	< 0.001	< 0.001	< 0.001	0.0	09
12/02/05 <0.001 <0.001 <0.001 <0.001 MW-6 03/07/05 <0.001		09/07/05	< 0.001	< 0.001	< 0.001	<0.(001
MW-6 03/07/05 <0.001 <0.001 <0.001 06/24/05 Not Sampled Due to Sample Reduction 07/05/05 Plugged and Abandoned MW-7 03/07/05 <0.001		12/02/05	<0.001	<0.001	<0.001	<0.(101
MW-6 03/07/05 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001<							L
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01/05/05 Plugged and Abandoned MW-7 03/07/05 <0.001		06/24/05	Not Sampled D	Not Sampled Due to Sample Reduction			
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OO/21/05 Plugged and Abandoned MW-10 03/07/05 <0.001		06/24/05	Not Sampled D	ue to Sample	Reduction		
MW-10 03/07/05 <0.001 <0.001 <0.001 <0.001 06/24/05 Not Sampled Due to Sample Reduction 01/05/05 Plugged and Abandoned 01/05/05 01/05/05		07/05/05	Plugged and Al	handoned			
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06/24/05 Not Sampled Due to Sample Reduction	MW-10	03/07/05	<0.001	< 0.001	< 0.001	<0.0	001
07/05/05 Plugged and Abandoned		06/24/05	Not Sampled D	ue to Sample	Reduction		
UTUSTUS IT TURgen and Abandonen		07/05/05	Plugged and A	bandoned			

Note: m, p and o Xylenes combined when analyzed by Trace Laboratories, Inc. only.

Note: EB denotes equipment blank collected during sampling event.

Appendices

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

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<u>trict I</u> 25 N. French I trict II	Dr., Hobbs, NM 88240		Energy Mir	, ite of N nerals a	New Mex nd Natura	ico l Resources			Re	Form C-141 vised October 10, 2003
1 W. Grand A	Avenue, Artesia, NM 88210		0:1 0		ration Dir				Submit 2 (onies to appropriate
<u>met m</u> 0 Rio Brazos	Road, Aztec, NM 87410		1000	Onserv South	Anon Div	/ision			District	Office in accordance
<u>trict IV</u> 20 S. St. Franc	ois Dr., Santa Fe, NM 87505		1220	South	St. Franc	1S Dr.			W	ith Rule 116 on back side of form
		Dala	Sa Notifia	nta Fe	, INIM 875		-			
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					OPERA			<u>x</u> Initia	al Report	Final Repo
lame of Co	mpany Plains Market	ng, LP and TX 7	9706		Contact Car	$\frac{1110}{10} \frac{Reynolds}{10}$	65			
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· ·	Latit	ude_ <u>32*2</u>	27' 03.8"		Longitu	de <u>103°08' 30.3</u>	3‴		•	· .
·		•	NAT	URE	OF REL	EASE				
ype of Rele	ase Crude Oil				Volume of	Release 49 barre	els	Volume I	Recovered 3	barrels
ource of Re	elease 6" Steel Pipeline				Date and 1	s	ce	Date and 02-05-19	Hour of Di	scovery
Vas Immedi	ate Notice Given?				If YES, To	Whom?		02 00 17		- <u></u>
	x	Yes 🔲	No 🗌 Not Rec	puired	Linda Williams					
y Whom? J	ohnny Chapman				Date and I	Hour 02-05-1998	@15:00		······	
Vas a Water	course Reached?		No		If YES, V	olume Impacting	the Wate	ercourse.		
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a Waterco	urse was Impacted, Desci	ibe Fully.*								
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escribe Ca	ise of Problem and Reme	dial Action	n Taken * Extern	al corros	sion of 6 incl	n nineline.				······································
escribe Are	ea Affected and Cleanup	Action Tal	ten.* Aerial exter	nt of surf	ace impact v	vas approximatel	y 100 x 3	0 feet.		
OTE: This aformation	s information was obtain to be correct. The rele	ase occuri	ed during the ti	/Link til me the v	ies, Plains a ipeline was	owned and oper	ink on A ated by	April 1, 20 Texas-Ne	04 and Pla w Mexico F	ins assumes this Pineline Company.
				r						
hereby cert	ify that the information g	given above	e is true and comp	plete to the	he best of m	y knowledge and	understa	nd that pur	suant to NM	AOCD rules and
ublic health	n or the environment. Th	e acceptan	ce of a C-141 rep	ort by the	e NMOCD r	narked as "Final]	Report"	does not re	lieve the op	erator of liability
lould their	operations have failed to	adequately	v investigate and	remediat	e contamina	tion that pose a th	reat to g	round wate	er, surface v	vater, human health
the environderal state	onment. In addition, NM	OCD accep	ptance of a C-141	report d	oes not relie	ve the operator of	f respons	sibility for	compliance	with any other
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inted Nam	e: Camille Reynolds				Approved by	y District Supervi	isor:			· · · · · · · · · · · · · · · · · · ·
Title: Remediation Coordinator				Approval D	ate:		Expiration	n Date:		
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ate: 02/03/	2005		Phone:505-441	-						
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Martin, Ed, EMNRD

To: Subject: Camille J Reynolds RE: TNM 98-05A release site monitor wells

This activity is approved. Monitor well MW-4 may be plugged and abandoned.

Ed Martin New Mexico Oil Conservation Division Environmental Bureau 1220 S. St. Francis Santa Fe, NM 87505 Phone: 505-476-3492 Fax: 505-476-3462 email: ed.martin@state.nm.us

----Original Message----From: Camille J Reynolds [mailto:cjreynolds@paalp.com] Sent: Monday, January 09, 2006 12:11 PM To: Martin, Ed, EMNRD Subject: TNM 98-05A release site monitor wells

Ed:

This e-mail is in reference to our phone conversation this morning regarding the groundwater monitoring wells located at the TNM 98-05A release site located in Sec.26, T21S, R37E in Lea County, NM. As per our discussion monitor well MW-4 was damaged during recent soil remediation activities and can no longer be utilized for groundwater monitoring due to the fact there is no water in the well. The PVC was apparently broken when the monitor well was struck. As indicated by the attached site map there are 2 monitor wells down gradient from MW-4. As shown on the groundwater chemistry table both of these monitor wells (MW-6 and MW-8) are below NMOCD guidelines for concentrations of BTEX. At this time Plains would like to request permission to plug and abandon MW-4.

AP-12

Monitor well MW-1 is the release point monitor at this location. During backfilling activities this monitor well was extended from approximately 15 feet bgs to grade (see site map). The PVC of this monitor well was somehow bent during backfilling. Despite our best efforts we have been unable to bail the well with a regular size bailer. I have asked Nova (oversight for the site) to try using a smaller bailer to collect a groundwater sample since it was not sampled during the last quarterly sampling event. I will let you know the outcome of the sampling event. Please contact me with any questions or concerns, and as always thanks for your time and consideration.

Sincerely, Camille

<<98-05A site map analyticals.pdf>>

This footnote also confirms that this email message has been scanned for Viruses and Content and cleared.



CONCENTRATIONS OF BTEX IN GROUNDWATER

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

All concentrations are reported in mg/L

		SW 846-8021B, 5030					
SAMPLE LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - Xylene	
NMOCD Gr	oundwater	0.01	0.75	0.75	0.	62	
MW-1	02/09/04	4.090	0.020	1.470	0.5	547	
	05/04/04	5.470	0.058	1.540	0.3	53	
	12/04/04	16.200	0.590	1.500	1.5	560	
	03/07/05	16.900	<0.1	1.500	0.6	644	
	06/07/05	15.6	<0.2	1.91	0.8	807	
	09/07/05	9.6	< 0.2	1.60	0.5	53	
MW-2	05/04/04	7.280	0.525	0.884	0.5	53	
	03/07/05	6.020	1.510	1.170	1.2	270	
	06/07/05	3.96	0.371	1.34	1.	13	
	09/07/05	4.67	0.283	1.21	1.	04	
and the second secon			a de la companya de l La companya de la comp	1995년 11월 11일 1997년 - 11일 - 11일 - 11일 11일 - 11일			
MW - 3	03/09/00	0.015	0.012	0.002	0.0	002	
	05/11/00	0.056	0.048	0.006	0.0	004	
	09/12/00	0.056	0.048	0.006	0.0	005	
	12/14/00	0.013	0.014	0.002	0.0	002	
	03/21/01	0.073	0.074	0.011	0.0	09	
	05/30/01	0.069	< 0.005	< 0.005	<0.	005	
	09/25/01	0.008	0.007	0.001	0.0	01	
	11/17/01	0.002	0.003	< 0.001	0.0	001	
	02/20/02	0.022	0.025	0.004	0.0	003	
	05/20/02	0.040	0.041	0.008	0.0	006	
	09/24/02	0.040	0.030	0.007	0.0	005	
	11/13/02	0.045	0.042	0.006	0.0	005	
	02/06/03	0.004	0.007	0.002	0.0	001	
	05/08/03	0.005	0.008	0.002	0.0	001	
	08/19/03	0.005	0.004	< 0.001	<0.	001	
	11/07/03	< 0.001	< 0.001	< 0.001	<0.	002	
	02/09/04	0.007	0.009	0.002	<0.	002	
	05/04/04	0.002	0.001	< 0.001	<0.	002	
	08/23/04	< 0.001	0.001	< 0.001	<0.	002	
	12/04/04	< 0.001	0.001	< 0.001	<0.	001	
	03/07/05	< 0.001	< 0.001	< 0.001	<0.	001	
	06/07/05	0.0064	< 0.001	< 0.001	<0.	001	
	09/07/05	0.0057	< 0.001	< 0.001	0.0	001	
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CONCENTRATIONS OF BTEX IN GROUNDWATER

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

All concentrations are reported in mg/L

		SW 846-8021B, 5030					
SAMPLE	SAMPLE	BENZENE TOLUEN		ETHYL-	0 -		
LOCATION	DATE		TOLUENE	BENZENE	XYLENES	XYLENE	
NMOCD G	oundwater	0.01	0.75	0.75	0.	62	
MW - 4	03/09/00	0.152	0.066	0.019	0.0	12	
	05/11/00	0.285	0.110	0.032	0.0)14	
	09/12/00	0.269	0.068	0.026	0.0	06	
	12/14/00	0.246	0.021	0.009	0.0	08	
	03/21/01	0.189	0.086	0.020	0.0	11	
	05/30/01	0.107	< 0.005	0.019	<0.	005	
	09/25/01	0.463	0.028	0.009	0.0	10	
	11/17/01	0.335	0.020	0.007	0.0	07	
	02/20/02	1.090	0.046	0.011	0.0	08	
	05/20/02	0.919	0.041	0.008	0.0	16	
	09/24/02	0.117	0.020	0.003	0.0	03	
	11/13/02	0.082	0.073	0.010	0.0	11	
	02/06/03	0.002	0.004	< 0.001	0.0	01	
	05/08/03	0.016	0.002	< 0.001	<0.	001	
	08/19/03	0.031	0.002	< 0.001	< 0.001		
	11/07/03	0.004	< 0.001	< 0.001	0.003		
	02/09/04	0.370	0.003	0.005	0.004		
	05/04/04	0.013	< 0.001	< 0.001	< 0.002		
	08/23/04	< 0.001	< 0.001	< 0.001	<0.002		
	12/04/04	0.006	< 0.001	< 0.001	<0.	001	
· · · · · · · · · · · · · · · · · · ·	03/07/05	<0.001	<0.001	< 0.001	<0.	001	
	06/07/05	0.0821	0.0023	< 0.001	0.0	019	
	09/07/05	0.0704	0.0045	0.001	0.0	024	
the second second	발생 아이에 있는 것이다.		n in standing Standard Standard	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
MW - 5	03/09/00	0.001	0.001	< 0.001	0.0	01	
	05/11/00	< 0.001	< 0.001	< 0.001	<0.	001	
	09/12/00	< 0.001	< 0.001	< 0.001	<0.	001	
	12/14/00	< 0.001	< 0.001	< 0.001	<0.	001	
	03/21/01	<0.001	< 0.001	< 0.001	_<0.	001	
	05/30/01	< 0.005	< 0.005	< 0.005	<0.	005	
	09/25/01	< 0.001	< 0.001	< 0.001	<0.	001	
	11/17/01	< 0.001	< 0.001	< 0.001	<0.	001	
	02/20/02	< 0.001	< 0.001	< 0.001	<0.	001	
	05/20/02	<0.001	< 0.001	< 0.001	<0.	001	
	09/24/02	0.003	< 0.001	< 0.001	<0.	001	
	11/13/02	0.002	0.001	< 0.001	<0.	001	
	02/06/03	< 0.001	< 0.001	< 0.001	<0.	001	

CONCENTRATIONS OF BTEX IN GROUNDWATER

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

All concentrations are reported in mg/L

		SW 846-8021B, 5030					
SAMPLE	DATE			ETHYL-	m, p -	0 -	
LOCATION		BENZENE IOLUEN	TOLUENE	BENZENE	XYLENES	XYLENE	
NMOCD G	oundwater	0.01	0.75	0.75	0.	62	
	05/08/03	< 0.001	< 0.001	< 0.001	<0.	001	
	08/19/03	< 0.001	< 0.001	< 0.001	<0.	001	
	11/07/03	< 0.001	< 0.001	< 0.001	<0.	002	
	02/09/04	< 0.001	< 0.001	< 0.001	<0.	002	
	12/04/04	< 0.001	< 0.001	< 0.001	<0.	001	
	06/07/05	Not Sampled	due to sample	e reduction			
ana an Arain. Calainn an a		han an a					
MW - 6	03/09/00	< 0.001	< 0.001	< 0.001	<0.	001	
	05/11/00	< 0.001	<0.001	< 0.001	<0.	001	
	09/12/00	< 0.001	< 0.001	< 0.001	<0.	001	
	12/14/00	< 0.001	< 0.001	< 0.001	<0.	001	
	03/21/01	< 0.001	< 0.001	< 0.001	<0.	001	
	05/30/01	< 0.005	< 0.005	< 0.005	<0.	005	
	09/25/01	< 0.001	< 0.001	< 0.001	<0.	001	
	11/17/01	< 0.001	< 0.001	< 0.001	<0.	001	
	02/20/02	0.001	< 0.001	< 0.001	<0.	001	
	05/20/02	< 0.001	< 0.001	< 0.001	<0.	001	
	09/24/02	< 0.001	< 0.001	< 0.001	<0.	001	
	11/13/02	< 0.001	< 0.001	< 0.001	<0.	001	
	02/06/03	< 0.001	< 0.001	< 0.001	<0.	001	
	05/08/03	< 0.001	< 0.001	< 0.001	<0.	001	
	08/19/03	< 0.001	< 0.001	< 0.001	<0.	001	
	11/07/03	< 0.001	< 0.001	< 0.001	<0.	002	
	02/09/04	< 0.001	< 0.001	< 0.001	<0.	002	
	12/04/04	< 0.001	< 0.001	< 0.001	<0.	001	
	06/07/05	< 0.001	< 0.001	< 0.001	<0.	001	
			STATION &				
MW - 7	03/09/00	< 0.001	< 0.001	< 0.001	<0.	001	
	05/11/00	< 0.001	< 0.001	< 0.001	<0.	001	
	09/12/00	< 0.001	< 0.001	< 0.001	<0.	001	
	12/14/00	< 0.001	< 0.001	< 0.001	<0.	001	
	03/21/01	< 0.001	< 0.001	< 0.001	<0.	001	
	05/30/01	< 0.005	< 0.005	< 0.005	<0.	005	
	09/25/01	< 0.001	<0.001	< 0.001	<0.	001	
	11/17/01	< 0.001	< 0.001	< 0.001	<0.	001	
	02/20/02	< 0.001	< 0.001	< 0.001	<0.	001	
	05/20/02	< 0.001	< 0.001	< 0.001	<0.	001	

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CONCENTRATIONS OF BTEX IN GROUNDWATER

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

All concentrations are reported in mg/L

CAMPLE	CAMPLE	SW 846-8021B, 5030			0	
SAMPLE	SAMPLE	DENZENE	TOLUENE	ETHYL-	m, p -	0 -
LUCATION	DATE	BENZENE	IOLUENE	BENZENE	XYLENES	XYLENE
NMOCD G	oundwater	0.01	0.75	0.75	0.	62
	09/24/02	<0.001	< 0.001	< 0.001	<0.	001
	11/13/02	< 0.001	< 0.001	< 0.001	<0.	001
	02/06/03	< 0.001	< 0.001	< 0.001	<0.	001
	05/08/03	< 0.001	< 0.001	< 0.001	<0.	001
	08/19/03	< 0.001	< 0.001	< 0.001	<0.	001
	11/07/03	< 0.001	< 0.001	< 0.001	<0.	002
	02/09/04	< 0.001	< 0.001	< 0.001	<0.	002
	12/04/04	< 0.001	< 0.001	< 0.001	<0.	001
	06/07/05	< 0.001	< 0.001	< 0.001	<0.	001
감사 그는 것이 같아요.				a da ser a ser	지 않는 것은 성격 관	Maria de Sala
MW - 8	03/09/00	0.001	< 0.001	0.001	<0.	001
	05/11/00	< 0.001	< 0.001	<0.001	<0.	001
	09/12/00	< 0.001	< 0.001	< 0.001	<0.	001
	12/14/00	< 0.001	< 0.001	< 0.001	<0.	001
	03/21/01	< 0.001	< 0.001	< 0.001	<0.	001
	05/30/01	< 0.005	< 0.005	< 0.005	<0.	005
	09/25/01	0.001	< 0.001	< 0.001	<0.	001
	11/17/01	< 0.001	< 0.001	< 0.001	<0.	001
	02/20/02	0.005	< 0.001	0.002	<0.	001
	05/20/02	< 0.001	< 0.001	<0.001	<0.	001
	09/24/02	< 0.001	<0.001	<0.001	<0.	001
	11/13/02	0.002	< 0.001	< 0.001	<0.	001
	02/06/03	< 0.001	< 0.001	< 0.001	<0.	001
	05/08/03	< 0.001	< 0.001	< 0.001	<0.	001
	08/19/03	< 0.001	< 0.001	<0.001	<0.	001
	11/07/03	<0.001	< 0.001	< 0.001	<0.	002
	02/09/04	< 0.001	< 0.001	< 0.001	<0.	002
	12/04/04	< 0.001	< 0.001	< 0.001	<0.	001
	06/07/05	Not Sampled	due to sample	e reduction		
		1. 1. A. 2.				
MW - 9	03/09/00	0.029	0.009	0.028	0.0	21
	05/11/00	0.056	0.034	0.008	0.0	09
	09/12/00	0.232	0.031	0.006	0.0	04
	12/14/00	0.030	0.015	0.003	0.0	02
	03/21/01	0.158	0.081	0.016	0.0	12
	05/30/01	0.532	< 0.005	< 0.005	<0.	005
	09/25/01	0.490	0.212	0.161	0.0	29

CONCENTRATIONS OF BTEX IN GROUNDWATER

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

SW 846-8021B, 5030 SAMPLE SAMPLE ETHYLm, p -0 -LOCATION DATE BENZENE TOLUENE BENZENE XYLENES XYLENE **NMOCD** Groundwater 0.01 0.75 0.75 0.62 11/17/01 0.014 0.047 0.025 0.008 02/20/02 0.158 0.042 0.046 0.011 0.392 05/08/03 0.446 0.188 0.369 08/19/03 0.060 0.005 0.043 0.069 0.008 11/07/03 0.076 0.001 0.003 02/09/04 0.015 0.013 0.009 0.020 05/04/04 0.303 0.011 0.057 0.039 08/23/04 0.049 < 0.001 0.006 < 0.002 0.005 < 0.001 0.002 0.003 12/04/04 03/07/05 0.016 < 0.005 0.024 0.055 06/07/05 0.0499 0.0183 0.0856 0.150 09/07/05 0.0123 0.0073 0.0454 0.063 MW-10 0.199 05/04/04 4.230 0.888 0.779 03/07/05 5.690 0.491 0.984 0.908 06/07/05 4.35 0.0618 0.510 0.264 09/07/05 5.63 < 0.2 1.790 1.180 <u> NGR</u>AN 33. 영화 **MW-11** 12/10/04 < 0.001 < 0.001 < 0.001 < 0.001 03/07/05 < 0.001 < 0.001 < 0.001 < 0.001 06/07/05 < 0.001 < 0.001 < 0.001 < 0.001 9 8 7 8 2 혼양 가장과 전 관 파 EB - 1 09/21/00 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 12/14/00 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 03/21/01 05/30/01 < 0.005 < 0.005 < 0.005 < 0.005 11/17/01 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 02/20/02 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 05/20/02

< 0.001

< 0.001

All concentrations are reported in mg/L

Concentrations in bold exceed NMOCD Groundwater Cleanup Limits

< 0.001

09/24/02

<0.001



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

January 31, 2006

Ms. Camille Reynolds Plains Marketing, L.P. 3112 West Highway 82 Lovington, NM 88260

RE: Soil Closure Request, Dated December 2005, for the TNM 98-05A Site Located in Section 26, Township 21 South, Range 37 East NMPM, Lea County, New Mexico Plains EMS Number: TNM-98-05A NMOCD Reference AP-012

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has reviewed the report shown above, submitted on behalf of Plains Marketing, L.P. (Plains) by NOVA Safety and Environmental. The request for soil closure is hereby approved with the following understandings and conditions:

- 1. Plains has excavated the east sidewall of the pre-existing excavation and removed approximately 100 cubic yards of contaminated soil. Such excavation continued until samples for total petroleum hydrocarbons (TPH) showed the results contained in Table 1 of Appendix A of the request.
- 2. A 20-mil thick polyurethane liner was installed as described in section 2.2 of the request.
- 3. Backfilling at the site was as described in section 2.3 of the request.
- 4. Groundwater monitoring at the site will continue until closure is approved by the NMOCD.

If you have any questions, contact Ed Martin at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Roger C. Anderson Environmental Bureau Chief

Copy: NMOCD, Hobbs Curt Stanley, NOVA



December 16, 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 98-05A Release Site Section 21, T21S, R37E Lea County, New Mexico

Dear Mr. Martin:

Please find attached for your approval the Soil Closure Request, dated December 2005, for the TNM 98-05A site located in Section 21 of Township 21 South, and Range 37 East of Lea County, New Mexico. The Soil Closure Request details site activities conducted as per NMOCD request for soil closure of the site.

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OIL CONSERVATION

DIVISION

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

Sincerely,

C. a million the Elymenters

Camille Reynolds Remediation Coordinator Plains All American Pipeline

Enclosure

SOIL CLOSURE REQUEST

AP-12

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

Prepared For:

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

Prepared By:

NOVA Safety and Environmental 2057 Commerce Midland, Texas 79703

December 2005

Curt D. Stanley

Project Manager

Todd Choban Vice President, Technical Services



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APPENDIX A:	Laboratory Reports
APPENDIX B:	Photographic Documentation
APPENDIX C:	Release Notification and Corrective Action (Form C-141)

1.0 INTRODUCTION

NOVA Safety and Environmental (NOVA) is pleased to submit this Soil Closure Request for the TNM-98 05A crude oil release site. The TNM 98-05A crude oil release site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains Marking 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. A site location map is included as Figure 1. On February 2, 1998 an estimated 38 barrels of crude oil was released from a Texas-New Mexico (TNM) six (6) inch diameter steel pipeline. Approximately four (4) barrels were recovered during emergency response activities. The release was attributed to external corrosion of the pipeline.

Recent site activities at the TNM 98-05A site were proposed by Plains in the Site Restoration Work Plan and Proposed Soil Closure Strategy Report dated December 2004. This work plan was approved by the New Mexico Oil Conservation Division (NMOCD) in a letter dated June 2, 2005.

2.0 SUMMARY OF RECENT FIELD ACTIVITIES

2.1 Excavation and Sampling Activities

On October 24, 2005, a backhoe was utilized to excavate additional impacted soil from the east sidewall of the existing excavation. The impacted soil had been identified during previous excavation activities. A site map is included as Figure 2. Approximately 100 cubic yards of overburden and hydrocarbon impacted soil was removed from the east sidewall of the excavation during this activity. The determination of impacted versus non impacted soil was made through visual and olfactory means. A Photo-Ionization Detector (PID) was utilized in the field to further evaluate the sidewall soil. Upon completion of excavation activities a discrete confirmation sample was collected from the east sidewall of the excavation. See Figure 3 for location of the sample. A five point composite sample was also collected from the stockpiled soil removed from the excavation on October 24, 2005. The samples were delivered to Environment Lab of Texas (ELOT) of Odessa, Texas for determination of total petroleum hydrocarbons (TPH) using EPA method 8015 modified (DRO/GRO). The analytical results of this sampling event are shown in Table 1 and laboratory reports are included in Appendix A. The analytical results indicate the collected samples were below the reporting threshold of 10 mg/Kg TPH.

On October 25, 2005, efforts were focused on removing soil which had sloughed from the other sidewalls. This soil was stockpiled to be used as backfill material. The excavation sidewalls were squared and the floor was smoothed to prepare for the woven polyurethane liner (liner) installation.

2.2 Woven Polyurethane Liner Installation

On October 26, 2005, approximately 720 cy of non-impacted sand was transported to the site. Approximately 350 cy of sand was placed in the excavation to cushion and protect the liner from damage. The sand was spread and compacted to a thickness of approximately one (1) foot. The sand was mounded beneath the six (6) inch pipeline to allow water to be channeled to the edges of the liner. Photographic documentation of the bottom sand installation is included in Appendix B.

The liner was supplied and installed by Akome Inc. of Hobbs, New Mexico. The liner is 7,200 square feet of black woven polyurethane, twenty (20) millimeters (mil) thick. The installation required the liner to be sewn and sealed together in three (3) areas. The remaining 370 cy of sand stockpiled on site was placed on top of the liner to protect it from damage during backfilling activities. The sand was compacted to a thickness of approximately one (1) foot. Monitor well MW-1 is located within the confines of the excavation and was fitted with a forty (40) mil protective boot. The boot was glued and taped to the liner to maintain an impermeable liner seal. Photographic documentation of the liner installation is included in Appendix B.

The polyvinylchloride (PVC) casing in monitor well MW-1 was extended approximately fifteen (15) feet to allow for continued groundwater sampling and monitoring after excavation backfilling. After the excavation was backfilled the monitor well casing was trimmed to the proper height and resurveyed.

2.3 Excavation Backfilling and Site Restoration

On October 26, 2005, backfilling of the excavation began. The plastic liner beneath the existing treatment cell was removed and disposed. The aeration system within the treatment cell, consisting of one (1) inch PVC perforated pipe was also removed and disposed. Approximately 3,300 cubic yards of soil from the treatment cell was transported, in stages into the excavation and compacted in twelve (12) inch lifts. There was adequate moisture in the treatment cell, allowing for effective compaction and no additional water was transported to the site. Backfilling of the excavation continued until November 4, 2005. Backfill soil was mounded above the former excavation to allow for ground settling over time. All materials used in the automated recovery system were excavated and transported offsite. The ground surface was graded to as near original contours as practical. The site will be reseeded in the spring of 2006, when adequate moisture allows, with grass acceptable to the landowner. Photographic documentation is included as Appendix B.

3.0 SOIL CLOSURE REQUEST

Plains respectfully request the NMOCD consider this site for soil closure. Groundwater monitoring and sampling will continue at the site until groundwater conditions meet closure standards. A groundwater and site closure request will follow after eight consecutive quarterly groundwater sampling events have demonstrated hydrocarbon concentrations are

below NMOCD regulatory guidelines. Form C-141, Release Notification and Corrective Action is included as Appendix C.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

• 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 collection of soil samples.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-ofcustody 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 Pipeline Company. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Nova Safety and Environmental and/or Plains Pipeline Company.

DISTRIBUTION

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Copy 1:	Ed Martin New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505
Copy 2:	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
Сору 3:	Camille Reynolds Plains Marketing, L.P. 3112 Highway 82 Lovington, New Mexico 88260 cjrenyolds@paalp.com
Copy 4:	Jeff Dann Plains Marketing, L.P. 333 Clay Street, Suite 600 Houston, Texas, 77002 jpdann@paalp.com
Copy 5:	NOVA Safety and Environmental 2057 Commerce Midland, Texas 79703 cstanley@novatraining.cc

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Table

TABLE 1

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

SAMPLE	SAMPLE	MÉT	HODS: EPA S	W 846-8021B	5030		EPA SW 846	-8015M
LOCATION	DATE	BENZENE	TOLUENE	ETHYL-	ΤΟΤΑΙ	GRO	DRO	TOTAL TPH
				BENZENE	XYLENES	C6-C10	>C10-C28	C6-C28
		Initial	Excavation	Composite	s			
Excavation Walls	05/08/02	<0.025	<0.025	< 0.025	<0.025	<10.0	<10.0	0.0
Excavation Bottom	05/08/02	<0.025	<0.025	<0.025	<0.025	<10.0	39.3	39.3
		Exc	cavation So	il Samples				
Excavation Westside Wall	11/14/02	<0.025	<0.025	< 0.025	<0.025	<10.0	<10.0	0.0
Excavation Southside Wall	11/14/02	<0.025	0.079	0.065	0.263	<10.0	<10.0	0.0
Excavation Northside Wall	11/14/02	<0.025	0.028	0.026	0.084	<10.0	29.8	29.8
Excavation Eastside Wall	11/14/02	<0.025	0.035	0.034	0.100	<10.0	831	831.0
		Bio_Tre	atment Cell	- Soil Sam	ples			
Bio-Mound North East	05/08/02	<0.025	<0.025	<0.025	0.116	868	1680	2,548.0
Bio-Mound North West	05/08/02	0.060	0.268	0.080	0.326	349	392	741.0
Bio-Mound South East	05/08/02	<0.025	0.191	0.092	0.225	405	559	964.0
Bio-Mound South West	05/08/02	<0.025	0.142	0.090	0.440	848	1260	2,108.0
S.W. Biomound Comp	11/14/02	<0.025	0.042	0.040	0.142	22.7	1530	1.552.7
N.W. Biomound Comp	11/14/02	<0.025	< 0.025	< 0.025	0.043	37.4	1480	1,517.4
S. E. Biomound Comp	11/14/02	<0.025	<0.025	< 0.025	<0.025	39.6	2180	2,219.6
N. E. Biomound Comp	11/14/02	<0.025	<0.025	<0.025	<0.025	75.7	2260	2,335.7
N.E. Biomound - 1	03/04/03	na	na	na	na	124	1460	1,584.0
N.W. Biomound - 2	03/04/03	na	na	na	na	115	1890	2,005.0
S.W. Biomound - 3	03/04/03	na	na	na	na	52.6	1250	1,302.6
S.E. Biomound - 4	03/04/03	na	na	na	na	24.8	658	682.8
N.E. Biomound - 5	06/30/03	na	na	na	na	52.8	561	613.8
N.W. Biomound - 6	06/30/03	na	na	na	na	130	2280	2,410.0
S.E. Biomound - 7	06/30/03	na	na	na	na	67.9	1680	1,747.9
S.W. Biomound - 8	06/30/03	na	na	na	na	29.4	578	607.4
N.E. Biomound - 9	09/18/03	na	na	na	na	22.3	1140	1,162.3
S.E. Biomound - 10	09/18/03	na	na	na	na	<10.0	747	747.0
N.W. Biomound - 11	09/18/03	na	na	na	na	<10.0	1020	1,020.0
S.W. Biomound - 12	09/18/03	na	na	na	na	14.6	1770	1,784.6
N.E. Biomound - 13	12/31/03	na	na	na	na	18.7	1100	1.118.7
N.W. Biomound - 14	12/31/03	na	na	na	na	21.7	979	1,000.7
S.E. Biomound - 15	12/31/03	na	na	na	na	17.6	1550	1,567.6
S.W. Biomound - 16	12/31/03	na	na	na	na	<10.0	1000	1,000.0
NE Quad 0-6-in	08/27/04	na	na	na	na	<10	<10	<10
NE Quad 1 ft.	08/27/04	na	na	na	na	24.4	1,010	1,030
NE Quad 2 ft.	08/27/04	na	na	na	na	49.7	1,820	1,870
NW Quad 0-6-in	08/27/04	na	na	na	na	11.4	1,080	1,090
NW Quad 1 ft.	08/27/04	na	na	na	na	J(7.55)	553	553
NW Quad 2 ft.	08/27/04	na	na	na	na	12	147	159
SW Quad 6-in	08/27/04	na	na	na	na	<20	340	340
SW Quad 1 ft.	08/27/04	na	na	na	na	<10	<10	<10
SW Quad 2 ft.	08/27/04	na	na	na	na	35.8	1,610	1,650
SE Quad 0-6-in	08/27/04	na	na	na	na	J(8.82)	547	547
SE Quad 1 ft.	08/27/04	na	na	na	na	<10	<10	<10
SE Quad 2 ft.	08/27/04	na	na	na	na	<10	<10	<10
NE Quad 0-6-in	04/22/05	na	na	na	na	<1	924	924
NE Quad 1 ft.	04/22/05	na	na	na	na	3	536	539
NE Quad 2 ft.	04/22/05	na	na	na	na		1080	1091
NW Quad 0-6-in	04/22/05	na	na	na	na	<2	1040	1040

All concentrations are in mg/Kg

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TABLE 1

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

SAMPLE	SAMPLE	MET	METHODS: EPA SW 846-8021B, 5030 EPA 3				EPA SW 846-8015M		
LOCATION	DATE	BENZENE	TOLUENE	ETHYL-	TOTAL	GRO	DRO	TOTAL TPH	
				BENZENE	XYLENES	C6-C10	>C10-C28	C6-C28	
NW Quad 1 ft.	04/22/05	na	na	na	na	<2	580	580	
NW Quad 2 ft.	04/22/05	na	na	na	na	6	524	530	
SW Quad 6-in	04/22/05	na	na	na	na	<5	988	988	
SW Quad 1 ft.	04/22/05	na	na	na	na	<1	495	495	
SW Quad 2 ft.	04/22/05	na	na	na	na	<1	340	340	
SE Quad 0-6-in	04/22/05	na	na	na	na	<2	758	758	
SE Quad 1 ft.	04/22/05	na	na	na	na	<2	467	467	
SE Quad 2 ft.	04/22/05	па	na	na	na	<2	674	674	
ESW-1	10/24/05	na	na	na	na	<10	<10	<10	
SP-New	10/24/05	na	na	na	na	<10	<10	<10	

All concentrations are in mg/Kg

na = not analyzed

•

ND = Non Detect

Appendices

Appendix A Laboratory Reports

ANALYTICAL REPORT

Prepared for:

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

 Project:
 TNM 98-05A

 Order#:
 G0203314

 Report Date:
 05/13/2002

<u>Certificates</u> US EPA Laboratory Code TX00158

) 	·							
	ENVIR	ONM	E	NTAL	LÆ	AB OF	TEXAS	
)		SA	MP	LE WOF	RK	LIST		
Environn	nental Technology Gro	oup, Inc.		Orde	er#:	G02	03314	
2540 W.	Marland			Proje	ect:	EOI	2026C	
Hobbs, 1	VM 88240			Proje	ect N	ame: TNN	198-05A	
505/397/	4701			Loca	ation	: Euni	ice, NM	
The sample Texas make procedures	s listed below were submitte es no representation or certif used prior to the receipt of s	d to Environ fication as to samples by E	mental the me nvironi	Lab of Texas an thod of sample c nental Lab of T	nd wer collecti 'exas.	e received und on, sample ide	er chain of custody. En ntification, or transpor	wironmental Lab of tation/handling
				Date / Time	e I	Date / Time		
ab ID:	Sample :	<u>Matrix:</u>		Collected		Received	Container	Preservative
203314-01	Excavation Walls	Soil		5/8/02		5/9/02	4 oz glass	Ice
Ia	h Tostina ·	Rejected:	No	13:50 1	Temn	10:30 0 C		
<u></u>	8015M				r emp.	00		
	8021B/5030 BTEX							
002214 02	Excavation Bottom	Soil		5/8/02		5/9/02	4 oz glass	Ice
203314-02				14:00		10:30	G	
La	<u>b Testing:</u>	Rejected:	No	-	Temp:	0 C		
)	8015M							
)	8021B/5030 BTEX				·			
203314-03	Bio-Mound North East	Soil		5/8/02		5/9/02	4 oz glass	Ice
) <u>La</u>	b Testing:	Rejected:	No	14.50	Temp:	10.30 0 C		
)	8015M							
	8021B/5030 BTEX							
203314-04	Bio-Mound North West	Soil		5/8/02		5/9/02	4 oz glass	Ice
		D • • • •	N-	14:15	-	10:30		
<u>La</u>	<u>b Testing:</u>	Rejected:	NO		Temp:	00		
,	8015M							
)	8021B/5030 BTEX							
203314-05	Bio-Mound South East	Soil		5/8/02 14·45		5/9/02 10:30	4 oz glass	Ice
La	ib Testing:	Rejected:	No		Temp	: 0C		
)	8015M							
	8021B/5030 BTEX							
203314-06	Bio-Mound South West	Soil		5/8/02 15:00		5/9/02 10:30	4 oz glass	lce
) <u>L</u>	ub Testing:	Rejected:	No		Temp	: 0C		
)	8015M							
	8021B/5030 BTEX				-			

ANALYTICAL REPORT

Environmental Technology Group, Inc. Project: E	EOT 2026C
2540 W. Marland Project Name: T	INM 98-05A
Hobbs, NM 88240 Location: E	Eunice, NM

Sample ID:

.

Excavation Walls

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

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

8021B/5030 BTEX

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

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

Lab ID:

0203314-02

Sample ID: Excavation Bottom

			801 3111			
Method Blank	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/9/02	1	1	СК	8015M

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

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

Page 1 of 6

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ENVIRONMENTAL LAB OFFEXAS ANALVTICAL REPORT

Camille Reynold	S ·			Order#:	G0203	314	
Environmental T	echnology Group, Inc	2.		Project:	EOT 2	026C	
2540 W. Marlan	d			Project Name:	TNM	98-05A	
Hobbs, NM 882	40	<u></u>		Location:	Eunice	e, NM	
Lab ID:	0203314-02						
Sample ID:	Excavation Botto	m					
			8021B	/5030 BTEX			
	Method	Date	Date	Sample	Dilution		
	Blank	Prepared	Analyzed	Amount	<u>Factor</u>	<u>Analyst</u>	Method
	0001667-02	2	5/9/02 20:09	1	25	СК	8021B
		Parameter		Result		RL	
		Benzene	·····	<25.0		25.0	
		Ethylbenzene		<25.0		25.0	
		Toluene		<25.0		25.0	
		p/m-Xylene		<25.0		25.0	
		o-Xylene		<25.0		25.0	

Lab ID: Sample ID:

Ŏ

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M
	Parameter		Resul mg/kg	t s	RL	
	DRO, >C12-C35		1680		10.0	
	GRO, C6-C12		868		10.0	
	TOTAL, C6-C35		2548		10.0	

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Camille Reynolds	Order#:	G0203314		
Environmental Technology Group, Inc.	Project:	EOT 2026C		
2540 W. Marland	Project Name:	TNM 98-05A		
Hobbs, NM 88240	Location:	Eunice, NM		
				•

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

		8021B	/5030 BTEX			
Method <u>Blank</u> 0001667-02	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02 20:31	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 25	<u>Analyst</u> CK	<u>Metho</u> 8021E
	Parameter	· · · · · · · · · · · · · · · · · · ·	Resul µg/kg	t	RL	
Ī	Benzene		<25.0		25.0	
I	Ethylbenzene		<25.0	· · · · · · · · · · · · · · · · · · ·	25.0	
	loluene		<25.0	· · · · ·	25.0	
· ·	o/m-Xylene		58.1		25.0	
Ī	o-Xylene		58.0		25.0	

Lab ID: Sample ID:

0203314-04 Bio-Mound North West

			8015M		÷	
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	<u>Analyst</u>	Method
		5/9/02	1	1	СК	8015M

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

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Camille Reynolds	Order#:	G0203314
Environmental Technology Group, Inc.	Project:	EOT 2026C
2540 W. Marland	Project Name:	TNM 98-05A
Hobbs, NM 88240	Location:	Eunice, NM

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

		8021B	/5030 BTEX	K		
Method <u>Blank</u> 0001667-02	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02 20:53	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 25	<u>Anaiyst</u> CK	Method 8021B
	Parameter		Resu µg/k	ılt .g	RL	
	Benzene		60.0)	25.0	
	Ethylbenzene		80.0)	25.0	
	Toluene		268	3	25.0	
	p/m-Xylene		154		25.0	
	o-Xylene		172	2	25.0	

Lab ID: Sample ID:

0203314-05 Bio-Mound South East

			8015M			
Method Blank	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	<u>Analyst</u>	Method
		5/9/02	1	1	СК	8015M

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

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Camille Reynolds	Order#:	G0203314
Environmental Technology Group, Inc.	Project:	ЕОТ 2026С
2540 W. Marland	Project Name:	TNM 98-05A
Hobbs, NM 88240	Location:	Eunice, NM

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

		8021E	x/5030 BTEX	X		
Method <u>Blank</u> 0001667-02	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02 21:16	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 25	<u>Analyst</u> CK	Method 8021B
ſ	Parameter		Resu µg/k	ılt g	RL	
	Benzene		<25	.0	25.0	
	Ethylbenzene	<u> </u>	92.3	2	25.0	
	Foluene		191	L .	25.0	
	p/m-Xylene		174	4	25.0	
	o-Xylene		50.	6	25.0	

Lab ID: Sample ID:

0203314-06 Bio-Mound South West

			8015M			
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M
(Parameter		Res mg/	ult Kg	RL.	

 Parameter
 RL

 mg/kg
 mg/kg

 DRO, >C12-C35
 1260

 GRO, C6-C12
 848

 TOTAL, C6-C35
 2108

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Camille Reynolds	Order#:	G0203314
Environmental Technology Group, Inc.	Project:	EOT 2026C
2540 W. Marland	Project Name:	TNM 98-05A
Hobbs, NM 88240	Location:	Eunice, NM

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

ID:	Bio-Mound	Sc

		8021B	8/5030 BTEX			
Method <u>Blank</u> 0001667-02	Date <u>Prepared</u>	Date <u>Analyzed</u> 5/9/02 21:38	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 25	<u>Analyst</u> CK	<u>Method</u> 8021B
	Parameter	<u> </u>	Result µg/kg	:	RL	
	Benzene		<25.0		25.0	
	Ethylbenzene		90.1		25.0	
	Toluene		142		25.0	
	p/m-Xylene		192		25.0	
	o-Xylene		248		25.0	

5-14-02 Date

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

QUALITY CONTROL REPORT

8015M

Order#: G0203314

BLANK	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
OTAL, 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
OTAL, 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
OTAL, C6-C35-mg/kg		0001644-05		1000	1140	114.%	

ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203314

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BLANK	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
senzene-µg/kg		0001667-02	·····		<25.0		
hylbenzene-µg/kg		0001667-02			<25.0		
oluene-µg/kg		0001667-02			<25.0		
/m-Xylene-µg/kg	•	0001667-02			<25.0		
-Xylene-µg/kg		0001667-02			<25.0		· · · · · · · · · · · · · · · · · · ·
IS	Soil	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
enzene-µg/kg		0203305-01	0	100	107	107.%	
Ethylbenzene-µg/kg		0203305-01	0	100	110	110.%	
foluene-µg/kg		0203305-01	0	100	108	108.%	
/m-Xylene-µg/kg		0203305-01	0	200	228	114.%	<u></u>
-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%
thylbenzene-µg/kg		0203305-01	0	100	108	108.%	1.8%
oluene-μg/kg		0203305-01	0	100	107	107.%	0.9%
/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	. <u></u>	100	112	112.%	
Ethylbenzene-µg/kg		0001667-05		100	112	112.%	
Toluene-µg/kg		0001667-05		100	114	114.%	
p/m-Xylene-µg/kg	<u>. </u>	0001667-05	· · · · · · · · · · · · · · · · · · ·	200	229	114.5%	
»-Xylene-μg/kg		0001667-05	· · · ·	100	110	110.%	

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		ST (o)				· · · · · · · · · · · · · · · · · · ·														KUSH	sp& st
	AND ANAL	SIS REQUES	<u></u>			2.255.	80628 selitsio mi Volatijes 8270C 7.0ar 20 7.54	о ц s									 			101	R
	:-CUSTODY	ANALYS (Circle or S	0272	10109	pH e2 d		itai Metals Ag As Ba B sA gA statis B sA gA statis Safijes CP Semi Volatijes	ы))) Т									 			Rec 0 'C	Resur
	CHAIN-OF				(¥ino	w Wexico	H 8270C (8100 Nev H 8015M GRO/DRC H 418,1/TX 1005							>			 			REMARKS:	ENX
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	. Projects Only	KUY CURU: ness 20 Mi 2 (915) 582-2781 (915) 582-2781		2026	asa	TION SA	THE COL		5.4					->						Ë	Date. 5-9-2 6
		EOTI ENL East Busi 77 7970 (915) 687-	er.	ber: LoJ	Lener	PRESERVA METHO	E H20 ⁵ 10 ³	< IC N ^S HV	<			· · · ·								Date:	ab by. کیکندیکسین
	JTT ENEK	2540 West Marland Hobbs, NM 88242 Tel (505) 397-4882 Fax (505) 397-4701	OTT Leak Numb	TGI Project Num	ampler Signature	MATRIX	NDGE 3 3		X										-	Received by:	Received at L
•	For Use On ${ m E}($	West Wall d, TX 79703 5) 522-1139 .5) 520-4310	P.	ш	0		SAJNATNO: ume/Amount ATTR	/M 0/ - 0/ -	1 //08					2						ne:	/ <i>030</i> The:
•	-	4600 Midlan Tel (91 Fax (91	Permi	-ost	NM		CODE		MALLS	MOTTON 1	KARI FACT	To'le the second	TOWN MINON	Source Land						Ξ. 	-9-02 :: Ti
•	ology Ground		2 MILE	m 58-	INITE		FIELD		XCAUNTION	VCH II WHAN		A MUMAN	CINNOW 4	anyyon - o						Date	Date
•••••••••••••••••••••••••••••••••••••••	umental Techn.	Ц	ject Manager:	ject Name:	ject Location:	2	LAB # b Use Only		ש ווס-חוצבסנ	05 20	01 01	NU 0.	20 20	100 Kr						elinguished by	elinquished by

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@ Environmental Technology Group, Inc.

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ANALYTICAL REPORT

Prepared for:

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

 Project:
 TNM 98-05A

 PO#:
 EO2026

 Order#:
 G0205068

 Report Date:
 11/22/2002

Certificates

US EPA Laboratory Code TX00158

-	ENVIR	ONM	EN	NTAL	LA	AB OF	TEX	AS	
		SA	MP	LE WO	RK	LIST			
Environm	ental Technology Gro	un. Inc.		Ord	er#:	G020)5068		
2540 W	Marland	чр, шо.		Pro	iect:	EQ2	026		
Hobbs N	JM 88740			Pro	iect N	ame TN	ν. Δ. 08-05 Δ		
505/397/2	170 1			Loc	ation	Euni	ce NM		
505/5971-	+ 10 I			Loc	anon.	Lum	, 1111		
The samples no represent receipt of sam	lite d below were submitted t ation or certification as to the mules by Environmental Lab o	o Environme method of sa of Texas, unle	ntal Lab mple col ess other	of Texas and v llection, sample wise noted.	vere rec identifi	eived under cha ication, or trans	iin of custody. I portation/handli	Environmer ng procedu	ntal Lab of Texas make res used prior to the
	~ .			Date / Tim	ie D	Date / Time	~		···
Lab ID:	Sample :	<u>Matrix:</u>		Collected		Received	Container		Preservativo
J205068-01	Excavation Westside wall	SOIL		11/14/02 15:25		11/19/02 17:15	4 oz glass		Ice
<u>Lal</u>	b Testing:	Rejected:	No		Temp:	2.0C			
)	80 1 5M 8021B/5030 BTEX								
0205068-02	Excavation Southside wall	SOIL		11/14/02 15:22		11/19/02 17:15	4 oz glass	1	Ice
Lai	<u>b Testing:</u>	Rejected:	No		Temp:	2.0C			
	8015M				•				
	8021B/5030 BTEX						<u>.</u>		
0205068-03	Excavation Northside wall	SOIL		11/14/02 15:17		11/19/02 17:15	4 oz glass		Ice
La	<u>bTesting:</u>	Rejected:	No		Temp:	2.0C			
	⁸⁰ 15M								
	8021B/5030 BTEX	······································							
0205068-04	Excavation Eastside wall	SOIL		11/14/02 15:33		11/19/02 17:15	4 oz glass		Ice
<u>La</u>	<u>bTesting:</u>	Rejected:	No		Temp:	2.0C			
	⁸⁰ 15M								
	8021B/5030 BTEX		····					•	
0205068-05	S.W. Biomound Comp	SOIL		11/14/02 15:07		11/19/02 17:15	4 oz glass		Ice
<u>La</u>	<u>bTesting:</u>	Rejected:	No		Temp	2.0C			
	8015M								
	8021B/5030 BTEX								
0205068-06	N.W. Biomound Comp	SOIL		11/14/02 14:57		11/19/02 17:15	4 oz glass		Ice
La	<u>bTesting:</u>	Rejected:	No		Temp	2.0C			
	8015M								
	8021B/5030 BTEX	····-							
0205068-07	S.E. Biomound Comp	SOIL		11/14/02 15:02		11/19/02 17:15	4 oz glass		Ice

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

	ENVIR	ONME	NTAL I	LAB OF	TEXAS	
	۲	SAMP	LE WOR	K LIST		
Environn	nental Technology Gr	oup, Inc.	Order#	: G02	05068	
2540 W.	Marland		Project	:: EO2	026	
Hobbs, 1	NM 88240		Project	t Name: TNI	M 98-05A	
505/397/	4701		Locatio	on: Euni	ice, NM	
The sample no represen receipt of sa	s listed below were submitted tation or certification as to the amples by Environmental Lab	to Environmental La e method of sample co of Texas, unless othe	b of Texas and were ollection, sample ide erwise noted.	received under channel in the second se	ain of custody. Environm portation/handling proce	nental Lab of Texas mak dures used prior to the
<u>b ID:</u>	<u>Sample :</u> 8015M	Matrix:	Date / Time <u>Collected</u>	Date / Time <u>Received</u>	Container	Preservativ
	8021B/5030 BTEX		8		······	
05068-08	N.E. Biomound Comp	SOIL	11/14/02 14:51	11/19/02 17:15	4 oz glass	Ice
<u>La</u>	<u>b Testing:</u>	Rejected: No	Ten	np: 2.0C		
	8015M				1	
	8021B/5030 BTEX					
	•					
					·	

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ANALYTICAL REPORT

Camille Reynolds Environmental Te 2540 W. Marland Hobbs, NM 88240	chnology Group, Ind	2.		Order#: Project: Project Nam Location:	G020 EO20 e: TNM Eúnio	5068 126 I 98-05A :e, NM	
Lab ID:	0205068-01						
Sample ID:	Excavation West	side wall					
				8015M			
	Method	Date	Date	Sample	Dilution	A	
	Blank	rrepared	<u>Analyzed</u> 11/21/02	<u>Amount</u> 1	<u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M
					-		
		Devemator		Resul	t	דס	
		Parameter		mg/kg	<u>g</u>		
		GRO, C6-C12		<10.0)	10.0	
		DRO, > C12-C35		<10.0	<u>}</u>	10.0	
		101AL, C0-C3.		<10.0	·		<i>,</i>
		Surrog	ates	% Recovered	OC Lim	its (%)	
		1-Chlorooc	tane	107%	70	130	
		1-Chlorooc	tadecane	103%	70	130	
			8021B	B/5030 BTEX	Z		
	Method	Date	Date	Sample	Dilution		
	<u>Blank</u>	Prepared	Analyzed	Amount	Factor 25	<u>Analyst</u>	Method
	0003839-02	2	10:35	I	25	CK	3021B
		Dorameter	······································	Resu	lt	RI	
				mg/k	g		
		Benzene		<0.02	5	0.025	
		Tohuene	<u> </u>	<0.02	5	0.023	
		n/m-Xylene		<0.02	5	0.025	
		o-Xylene	····.	<0.02	5	0.025	
		L					•
		Surrog	gates	% Recovered	QC Lin	nits (%)	
		aaa-Toluei	ne	86%	80	120	
		Bromofluo	robenzene	91%	80	120	

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Camille Reynolds Environmental T 2540 W. Marland Hobbs, NM 8824	echnology Group, I I 40	nc.		Order#: Project: Project Name Location:	G02 EO2 : TN Eůr	205068 2026 M 98-05A nice, NM		
Lab ID:	0205068-02							
Sample ID:	Excavation Sou	thside wall		•				
				8015M				
	Metho	d Date	Date A polygod	Sample	Dilutio	n Analuat	Madea	
	Blank	riepareu	<u>Analyzeu</u> 11/21/02	1	<u>racto</u>	CK	8015M	
				-	-		0013111	
		Parameter	a	Result mg/kg	:	RL .		
		GRO, C6-C12	· · ·	<10.0		10.0		
		DRO, >C12-C3	5	<10.0		10.0		
		TOTAL, C6-C3	5	<10.0		10.0		
		F					/	·
		Surrog	gates	% Recovered		mits (%)		
		1-Chlorood	ctadecane	102%	70	130		
		L	8021F	R/5030 BTEX	·	L		
	Metho	d Date	Date	Sample	Dilutio	n		
	Blank	Prepared	Analyzed	Amount	Facto	<u>r Analyst</u>	Method	
	0003839	-02	11/21/02 11:32	1	25	СК	8021B	
		Parameter		Resul mg/kg	t	RL		
		Benzene		<0.025	5	0.025		
		Ethylbenzene		0.065		0.025		
		Toluene		0.079		0.025		
		p/m-Xylene	<u> </u>	0.221		0.023		
		0-Aylene		0.042			J _	
		Surro	gates	% Recovered	QC L	imits (%)		
		aaa-Tolue	- ene	95%	80	120		
		Bromofluc	probenzene	100%	80	120		

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT **Camille Reynolds** Order#: G0205068 Environmental Technology Group, Inc. **Project:** EO2026 2540 W. Marland **Project Name:** TNM 98-05A Hobbs, NM 88240 Location: Eunice, NM Lab ID: 0205068-03 Sample ID: **Excavation Northside wall** 8015M Method Date Date Sample Dilution Analyzed Amount Factor <u>Analyst</u> Method Blank Prepared 11/21/02 1. 1 СК 8015M Result RL Parameter mg/kg GRO, C6-C12 <10.0 10.0 10.0 DRO, >C12-C35 29.8 29.8 10.0 TOTAL, C6-C35 Surrogates % Recovered QC Limits (%) 1-Chlorooctane 115% 70 130 1-Chlorooctadecane 111% 70 130 8021B/5030 BTEX Method Date Date Sample Dilution <u>Analyst</u> **Factor** Method Blank Prepared Analyzed Amount 11/21/02 1 25 СК 8021B 0003839-02 11:51 Result RL Parameter mg/kg 0.025 < 0.025 Benzene 0.025 Ethylbenzene 0.026 0.028 0.025 Toluene 0.025 0.084 p/m-Xylene < 0.025 0.025 o-Xylene QC Limits (%) Surrogates % Recovered 90% 80 120 aaa-Toluene 100% 80 Bromofluorobenzene 120

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ENVIRONMENTAL LAB OFFEXAS ANALYTICAL REPORT

Camille Reynolds G0205068 Order#: Environmental Technology Group, Inc. **Project:** EO2026 2540 W. Marland **Project Name: TNM 98-05A** Hobbs, NM 88240 Location: Eúnice, NM Lab ID: 0205068-04 Sample ID: **Excavation Eastside wall** 8015M Method Date Date Sample Dilution Prepared **Analyzed** Amount Factor <u>Analyst</u> Method Blank 11/21/02 1 1 CK 8015M Result RL Parameter mg/kg 10.0 GRO, C6-C12 <10.0 10.0 DRO, >C12-C35 831 10.0 TOTAL, C6-C35 831 QC Limits (%) % Recovered Surrogates 1-Chlorooctane 120% 70 130 121% 70 130 1-Chlorooctadecane 8021B/5030 BTEX Date Method Date Sample Dilution Method Analyzed Amount Factor <u>Analyst</u> Prepared Blank 11/21/02 8021B 1 25 СК 0003839-02 12:10 Result RL Parameter mg/kg 0.025 Benzene < 0.025 0.025 0.034 Ethylbenzene 0.025 Toluene 0.035 0.025 0.100 p/m-Xylene 0.025 < 0.025 o-Xylene % Recovered QC Limits (%) Surrogates 90% 80 120 aaa-Toluene 98% 80 120 Bromofluorobenzene

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

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

Camille Reynolds Environmental To 2540 W. Marland Hobbs, NM 8824	echnology Group, Inc 40			Order#: Project: Project Name Location:	G020 EO20 : TNM Euni	5068)26 1 98-05A ce, NM	
Lab ID: Sample ID:	0205068-05 S.W. Biomound C	omp					
	36-4-3	Dete	Dete	8015M	D .1		
	Blank	Prepared	Analyzed	<u>Amount</u>	Factor	Analyst	Method
			11/21/02	1	1	СК	8015M
		Parameter	<u> </u>	Result mg/kg		RL	
		GRO, C6-C12		22.7		10.0	
		DRO, >C12-C35		1,530		10.0	
		TOTAL, C6-C35		1,553		10.0	
		Surroga	ates	% Recovered	QC Lin	1its (%)	
		1-Chlorooct	ane	118%	70	130	
		1-Chlorooct	tadecane	120%	70	130	
			8021E	B/5030 BTEX			
	Method	Date	Date	Sample	Dilution	L	
	Blank	Prepared	Analyzed	Amount	Factor	<u>Analyst</u>	Method
	0003839-02		11/21/02 12:29	1	25	СК	8021B
		Parameter		Resul mg/kg	t	RL	
		Benzene		< 0.025	5	0.025	
		Ethylbenzene		0.040		0.025	
		Toluene		0.042		0.025	
		p/m-Xylene		0.114		0.025	
		o-Xylene		0.028		0.025	
		Surrog	ates	% Recovered	QC Lin	nits (%)	
		aaa-Toluer	ie	87%	80	120	
		Bromofluor	obenzene	80%	80	120	

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT **Camille Reynolds** Order#: G0205068 Environmental Technology Group, Inc. **Project:** EO2026 2540 W. Marland **Project Name:** TNM 98-05A Hobbs, NM 88240 Location: Eunice, NM Lab ID: 0205068-06 N.W. Biomound Comp Sample ID: 8015M Method Date Date Sample Dilution Prepared Analyzed Amount Factor <u>Analyst</u> Blank Method 11/21/02 1 1 CK 8015M Result RL Parameter mg/kg 10.0 GRO, C6-C12 37.4 10.0 DRO, >C12-C35 1,480 10.0 TOTAL, C6-C35 1,517 % Recovered QC Limits (%) Surrogates 122% 70 130 1-Chlorooctane 126% 70 1-Chlorooctadecane 130 8021B/5030 BTEX Date Method Date Sample Dilution Method Prepared Analyzed Amount Factor <u>Analyst</u> Blank 11/21/02 8021B 25 СК 1 0003839-02 12:48 Result RL Parameter mg/kg 0.025 <0.025 Benzene 0.025 Ethylbenzene < 0.025 Toluene < 0.025 0.025 0.025 0.043 p/m-Xylene 0.025 o-Xylene < 0.025 QC Limits (%) Surrogates % Recovered 88% 80 120 aaa-Toluene Bromofluorobenzene 82% 80 120

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ENVIRONMENTAL LAB OF TEXAS DEDODE

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Comille Devrolde				V		
Environmental Technology Group, I 2540 W. Marland Hobbs, NM 88240	nc.		Order#: Project: Project Name: Location:	G020 EO20 TNM Eunic	5068 126 1 98-05A :e, NM	
Lab ID: 0205068-07 Sample ID: S.E. Biomound	Comp			·		
		8	8015M			
Methor <u>Blank</u>	d Date <u>Prepared</u>	Date <u>Analyzed</u> 11/21/02	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M
	Parameter		Result mg/kg		RL	
	GRO, C6-C12	· · · · ·	39.6		10.0	
	DRO, >C12-C35		2,180		10.0	
	TOTAL, C6-C35		2,220		10.0	,
	Surrog	ites	% Recovered	QC Lim	its (%)	
	1-Chlorooc	ane	110%	70	130	
	1-Chlorooc	adecane	110%	70	130	
		8021B	/5030 BTEX			
Metho	d Date	Date	Sample	Dilution	A a loured	
Blank	Prepared	Analyzed	Amount 1	Pactor 25	Analyst CK	Method 8021B
0003839-	-02	13:47		25	CK	0021 B
	Parameter		Result mg/kg		RL	
	Benzene		<0.025		0.025	
	Ethylbenzene		<0.025		0.025	
	77 1		<0.025		0.025	
	Toluene		<0.025		0.025	
	Toluene p/m-Xylene		<0.025		0.025	
	Toluene p/m-Xylene o-Xylene		<0.025 <0.025		0.025	
	Toluene p/m-Xylene o-Xylene Surrog	ates	<0.025 <0.025	QC Lim	0.025 0.025	
·	Toluene p/m-Xylene o-Xylene Surrog aaa-Toluer	ates e	<0.025 <0.025 <0.025 % Recovered 91%	QC Lim	0.025 0.025 iits (%) 120	

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

NMENTAL LAB OFFEXAS ENV

Camille Reynold Environmental 2540 W. Marlan Hobbs, NM 88	is Fechnolog Id 240	y Group, Inc	•		Order#: Project: Project Name Location:	G0205068 EO2026 me: TNM 98-05A Eunice, NM			
Lab ID: Sample ID:	0205 N.E.	068-08 Biomound C	omp						
					8015M				
	- 2	Method Blank	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	ı <u>Analyst</u>	Method	
				11/21/02	1	1	СК	8015M	
			Parameter		Resul	t	RL		
			GRO, C6-C12		75.7		10.0		
			DRO, >C12-C35		2,260		10.0		
			TOTAL, C6-C35	.	2,336		10.0		
			Surrog	ates	% Recovered	QC Lin	nits (%)		
			1-Chlorooc	tane	105%	70	130		
			1-Chlorooc	tadecane	103%	70	130		
				8021B	8/5030 BTEX	•			
		Method	Date	Date	Sample	Dilution	n A 1		
		<u>Blank</u>	Prepared	<u>Analyzeu</u> 11/21/02	Amount	<u>Factor</u> 25	<u>Analyst</u> CV	PO21 P	
		0003839-02		14:06	Å	23	CK	00210	
			Parameter		Resul	t	RL		
			Benzene		<0.02	5	0.025		
			Ethylbenzene		<0.02	5	0.025		
			Toluene		<0.02	5	0.025		
			p/m-Xylene		<0.02	5	0.025		
			o-Xylene		<0.02	5	0.025		
			Surrog	ates	% Recovered	QC Li	mits (%)		
			aaa-Toluer	ne	89%	80	120		
			Bromofluo	robenzene	87%	80	120		
					App Rala Cele Jean Sand	roval: nd K. Tutti y D. Keen ne McMur ira Biezug	tle, Lab Director le, Org. Tech. Di rrey, Inorg. Tech. be, Lab Tech.	A Officer rector Director	11-22-C Date

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

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

QUALITY CONTROL REPORT

8015M

Order#: G0205068

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

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205068

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

R. Eldson ED as Per Ç≜T pisprisi∂ Jelubertoč-erg) TAT HRUR J J CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Ю. С ٠. TWM 98-05 <u>.</u> EUNICE, NN E02050 Analyze For 0209/81209 XE16 X × semenovimes Containe seineio, alue li العني في الم الم الم الم LE LATER EXENNY FOLM. DECKORD CECKERC Project Name: Project #: Project Loc: PO #: Sar 9001/S00+ X1 H91 1915 HGT 22 DB/EVS: 10/ SOL Time Time 2 (viper (specify) Matrix lioS XX XX \times $\overline{\mathbf{x}}$ 20-61-11 appulz Dale 1916 VV Other (Specify) anoM Fax No: 505-397-470 Preservative OS H HŨ®N юн 'ONH aoj X X $\boldsymbol{\times}$ No. of Containers Hand memeryay 15:12 15:33 114/02/15:07 1114/02 14:5-7 15:22 15:28 belgme2 emiT 1502 1 Shl Received by ELOT 14/02 1114/02 14/02 1/14/02 20/h1/11 Received by: 11/11/02 Environmental Lab of Texas, Inc. 88240 12 Date Sampled 14:42 CAMILLE KEYNOLDS Phone: 915-563-1800 Fax: 915-563-1713 Time 2540 N. MALIN Line 140 12 4 M MI Excavation Sourtise WALL 03 Excumption Norrysiga WALL W ON THE MY AND LEVER WITH LO M Biomoundlomp EXCANTION MESTSIDE WALL Bionound Comp OF EXAMINON EASTSIDE WALL Telephone No: 505-397-4862) as pur RE: dSDA 2010 201 05 S. W. Dignound Comp OG N. 41. Gromowy Com P Date 115/02 EVGT -Company Name Company Address: SWG Project Manager: S.E. City/State/Zip: Sampler Signature: N.E. Odessa, Texas 79763 12600 West I-20 East 20 0205068-01 Special Instructions: 80 LAB # (lab use only) Refinquished by Relinquist N.

ANALYTICAL REPORT

Prepared for:

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

 Project:
 TNM 98-05A

 PO#:
 EO 2026

 Order#:
 G0305917

 Report Date:
 03/11/2003

<u>Certificates</u> US EPA Laboratory Code TX00158

SAMPLE WORK LIST

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

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

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

Cab ID: Sample: Matrix: Collected Received Container Ph 105015.01 NE Biogrammed 1 SON 2/4/02 2/2/02 Ass alsos	eservative
$\sqrt{30591/-01}$ NE Biomound-1 SOL $5/4/03$ $5/7/05$ 4 62 grass	Ice
13:20 16:03	
Lab Testing: Rejected: No Temp: 3.5 C	
8015M	
4305917-02 NW Biomound-2 SOIL 3/4/03 3/7/03 4 oz glass	Ice
13:42 16:03	
Lab Testing: Rejected: No Temp: 3.5 C	
8015M	
305917-03 SW Biomound-3 SOIL 3/4/03 3/7/03 4 oz glass	Ice
14:08 16:03	
Lab Testing: Rejected: No Temp: 3.5 C	
8015M	
U305917-04 SE Biomound-4 SOIL 3/4/03 3/7/03 4 oz glass	Ice
13:53 16:03	2
Lab Testing: Rejected: No Temp: 3.5 C	
8015M	

ANALYTICAL REPORT

Camille Reynold Environmental T 2540 W. Marland Hobbs, NM 882	s Fechnology Group, Inc d 40			Order#: Project: Project Nam Location:	G030 TNM e: TNM Lea (5917 98-05A 98-05A County, NM	
Lab ID: Sample ID:	0305917-01 NE Biomound-1						·
				8015M			
	Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
			3/10/03	1	1	СК	8015M
		Parameter		Resul mg/kg	t s	RL	
		GRO, C6-C12		124		10.0	
		DRO, >C12-C35		1,46)	10.0	
		TOTAL, C6-C35		1,584	1	10.0	
		Surroga	tes	% Recovered	QC Lin	its (%)	
		1-Chloroocta	ane	110%	70	130	
		1-Chioroocta	adecane	119%	10	130	
Lab ID:	0305917-02						
Sample ID:	NW Biomound-2						
				8015M			
	Method	Date	Date	Sample	Dilutior	I	
	Blank	Prepared	Analyzed	Amount	<u>Factor</u>	<u>Analyst</u>	Method
			3/10/03	1	1	СК	8015M
		Parameter	<u></u>	Resu mg/k	lt g	RL	
		GRO, C6-C12		115	;	10.0	
		DRO, >C12-C35		1,89	0	10.0	
		TOTAL, C6-C35		2,00	5	10.0	
		Surroga	tes	% Recovered	QC Lir	nits (%)	
		1-Chlorooct	ane	122%	70	130	
		1-Chlorooct	adecane	140%	70	130	

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.
ANALYTICAL REPORT **Camille Reynolds** Order#: G0305917 Environmental Technology Group, Inc. **Project: TNM 98-05A** 2540 W. Marland **Project Name:** TNM 98-05A Hobbs, NM 88240 Location: Lea County, NM Lab ID: 0305917-03 Sample ID: SW Biomound-3 8015M Method Sample Date Date Dilution Amount Factor Blank Prepared Analyzed <u>Analyst</u> Method 3/10/03 1 1 СК 8015M Result RL Parameter mg/kg GRO, C6-C12 52.6 10.0 DRO, >C12-C35 1,250 10.0 TOTAL, C6-C35 1,303 10.0 Surrogates % Recovered QC Limits (%) 107% 70 130 1-Chlorooctane 123% 70 130 1-Chlorooctadecane Lab ID: 0305917-04 Sample ID: SE Biomound-4 8015M Method Date Date Sample Dilution Factor Method Blank Prepared **Analyzed** Amount <u>Analyst</u> 3/10/03 8015M 1 1 СК Result RL Parameter mg/kg

GRO, C6-C12	24.8	10.0
DRO, >C12-C35	658	10.0
TOTAL, C6-C35	683	10.0
		L,

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

aland K Juis 3-11-03 Approval: K

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech. Date

Tech.

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

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

J

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

QUALITY CONTROL REPORT

8015M

Order#: G0305917

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

ENVIRONMENTAL LAB OF TEXAS I, LTD.

CASE NARRATIVE ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Environmental Technology Group, Inc. 2540 W. Marland Hobbs, NM 88240 Order#: G0305917 Project: TNM 98-05A

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

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received		
NE Biomound-1	0305917-01	SOIL	03/04/2003	03/07/2003		
NW Biomound-2	0305917-02	SOIL	03/04/2003	03/07/2003		
SW Biomound-3	0305917-03	SOIL	03/04/2003	03/07/2003		
SE Biomound-4	0305917-04	SOIL	03/04/2003	03/07/2003		

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

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

Kalandkitis Approved By: Date: 3-11-03 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 A

PO#:

Order#: G0306894

Report Date: 07/09/2003

<u>Certificates</u> US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS I, LTD.

	ENVL	KUNN	LE I	NIAL	LA	R OF	TEXAS	· .
		SA	MP	LE WO	RK J	LIST		
Environn	nental Technology	Group, Inc.		Ord	er#:	G03(06894	
2540 W.	Marland			Proj	ect:	EO 2	2026	
Hobbs, 1	NM 88240			Proj	ect Na	me: TNM	198-05 A	
505/397/	4701			Loc	ation:	· Lea	County N.M.	
no represent receipt of sa	tation or certification as to amples by Environmental I	the method of sar Lab of Texas, unle	nple co ss othe	bllection, sample rwise noted. Date / Tim	identific e Da	ation, or trans	portation/handling proce	dures used prior to the
ab ID:	Sample :	Matrix:		Collected	F	Received	Container	Preservative
306894-01	NE Biomound 5	SOIL		6/30/03 9:50		7/3/03 10:23	4 oz glass	ice
La	b Testing:	Rejected:	No	,	Temp:	14.5 C		
)	8015M							
306894-02	NW Biomound 6	SOIL		6/30/03		7/3/03 10:23	4 oz glass	ice
La	h Testing:	Rejected:	No	10.15	Temp:	10.25 14.5 C		
	8015M	-					, 	
		SOIL		6/30/03		7/3/03	4 oz glass	ice
306894-03	SE Biomound 7							
306894-03	SE Biomound 7	Defected.	No	10:41	m	10:23		
306894-03 <u>La</u>	SE Biomound 7 <u>b Testing:</u> 8015M	Rejected:	No	10:41	Temp:	10:23 14.5 C		
306894-03 <u>La</u> 306894-04	SE Biomound 7 <u>b Testing:</u> 8015M SW Biomound 8	Rejected: SOIL	No	10:41 6/30/03 11:08	Temp:	10:23 14.5 C 7/3/03 10:23	4 oz glass	ice
306894-03 <u>La</u> 306894-04 <u>La</u>	SE Biomound 7 <u>b Testing:</u> 8015M SW Biomound 8 <u>b Testing:</u>	Rejected: SOIL Rejected:	No	10:41 6/30/03 11:08	Temp: Temp:	10:23 14.5 C 7/3/03 10:23 14.5 C	4 oz glass	ice

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ENVIRONMENTAL LAB OFFEXAS ANALYTICAL REPORT

Hobbs, NM 88	240				Location:	Lea	County N.M.	
Lab ID:	0306	894-01						
Sample ID:	NE I	Biomound 5			001511			
		Method Blank	Date <u>Prepared</u>	Date Analyzed	Sample <u>Amount</u>	Dilution Factor	ı <u>Analy</u> st	Method
				7/7/03	1	1	RKT	8015M
			Parameter		Resul mg/kg	t	RL	
			GRO, C6-C12		52.8	·	10.0	
			DRO, >C12-C35		561		10.0	
			TOTAL, C6-C35		614		10.0	
			Surroga	tes	% Recovered	QC Lir	nits (%)	
			1-Chloroocta	ine	111%	70	130	
			1-Chloroocta	decane	108%	70	130	

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

1

1

RKT

8015M

7/7/03

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

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

Page 1 of 2

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12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF EXAS ANALYTICAL REPORT

Camille Reynolds Environmental Technology Group, Inc 2540 W. Marland Hobbs, NM 88240					G0300 EO 20 : TNM Lea C	6894 026 98-05 A County N.M.		
Lab ID: Sample ID:	0306894-03 SE Biomound 7							
				8015M				
	Method	Date Prepared	Date Analyzed	Sample	Dilution	Analyst	Method	
	Diank	Trepareu	7/7/03	1	1	RKT	8015M	
		Parameter		Result		RL		
		GRO, C6-C12	<u> </u>	67.9		10.0		
		DRO, >C12-C35		1,680		10.0		
		TOTAL, C6-C35		1748		10.0		
		Surroga	tes	% Recovered	QC Lim	its (%)	,	
		1-Chloroocta	ane	105%	70	130		
Lab ID: Sample ID:	0306894-04 SW Biomound 8			8015M				
	Method	Date	Date	Sample	Dilution			
	Blank	Prepared	Analyzed	Amount	Factor	<u>Analyst</u>	Method	
			7/7/03	1	1	RKT	8015M	
		Parameter		Result mg/kg		RL		
		GRO, C6-C12		29.4		10.0		
		DRO, >C12-C35		578		10.0		
		TOTAL, C6-C35		607		10.0		
		Surroga	tes	% Recovered	QC Lim	its (%)		
		1-Chlorooct	ane	107%	70	130		
		1-Chlorooct	adecane	105%	70	130		

Approval <u>Canton Province</u> Raland K. Turle, Lab Director, QA Officer Date Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech.

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

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS I, LTD.

Sara Molina, Lab Tech.

QUALITY CONTROL REPORT

8015M

Order#: G0306894

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

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

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FILE

ANALYTICAL REPORT

Prepared for:

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

 Project:
 TNM 98-05A

 PO#:
 G0307500

 Order#:
 G0307500

 Report Date:
 09/23/2003

<u>Certificates</u> US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West 1-20 East, Odessa, TX 79765 Ph: 915-563-1800

SAMPLE WORK LIST

Environmental Technology Group, Inc. 2540 W. Marland Hobbs, NM 88240 505/397/4701 Order#:G0307500Project:EO 2026Project Name:TNM 98-05ALocation:Lea County, N.M.

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

Lah IDu	Sample	Matrix	Date / Time	Date / Time	Containan	Duranting
<u>Lab ID:</u>	Northeast Quad	SOIL	<u>9/18/2003</u>	9/19/2003	4 oz glass	Preservative
030/500-01	Biomound-9	5012	10:24	13:00	4 VZ B1033	
La	<u>b Testing:</u>	Rejected: No	Tem	p: 1.0 C		
	8015M					
0307500-02	Southeast Quad Biomound-10	SOIL	9/18/2003 10:38	9/19/2003 13:00	4 oz glass	ice
La	<u>b Testing:</u>	Rejected: No	Tem	p: 1.0 C		
	8015M				· •••	
0307500-03	Northwest Quad Biomound-11	SOIL	9/18/2003 10:47	9/19/2003 13:00	4 oz glass	ice
<u>La</u>	<u>b Testing:</u>	Rejected: No	Tem	p: 1.0 C		
<u> </u>	8015M					
0307500-04	Southwest Quad Biomound-12	SOIL	9/18/2003 10:59	9/19/2003 13:00	4 oz glass	ice
<u>L</u> a	b Testing:	Rejected: No	Tem	p: 1.0 C		
-	8015M					
						·.
Eľ	NVIRONMENTAL LAB	OF TEXAS I, LTD	12600 West	I-20 East, Ode	ssa, TX 79765	Ph: 915-563-1800

p.2

			ANALYTIC	CAL REPO	DRT		
Camille Reynolds Environmental Tech 1540 W. Marland Hobbs, NM 88240	inology Group, Inc			Order#: Project: Project Name: Location:	G0307500 EO 2026 TNM 98-05A Lea County, N.N	1.	
Lab ID: Sample ID:	0307500-01 Northeast Ouad I	Biomound-9			· ·		
	•		80	015M			
·	Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 9/20/2003	Sample I <u>Amount</u> I	Dilution Factor Analys 1 JLH	<u>st Method</u> 8015M	
		Parameter		Result mg/kg	RL		
		GRO, C6-C12		22.3	10.0		
		DRO, >C12-C3	5	1,140	10.0		
		TOTAL, C6-C3	5	1,162	10.0		
		Surro	gates	% Recovered	QC Limits (%)		
		1-Chlordo	ctane	98%	70 130		
Sample ID:	Southeast Quad	Biomound-10	81	015M			· ·
Sample ID:	Southeast Quad Method	Biomound-10 Date <u>Prepared</u>	81 Date <u>Analyzed</u> 9/20/2003	015M Sample Amount J	Dilution <u>Factor Analy</u> I JLH	<u>st Method</u> 8015M	· · ·
Sample ID:	Southeast Quad J Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter	81 Date <u>Analyzed</u> 9/20/2003	015M Sample J <u>Amount</u> J Result	Dilution Factor <u>Analy</u> I JLH RL	<u>81 Method</u> 8015M	·. ·
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12	81 Date <u>Analyzed</u> 9/20/2003	015M Sample 1 Amount 1 Result mg/kg <10.0	Dilution Factor Analy I JLH RL 10.0	<u>81 Method</u> 8015M	·. ·
Sample ID:	Southeast Quad J Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2	81 Date <u>Analyzed</u> 9/20/2003	015M Sample Amount J Result mg/kg <10.0 747	Dilution Factor Analy I JLH RL 10.0 10.0	<u>81 Method</u> 8015M	·. ·
Sample ID:	Southeast Quad J Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C	81 Date <u>Analyzed</u> 9/20/2003	015M Sample J Amount J Result mg/kg <10.0 747 747	Dilution <u>Factor</u> <u>Analy</u> 1 JLH RL 10.0 10.0 10.0	<u>81 Method</u> 8015M	·. ·
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C	81 Date <u>Analyzed</u> 9/20/2003 35 35 35	015M Sample J Amount J Result mg/kg <10.0 747 747 747	Dilution <u>Factor</u> <u>Analy</u> 1 JLH RL 10.0 10.0 2C Limits (%)	<u>80 Method</u> 8015M	·. ·
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date Prepared Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C Surred 1-Chlored	81 Date <u>Analyzed</u> 9/20/2003	015M Sample 1 <u>Amount</u> 1 Result mg/kg <10.0 747 747 % Recovered (98% 79%	Dilution Factor Analy I JLH RL 10.0 10.0 10.0 2C Limits (%) 70 130 70 130	<u>81 Method</u> 8015M	
Sample ID:	Southeast Quad J Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C 1-Chlored 1-Chlored	8 Date <u>Analyzed</u> 9/20/2003	015M Sample J Amount J Result mg/kg <10.0 747 747 % Recovered (98% 79%	Dilution Analy I JLH RL 10.0 10.0 10.0 2C Limits (%) 70 130 70 130	st <u>Method</u> 8015M	·. ·
Sample ID:	Southeast Quad J Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C 1-Chlored 1-Chlored	81 Date <u>Analyzed</u> 9/20/2003	015M Sample J Amount J Result mg/kg <10.0 747 747 747 % Recovered (98% 79%	Dilution Factor Analy I JLH RL 10.0 10.0 10.0 20 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	81 <u>Method</u> 8015M	
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C 1-Chlored 1-Chlored	84 Date <u>Analyzed</u> 9/20/2003	015M Sample 1 <u>Amount</u> 1 Result mg/kg <10.0 747 747 747 % Recovered (98% 79%	Dilution <u>Factor</u> <u>Analy</u> I JLH RL 10.0 10.0 2C Limits (%) 70 130 70 130	<u>81 Method</u> 8015M	•
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date Prepared Parameter GRO, C6-C12 DRO, >C12-C2 TOTAL, C6-C 1-Chlored 1-Chlored	St Date <u>Analyzed</u> 9/20/2003	015M Sample 1 <u>Amount</u> 1 Result mg/kg <10.0 747 747 % Recovered (98% 79%	Dilution Factor Analy I JLH RL 10.0 10.0 2C Limits (%) 70 130 70 130	81 <u>Method</u> 8015M	
Sample ID:	Southeast Quad I Method <u>Blank</u>	Biomound-10 Date <u>Prepared</u> Parameter GRO, C6-C12 DRO, >C12-C1 TOTAL, C6-C 1-Chlorod 1-Chlorod	St Date <u>Analyzed</u> 9/20/2003	015M Sample 1 <u>Amount</u> 1 Result mg/kg <10.0 747 747 747 % Recovered (98% 79%	Dilution Analy Factor Analy I JLH RL 10.0 10.0 10.0 2C Limits (%) 70 130 70 130	<u>84 Method</u> 8015M	

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		I	ANALYTI	CAL REF	PORT		-	
Camille Reynolds Environmental To 2540 W. Marland Hobbs, NM 8824	echnology Group, Inc I 140			Order#: Project: Project Name Location:	G030 EO 2 e: TNM Lea (07500 1026 I 98-05A County, N.M.		
Lab ID:	0307500-03			· · · ·		· .	· · · ·	
Sample ID:	Northwest Quad	Biomound-11						
			à	8015M		•		
	Method	Date	Date	Sample	Dilution			
	Blank	Prepared	Analyzed	Amount	Factor	<u>Analyst</u>	Method.	
			9/20/2003	1	1	JLH	8015M	
		Doromotor		Resul	t	Pl		
		Falameter		ing/kg	;			
		GRO, C6-C12		<10.0		10.0		
		DRO, >C12-C35		1,020)	10.0		
		TOTAL, C6-C35		1,020		10.0		
		Surrog	ates	% Recovered	QC Lin	uits (%)		
		1-Chlorooc	tane	103%	70	130		
		1-Chlorooc	tadecane	86%	70	130		
Lab ID:	0307500-04			. •				
Sample ID:	Southwest Quad	Biomound-12						
				8015M		·		
	Method	Date	Date	Sample	Dilution	1		
	<u>Blank</u>	Prepared	Analyzed	Amount	Factor	<u>Analyst</u>	Method	
			9/20/2003	1	1	JLH	8015M	
382		Parameter		Resu	lt	RL		
				mg/kj	g			
		GRO, C6-C12		14.6		10.0		
		DRO, >C12-C3	<u> </u>	1,770	0	10.0		
		TOTAL, C6-C3	5	1,78	5	10.0		
		Surrog	ates	% Recovered	QC Lir	nits (%)		
		1-Chlorood	ctane	100%	70	130		
		1-Chlorood	ctadecane	81%	70	130		
				App Raia Cele Jean	roval Ind K. Tub Ly D. Keen Ine McMu	te, Lab Director, c, Org. Tech. Dir rey, Inorg. Tech	MCMULLU QA Otficer rector Director	09-29-03 Date

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

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

p.4



ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

8015M

Order#: G0307500

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006892-02			<[0.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
1'OTAL, C6-C35-mg/kg	0006892-03	•	2000	1624	81.2%	
CONTROL DITP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Rcsult	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006892-04		2000	1618	80.9%	0.4%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006892-05		1000	924	92.4%	

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West 1-20 East, Odessa, TX 79765 Ph: 915-563-1800



p.6

ANALYTICAL REPORT

Prepared for:

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

Project: TNM 98-05A

PO#:

Order#: G0308259

Report Date: 01/02/2004

<u>Certificates</u> US EPA Laboratory Code TX00158

SAMPLE WORK LIST

Environmental Technology Group, Inc. 2540 W. Marland Hobbs, NM 88240 505/397/4701 Order#:G0308259Project:EO 2026Project Name:TNM 98-05ALocation: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.

				Date / Time	Date / Time		
ab ID:	Sample :	<u>Matrix:</u>		Collected	Received	Container	Preservative
308259-01	NE Biomond-13	SOIL		12/31/03	12/31/03	4 oz glass	Ice
				9:00	11:25		
<u>La</u>	<u>b Testing:</u>	Rejected:	No	Tem	p: 2.5 C		
}	8015M						
))308259-02	NW Biomond-14	SOIL		12/31/03	12/31/03	4 oz glass	Ice
				9:17	11:25		
La	b Testing:	Rejected:	No	Tem	p: 2.5 C		
	8015M						
308259-03	SE Biomond-15	SOIL		12/31/03	12/31/03	4 oz glass	Ice
				9:34	11:25		
l <u>La</u>	<u>ub Testing:</u>	Rejected:	No	Ten	1 p: 2.5 C		
)	8015M						
0308259-04	SW Biomound-16	SOIL		12/31/03	12/31/03	4 oz glass	Ice
				9:10	11:25		
	ab Testing:	Rejected:	No	Ten	np: 2.5 C		
,	8015M						

ANALYTICAL REPORT

Camille Reynolds Environmental T 2540 W. Marland Hobbs, NM 8824	s lechnology Group, Inc. l 40			Order#: Project: Project Name Location:	G03 EO : TŅN Lea	08259 2026 4 98-05A County, NM	
Lab ID: Sample ID:	0308259-01 NE Biomond-13						
			8	015M			
	Method	Date	Date	Sample	Dilutio	n	
	Blank	Prepared	Analyzed	Amount	Factor	Analyst	Method
			12/31/03	1	1	JLH 、	8015M
	1	Parameter		Result		RL	
		CPO C6 C12		19.7		10.0	_
		DRO' > C12 - C35		1 100		10.0	
		TOTAL $C6-C35$		1,100		10.0	-
	ł	,				· · · · · · · · · · · · · · · · · · ·	
		Surroga	tes	% Recovered	QC Li	mits (%)	
		1-Chlorooct	ane	84%	70	130	
		1-Chlorooct	adecane	79%	70	130	
Lab ID: Sample ID:	0308259-02 NW Biomond-14		8	015M			
	Method	Date	Date	Sample	Dilutio	n	
	Blank	Prepared	Analyzed	Amount	Factor	r <u>Analys</u>	t Method
			12/31/03	1	1	JLH	8015M
		Parameter		Resul mg/kg	t	RL	
		GRO, C6-C12		21.7		10.0	
		DRO, >C12-C35		979		10.0	
		TOTAL, C6-C35		1,001		10.0	
		Surroga	ates	% Recovered	QC Li	mits (%)	
		1-Chlorooc	tane	84%	70	130	
		1-Chlorooc	tadecane	81%	70	130	

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

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ENVLONMENTAL LAB OTEXAS

hnology Group, Inc.			Order#: Proiect:	G0308	259		
			Project Name: Location:	EO 20 TNM 9 Lea Co	26 98-05A ounty, NM		
0308259-03 SE Biomond-15					·	<u> </u>	
			001574				
Method Blank	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method	
		12/31/03	1	1	JLH	8015M	
	Parameter		Result mg/kg		RL		
	GRO, C6-C12		17.6		10.0		
	DRO, >C12-C35		1,550		10.0		
	TOTAL, C6-C35		1,568		10.0		
	Surroga	ates	% Recovered	QC Limi	ts (%)		
	1-Chlorooc	tane	121%	70	130		
	1-Chlorooc	tadecane	121%	70	130		
0308259-04 SW Biomound-16	5						
			8015M				
Method	Date	Date	Sample	Dilution	A	M . 41 . J	
Blank	Prepared	12/31/03	Amount 1	Factor 1	<u>Analyst</u> JLH	8015M	
				~~~ <u>~</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
	Parameter		Result mg/kg	t	RL		
	GRO, C6-C12		<10.0		10.0		
	DRO, >C12-C3	5	1,000	·	10.0		
	TOTAL, C6-C3	5	1,000		10.0		
	Surrog	ates	% Recovered	QC Lim	its (%)		
	1-Chlorood	stane	103%	70	130		
	1-Chlorood	tadecane	103%	70	130		
			Appr Ralar Celey	oval: nd K. Tuttle D. Keene,	Lab Director Org. Tech. Di	<u>d it Jus</u> QA Officer rector	<u> -02-04</u> Date
	0308259-03 SE Biomond-15 Method <u>Blank</u> 0308259-04 SW Biomound-16 <u>Blank</u>	0308259-03 SE Biomond-15 Method Date Blank Prepared Parameter GRO, C6-C12 DRO, >C12-C35 TOTAL, C6-C35 Surrog 1-Chlorooc 1-Chlorooc 308259-04 SW Biomound-16 Method Date Blank Prepared Parameter GRO, C6-C12 DRO, >C12-C35 TOTAL, C6-C35 TOTAL, C6-C35 Surrog 1-Chlorooc 1-Chlorooc	0308259-03 SE Biomond-15 Method Date Date <u>Blank</u> Prepared <u>Analyzed</u> 12/31/03 Parameter GRO, C6-C12 DRO, >C12-C35 TOTAL, C6-C35 Surrogates 1-Chlorooctane 1-Chlorooctadecane 0308259-04 SW Biomound-16 Method Date Date <u>Blank</u> Prepared <u>Analyzed</u> 12/31/03 Parameter GRO, C6-C12 DRO, >C12-C35 TOTAL, C6-C35 Surrogates 1-Chlorooctadecane 1-Chlorooctadecane 1-Chlorooctadecane 0308259-04	03082259-03 SE Biomond-15       SB/15M         Method Blank       Date Prepared       Date Analyzed Analyzed 12/31/03       Sample Amount 1	S2 Biomond-15         Method       Date       Date       Sample       Dilution         Blank       Prepared       Analyzed       Sample       Dilution         I2/31/03       1       1       1         Parameter       Result       mg/kg       1       1         GRO, C6-C12       17.6       17.6       1       1         DRO, >C12-C35       1,550       1       1       1         Surrogates       % Recovered       QC Limit         1-Chlorooctane       121%       70       1       1         Surrogates         SW Biomound-16       Sample       Dilution         Method       Date       Date       Sample       Dilution         Blank       Prepared       Analyzed       Amount       Pactor         12/31/03       1       1       1         Parameter       Result       mg/kg       1       1         IDRO, >C12-C35       1,000       1       1       1         IDRO, >C12-C35       1,000       1       1       1         IDRO, >C12-C35       1,000       1       1       1         IDRO, >C12-C35	Size Biomond-15       Source       Source       Dister       Sample       Disterior       Analyzed         Method       Date       Date       Sample       Distrior       Analyzed         Image: Sample       Distrior       Analyzed       Amount       Factor       Analyzed         Image: Sample       Distrior       Image: Sample       Distrior       Analyzed       Image: Sample       Distrior         Image: Sample       Recourt       Recourt       Recourt       Recourt       Recourt       Image: Sample       Image:	Sel Biomond-15       Method Blank     Date Prepared     Date Analyzed     Sample Method 12/31/03     Dilution Factor     Method Method       Parameter     Date 12/31/03     1     1     Method Method       Second     Trepared     Analyzed 12/31/03     Method 1     Nethod       Second     Second     Second     Second       Second     Second     1/2/31/03     1     Nethod       Second     Second     1/2/31/03     1     1     Second       Second     Date 12/31/03     Second     Method 1     Nethod     Second       Second     Date 12/31/03     Date 1     Second     Method 1     Second       Method Blank     Date 12/31/03     Date 1     Sample 1     Dilution 1     Method 1     Second       Second     Date 12/31/03     Date 1     Sample 1     Nethod 1     Second     Second       Second     Date 12/31/03     Date 1

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

Page 2 of 2

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Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

### QUALITY CONTROL REPORT

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#### 8015M

Order#: G0308259

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



Report Date: May 9, 2005 TNM 9805-A

Work Order: 5042711 9805-A

Summary Report

Report Date: May 9, 2005 Work Order: 5042711

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

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

Date Time Date Sample Description Matrix Taken Taken Received 60989 NE Quad 0-6 soil 2005-04-22 14:30 2005-04-27 60990 2005-04-27 NE Quad 1' soil 2005-04-22 14:5060991 NE Quad 2' soil 2005-04-22 15:202005-04-27 60992 NW Quad 0-6 soil 2005-04-22 14:35 2005-04-27 60993 NW Quad 1' 2005-04-27 soil 2005-04-22 14:5560994 NW Quad 2' soil 2005-04-22 15:30 2005-04-27 60995 SW Quad 0-6 2005-04-27 soil 2005-04-22 14:40 60996 SW Quad 1' 2005-04-27 soil 2005-04-22 15:00SW Quad 2' 60997 soil 2005-04-22 2005-04-27 15:4060998 SE Quad 0-6 soil 2005-04-22 14:45 2005-04-27 60999 SE Quad 1' 2005-04-22 2005-04-27 soil 15:10 61000 SE Quad 2' soil 2005-04-22 15:50 2005-04-27

[	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
60989 - NE Quad 0-6	924	<1.00
60990 - NE Quad 1'	536	2.75
60991 - NE Quad 2'	1080	10.8
60992 - NW Quad 0-6	1040	<2.00
60993 - NW Quad 1'	580	<2.00
60994 - NW Quad 2'	524	5.63
60995 - SW Quad 0-6	988	<5.00
60996 - SW Quad 1'	495	<1.00
60997 - SW Quad 2'	340	<1.00
60998 - SE Quad 0-6	758	<2.00
60999 - SE Quad 1'	467	<2.00
61000 - SE Quad 2'	674	<2.00

Sample: 60991 - NE Quad 2'

Param	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Benzene		< 0.0100	mg/Kg	0.00100
Toluene		<0.0100	mg/Kg	0.00100
Ethylbenzene	. `	<0.0100	mg/Kg	0.00100

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continued ...

Report Date: May 9, 200 FNM 9805-A	5	Work Order: 504 9805-A	42711	Page Number: 2 of 2 Eunice
ample 60991 continued.	••			
Param	Flag	Result	Units	RI
Xylene	·	<0.0100	mg/Kg	0.00100
		· · · ·		
		· ·		
•				
· · ·				
			· · ·	
		 	· · · ·	
	· ·		1 × 1 × 1	
			·	
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6701 Aberdeen Avenue, Suite 9 155 McCutcheon, Suite H Lubbock, Texas 79424 800•378•1296 El Paso, Texas 79932 888•588•3443 E-Mail: lab@traceanalysis.com

806•794•1296 915•585•3443

6 FAX 806●794●1298 FAX 915●585●4944

#### **Analytical and Quality Control Report**

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

Report Date: May 9, 2005 Work Order: 5042711

Project Location:EuniceProject Name:9805-AProject Number:TNM 9805-A

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

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

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

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

				· ·			
leport Date: M	May 9, 2005		Work O	rder: 5042711	Ŭ	Page N	umber: 2 of 14
INM 9805-A	· .		·····	9805-A		· .	Eunice
	•	-	Analytic	al Donord	<b>.</b> .	•	
			Analytic	а керогі	<b>.</b> .	•	
ample: 6098	9 - NE Quad 0	-6					
Analysis:	TPH DRO		Analytical Met	hod: Mod. 801	5B	Prep 1	Method: N/A
QC Batch:	17715		Date Analyzed	: 2005-04-2	27	Analy	zed By: DS
Prep Batch:	15614		Sample Prepar	ation: 2005-04-2	27	Prepa	red By: DS
			RL		•	•	•
Parameter	<u> </u>	Flag	Result	Units		Dilution	
	·			mg/Kg			
	<b>1</b> 1	D 14	TT *.		Spike	Percent	Recovery
Surrogate	Flag		Units mg/Kg	Dilution	Amount	Recovery 145	<u>Limits</u>
						175	02.0 - 115
			·	•		•	
Sample: 6098	39 - NE Quad (	0-6					
Analysis:	TPH GRO	• •	Analytical Met	hod: S 8015B		Prep Me	thod: S 5035
QC Batch:	17745		Date Analyzed	2005-04-2	8	Analyze	d By: JG
Prep Batch:	15640		Sample Prepara	ition: 2005-04-2	8	Preparec	i By: JG
			RL	·			
Parameter	]	Flag	Result	Units	· · · · · · · · · · · · · · · · · · ·	Dilution	
GRU			<1.00	mg/Kg		10	0.100
<b>a</b> .		~ 1	<b></b>		Spike	Percent	Recovery
Surrogate	me (TFT)	Flag	Result (	nits Diluti	on Amoun	nt Recovery	Limits
4-Bromofluor	obenzene (4-B)	FB)	0.848 m	g/Kg 10	0.100	85	10 - 174
			· · · · · · · · · · · · · · · · · · ·				<u> </u>
~							
Sample: 6099	90 - NE Quad	1'				·	
Analysis:	TPH DRO		Analytical Me	thod: Mod. 801	15B	Prep	Method: N/A
QC Batch: Pren Batch:	17/15		Date Analyzed Sample Prena	1: 2005-04-	27 27	Analy	vzed By: DS
Thep Datom.	15011		Sumple i Topu	2005-04-	2,		100 DJ. DD
Damanatan		Flag	RL Barrelt	<b>T</b> .7*4			ħŤ
DRO		r lag	536	mg/Ka	2 2	1	KL
					<	· · ·	
Surrogate	Flao	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	<u> </u>	170	mg/Kg	1	150	113	62.8 - 115
			· ·	·		····	
Samely (AA)	00 NE 0 1	1)			•	· .	
Sampie: 009	- INE Quad	1.					
Analysis:	TPH GRO		Analytical Met	hod: S 8015B		Prep Me	ethod: S 5035
Prep Batch:	15640		Sample Prepar	ation: 2005-04-2	28	Analyze Prepare	аву: JG dBy: JG
						F	- ,
	ate recovery due to	peak interference.					
¹ High surrog							
¹ High surrog							
¹ High surrog							
¹ High surrog		• •			. *		

Report Date: M	av 9 2005		W	ork Order: 5	042711		Page N	umber: 3 of 14
TNM 9805-A	iy 9, 2005	· · ·		9805-A	042/11		I age IN	Eunice
			· · · · · · · · · · · · · · · · · · ·					
			RI.				•	
Parameter	Flag		Result		Units		Dilution	RL
GRO			2.75		mg/Kg		10	0.100
				·····				
-						Spike	Percent	Recovery
Surrogate	(777)	Flag	Result	Units	Dilution	Amount	Recovery	Limits
I rifluorotoluene	(IFI)		0.766	mg/Kg	10	0.100	77	10 - 160
4-Bromonuorob	enzene (4-BFB)		0.787	mg/Kg	10	0.100		10-174
•					• • •		с. С. 1916 г.	÷.,
Samala, 60001	NE Oned 11							
sample: 60991	- NE Quad 2							
Analysis: B	TEX		Analytical N	Aethod: S	8021B		Prep Met	hod: S 5035
QC Batch: 1'	7919		Date Analyz	zed: 2	005-05-07		Analyzed	l By: AG
Prep Batch: 1:	5792		Sample Prep	paration: 2	005-05-06		Prepared	By: AG
			DI					
Parameter	E1~~		KL Parult		TInita	· <b>т</b>	Vilution	זם
Renzene	11ag				ma/Ka	<u>L</u>	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
				·	88			
			•			Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluen	e (TFT)	2	0.586	mg/Kg	10	0.100	59	74.5 - 114
4-Bromofluoro	benzene (4-BFB)	·	0.583	mg/Kg	10	0.100	58	36.6 - 112
a 1 (000						·		
Sample: 60991	- NE Quad 2'					•		
Analysis: T	PH DRO		Analytic	al Method:	Mod. 8015B		Prep N	Aethod: N/A
QC Batch: 1	7715		Date Ana	alyzed:	2005-04-27		Analy	zed By: DS
Prep Batch: 1	5614		Sample I	Preparation:	2005-04-27		Prepar	red By: DS
				-			-	-
_	-		RL					
Parameter	Flag		Result		Units		Dilution	RL
			1080	<u> </u>	mg/Kg		5	50.0
•						Spike	Percent	Recoverv
Surrogate	Flag	Result	Units	Di	lution	Amount	Recovery	Limits
n-Triacontane	3	279	mg/Kg		5	30.0	186	62.8 - 115
· · · · ·								
	- NE Onad 2'							
Sample: 60991					<b>0</b> 000 <b>5</b>			
Sample: 60991					11 001 670		m M.	
Sample: 60991	TPH GRO		Analytica	l Method:	S 8015B		Prep Me	moa: 5 5035
Sample: 60991 Analysis: 7 QC Batch: 1	TPH GRO 7745		Analytica Date Ana	l Method: lyzed:	2005-04-28		Analyze	d By: JG
Sample: 6099 Analysis: 7 QC Batch: 1 Prep Batch: 1	TPH GRO 7745 5640		Analytica Date Ana Sample P	l Method: lyzed: reparation:	2005-04-28 2005-04-28		Analyze Prepared	d By: JG By: JG By: JG
Sample: 6099 Analysis: 7 QC Batch: 7 Prep Batch: 7	TPH GRO 7745 5640		Analytica Date Ana Sample P RI	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28		Prep Me Analyze Prepared	i By: JG By: JG
Sample: 6099 Analysis: 7 QC Batch: 1 Prep Batch: 1 Parameter	TPH GRO 7745 5640 Flag		Analytica Date Ana Sample P RL Result	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units		Prep Me Analyze Prepared	i By: JG By: JG By: JG

³High surrogate recovery due to peak interference.

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Report Date: FNM 9805-A	May 9, 2005			W	ork Order: 5 9805-A	5042711 A		Page N	umber: 4 of 1 Eunic
	· .				Work Order: $3042711$ Fage Funitor9805-ASpikePercentutUnitsDilutionAmountRecovery12mg/Kg200.1005657mg/Kg200.10038ulytical Method:Mod. 8015BPrep Methode Analyzed:2005-04-27Analyzed Enple Preparation:2005-04-27Prepared B;RLsultUnitsDilution040mg/Kg5JnitsDilutionAmountRecoveryg/Kg530.02036lytical Method:S 8015BPrep Method:analyzed:2005-04-28Analyzed By:rla Premaration:2005-04-28Analyzed By:rla Premaration:2005-04-28Premared By:	Recover			
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Limits
Frifluorotolue	ne (TFT)			1.12	mg/Kg	20	0.100	56	10 - 160
-Bromofluor	obenzene (4-	BFB)		0.757	mg/Kg	20	0.100	38	10 - 174
Sample: 6099	92 - NW Qu	ad U-6				т			
Analysis:	TPH DRO			Analytica	l Method:	Mod. 8015B		Prep N	fethod: N/A
QC Batch:	17715			Date Ana	lyzed:	2005-04-27		Analy	zed By: DS
Prep Batch:	15614			Sample P	reparation:	2005-04-27	· .	Prepar	ed By: DS
				RL			•		
Parameter		Flag		Result		Units		Dilution	RI
DRO	r Flag Res 10		1040		mg/Kg		5	50.0	
							Spike	Percent	Recovery
Surrogate	Fla	g	Result	Units	Di	lution	Amount	Recoverv	Limits
n-Triacontane	4	8	305	mg/Kg		5	30.0	203	62.8 - 11
Sample: 609 Analysis: OC Batch:	<b>92 - NW Qu</b> TPH GRO 17745	ad 0-6		Analytica Date Anal	l Method:	S 8015B 2005-04-28		Prep Met Analyzed	hod: S 503 1 By: JG
Sample: 609 Analysis: QC Batch: Prep Batch:	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6		Analytica Date Anal Sample P:	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28		Prep Met Analyzed Prepared	hod: S 503: 1 By: JG By: JG
Sample: 609 Analysis: QC Batch: Prep Batch:	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6		Analytica Date Anai Sample P: RL	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28		Prep Met Analyzed Prepared	hod: S 503 1 By: JG By: JG
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6 Flag		Analytica Date Ana Sample P RL Result	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units	]	Prep Met Analyzed Prepared Dilution	hod: S 503 I By: JG By: JG RJ
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6 Flag		Analytica Date Anal Sample P RL Result <2.00	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg	]	Prep Met Analyzed Prepared Dilution 20	hod: S 503: 1 By: JG By: JG R1 0.10
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6 Flag		Analytica Date Ana Sample P RL Result <2.00	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg	]  Spike	Prep Met Analyzed Prepared Dilution 20 Percent	hod: S 503: 1 By: JG By: JG RI 0.10 Recover
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate	<b>92 - NW Qu</b> TPH GRO 17745 15640	ad 0-6 Flag	Flag	Analytica Date Anal Sample P RL Result <2.00 Result	l Method: lyzed: reparation: Units	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution	Spike Amount	Prep Met Analyzed Prepared Dilution 20 Percent Recovery	hod: S 503. 1 By: JG By: JG RI 0.10 Recover Limits
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu	<b>92 - NW Qu</b> TPH GRO 17745 15640 ene (TFT)	ad 0-6 Flag	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748	l Method: lyzed: reparation: Units mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20	Spike Amount 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37	hod: S 503: 1 By: JG By: JG R1 0.10 Recover Limits 10 - 160
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo	<b>92 - NW Qu</b> TPH GRO 17745 15640 ene (TFT) robenzene (4	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P RL Result <2.00 Result 0.748 0.774	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 <u>Units</u> mg/Kg Dilution 20 20	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39	hod: S 503 1 By: JG By: JG Recover Limits 10 - 160 10 - 174
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P RL Result <2.00 Result 0.748 0.774	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39	hod: S 503 1 By: JG By: JG R1 0.10 Recover Limits 10 - 160 10 - 174
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Pren M	hod: S 503: 1 By: JG By: JG Recover Limits 10 - 160 10 - 174
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: OC Batch:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P RL Result <2.00 Result 0.748 0.774 Analytic Date Ana	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alvzed:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Prep N Analy	hod: S 503: 1 By: JG By: JG R1 0.10 Recover Limits 10 - 160 10 - 174 Method: N/4 zed By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample H	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepare	hod: S 503: By: JG By: JG Recover Limits 10 - 160 10 - 174 Method: N/A zed By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614	ad 0-6 Flag -BFB)	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample H RL	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepare	hod: S 503: 1 By: JG By: JG Recover Limits 10 - 160 10 - 174 Method: N/4 zed By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614	ad 0-6 Flag -BFB) ad 1'	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample F RL Result	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Met Analyzec Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepare Dilution	hod: S 503 By: JG By: JG Recover Limits 10 - 160 10 - 174 Method: N/A zed By: DS red By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter DRO	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614	ad 0-6 Flag -BFB) ad 1'	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample H RL Result 580	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27 Units mg/Kg	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepared Dilution 1	hod: S 503: 1 By: JG By: JG R1 0.10 Recover Limits 10 - 160 10 - 172 Method: N/2 zed By: DS red By: DS red By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Prep Batch:	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614	ad 0-6 Flag -BFB) ad 1' Flag	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample H RL Result 580	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27 Units mg/Kg	Spike Amount 0.100 0.100 Spike	Prep Met Analyzed Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepare Dilution 1 Percent	hod: S 503: By: JG By: JG Recover Limits 10 - 160 10 - 174 Method: N/4 zed By: DS red By: DS Recover State State St
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter DRO Surrogate	92 - NW Qu TPH GRO 17745 15640 ene (TFT) robenzene (4 993 - NW Qu TPH DRO 17715 15614 Fla	ad 0-6 Flag -BFB) ad 1' Flag	Flag	Analytica Date Anal Sample P: RL Result <2.00 Result 0.748 0.774 Analytic Date Ana Sample H RL Result 580 Units	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation: Di	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27 Units mg/Kg	Spike Amount 0.100 0.100 Spike Amount	Prep Met Analyzec Prepared Dilution 20 Percent Recovery 37 39 Prep M Analy Prepare Dilution 1 Percent Recovery	hod: S 503: By: JG By: JG Recover Limits 10 - 160 10 - 174 Method: N/4 zed By: DS red By: DS Recover Limits

⁴High surrogate recovery due to peak interference.

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NM 9805-A	•	wo	9805-A	A	•	Page Ni	Eunic
ample: 60993 - NW Quad 1'	·				······		
						·.	•
nalysis: TPH GRO C Batch: 17745		Analytical Date Apaly	Method:	S 8015B		Prep Met	hod: $S 503$
rep Batch: 15640		Sample Pre	eparation:	2005-04-28	•	Prepared	By: JG
		דמ				•	
arameter Flag		Result		Units	D	vilution	R
GRO		<2.00		mg/Kg		20	0.10
					Snike	Percent	Recover
urrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
rifluorotoluene (TFT)		0.812	mg/Kg	20	0.100	41	10 - 160
-Bromofluorobenzene (4-BFB)		0.736	mg/Kg	20	0.100	37	10 - 174
	80 T			• •			
Sample: 60994 - NW Quad 2'							
Analysis TPH DRA		Analytica	Method	Mod 8015B		Dren M	athod: N/
QC Batch: 17715		Date Anal	lyzed:	2005-04-27		Analyz	zed By: DS
Prep Batch: 15614		Sample Pr	reparation:	2005-04-27		Prepar	ed By: DS
		RT.					
Parameter Flag		Result		Units		Dilution	R
DRO		524		mg/Kg		1	50.
	•						
					Spike	Percent	Recover
Surrogate Flag	Result	Units	Di	lution	Spike Amount	Percent Recovery	Recover Limits
Surrogate Flag n-Triacontane	Result 133	Units mg/Kg	Di	lution 1	Spike Amount 150	Percent Recovery 89	Recover Limits 62.8 - 11
Surrogate Flag n-Triacontane	Result 133	Units mg/Kg	Di	lution 1	Spike Amount 150	Percent Recovery 89	Recover Limits 62.8 - 11
Surrogate Flag n-Triacontane Sample: 60994 - NW Ouad 2'	Result 133	Units mg/Kg	Di	lution1	Spike Amount 150	Percent Recovery 89	Recover Limits 62.8 - 11
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2'	Result 133	Units mg/Kg	Di	lution 1	Spike Amount 150	Percent Recovery 89	Recover Limits 62.8 - 11
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745	Result 133	Units mg/Kg Analytical Date Anal	Di Method: yzed:	lution 1 S 8015B 2005-04-28	Spike Amount 150	Percent Recovery 89 Prep Met Analyzed	Recover Limits 62.8 - 11 hod: S 503 By: JG
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640	Result 133	Units mg/Kg Analytical Date Analy Sample Pr	Di Method: yzed: eparation:	lution 1 S 8015B 2005-04-28 2005-04-28	Spike Amount 150	Percent Recovery 89 Prep Met Analyzed Prepared	Recover Limits 62.8 - 11 hod: S 503 l By: JG By: JG
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640	Result 133	Units mg/Kg Analytical Date Analy Sample Pr	Di Method: yzed: eparation:	lution 1 S 8015B 2005-04-28 2005-04-28	Spike Amount 150	Percent Recovery 89 Prep Met Analyzed Prepared	Recover Limits 62.8 - 11 hod: S 503 I By: JG By: JG
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag	Result 133	Units mg/Kg Analytical Date Analy Sample Pr RL Result	Di Method: yzed: eparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units	Spike Amount 150	Percent Recovery 89 Prep Met Analyzed Prepared	Recover Limits 62.8 - 11 hod: S 503 l By: JG By: JG R
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO	Result 133	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63	Di Method: yzed: eparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg	Spike Amount 150 I	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG R 0.10
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO	Result 133	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63	Di Method: yzed: eparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg	Spike Amount 150 I Spike	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result	Di Method: yzed: eparation: Units	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution	Spike Amount 150 I Spike Amount	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4 Brem offucerebarytone (4 PEP)	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741	Di Method: yzed: eparation: Units mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20	Spike Amount 150 I Spike Amount 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 27	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16
SurrogateFlagn-TriacontaneSample: 60994 - NW Quad 2'Analysis:TPH GROQC Batch:17745Prep Batch:15640ParameterFlagGROSurrogateTrifluorotoluene (TFT)4-Bromofluorobenzene (4-BFB)	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB)	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37	Recover Limits 62.8 - 11 hod: S 503 l By: JG By: JG By: JG Recover Limits 10 - 16 10 - 17
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Sample: 60995 - SW Quad 0-6	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Sample: 60995 - SW Quad 0-6 Analysis: TPH DRO	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17
Surrogate       Flag         n-Triacontane	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analyzed	Recover           Limits           62.8 - 11           hod:         \$ 503           By:         JG           By:         JG           By:         JG           Recover         Limits           10 - 16         10 - 17           Method:         N/           Zed By:         DS
SurrogateFlagn-TriacontaneSample: 60994 - NW Quad 2'Analysis:TPH GRO QC Batch:QC Batch:17745Prep Batch:15640ParameterFlag GROSurrogateTrifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB)Sample:60995 - SW Quad 0-6Analysis:TPH DRO QC Batch:QC Batch:17715 Prep Batch:Prep Batch:15614	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg mg/Kg all Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep Met Analyzed Prepared	Recover           Limits           62.8 - 11           hod:         \$ 503           By:         JG           By:         JG           Recover         Limits           10 - 16         10 - 17           Method:         N/           Zed By:         DS           ed By:         DS
Surrogate       Flag         n-Triacontane	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg mg/Kg ll Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analy Prepared	Recover           Limits           62.8 - 11           hod:         \$ 503           By:         JG           By:         JG           By:         JG           Recover         Limits           10 - 16         10 - 17           Method:         N/           zed By:         DS           ed By:         DS
Surrogate       Flag         n-Triacontane       Sample: 60994 - NW Quad 2'         Analysis:       TPH GRO         QC Batch:       17745         Prep Batch:       15640         Parameter       Flag         GRO       Surrogate         Trifluorotoluene (TFT)       4-Bromofluorobenzene (4-BFB)         Sample:       60995 - SW Quad 0-6         Analysis:       TPH DRO         QC Batch:       17715         Prep Batch:       15614	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg mg/Kg ll Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep Met Analyzed Prepared	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS ed By: DS
Surrogate       Flag         n-Triacontane	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg ll Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analy Prepare	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS ed By: DS
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Sample: 60995 - SW Quad 0-6 Analysis: TPH DRO QC Batch: 17715 Prep Batch: 15614	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: Units mg/Kg mg/Kg mg/Kg	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analy Prepare	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS ed By: DS
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Sample: 60995 - SW Quad 0-6 Analysis: TPH DRO QC Batch: 17715 Prep Batch: 15614	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: Units mg/Kg mg/Kg il Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analy Prepare	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS ed By: DS
Surrogate Flag n-Triacontane Sample: 60994 - NW Quad 2' Analysis: TPH GRO QC Batch: 17745 Prep Batch: 15640 Parameter Flag GRO Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB) Sample: 60995 - SW Quad 0-6 Analysis: TPH DRO QC Batch: 17715 Prep Batch: 15614	Result 133 Flag	Units mg/Kg Analytical Date Analy Sample Pr RL Result 5.63 Result 0.716 0.741 Analytica Date Ana Sample P	Di Method: yzed: eparation: <u>Units</u> mg/Kg mg/Kg ll Method: lyzed: reparation:	lution 1 S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 20 20 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 150 I Spike Amount 0.100 0.100	Percent Recovery 89 Prep Met Analyzed Prepared Dilution 20 Percent Recovery 36 37 Prep M Analy Prepare	Recover Limits 62.8 - 11 hod: S 503 By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS ed By: DS

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		·. ·			· .			
			RL		<b></b>		~	
Parameter	Flag	· · · · · · · · · · · · · · · · · · ·	Result		Units		Dilution	RL
DRO			988		mg/Kg		5	50.0
						Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dil	ution	Amount	Recovery	Limits
n-Triacontane	5	244	mg/Kg		5	30.0	163	62.8 - 115
· .	· · · · · · · · · · · · · · · · · · ·				•		······	······································
Sample: 6099	5 - SW Quad 0-6						•	•
Sampier 0099	c on Quarter							
Analysis:	TPH GRO		Analytical	Method:	S 8015B		Prep Met	hod: S 5035
QC Batch:	C Batch: 17745		Date Analy	zed:	2005-04-28		Analyzed	By: JG
Prep Batch:	15640		Sample Pre	eparation:	2005-04-28		Prepared	By: JG
<b>.</b>			RL					
Parameter	Flag		Result		Units		Dilution	
GRO			< 5.00		mg/K.g		50	0.100
						Spike	Percent	Recoverv
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	me (TFT)		0.930	mg/Kg	50	0.100	19	10 - 160
4-Bromofluor	obenzene (4-BFB)		0.820	mg/Kg	50	0.100	16	10 - 174
Sample: 6099	96 - SW Quad 1' TPH DRO		Analytica	l Method:	Mod. 8015B		Ргер М	Method: N/A
QC Batch:	1//15		Date Ana	lyzed:	2005-04-27		Analy.	zed By: DS
Prep Batch:	15614		Sample P	reparation:	2005-04-27		Prepar	red By: DS
Dorometer	Flag		RL Besult		Linita		Dilution	זס
DRO	1 14g		495		mg/Kg		1	50.0
<u></u>	·······					•· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
						Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Di	lution	Amount	Recovery	Limits
n-Triacontane	°	174	mg/Kg		1	150	116	62.8 - 115
						•		
Sample: 609	96 - SW Quad 1'							
Analysis	TPH GRO		Analytical	Method.	S 8015B		Pren Mer	thod: \$ 5035
QC Batch:	17745		Date Anal	yzed:	2005-04-28		Analyze	1 By: JG
Prep Batch:	15640		Sample Pr	eparation:	2005-04-28		Prepared	By: JG
-			-	•			-	-
_	·		RL					_
llanamaatam	Flag		Result		Units		Dilution	RL
Parameter	8				~-			

⁵High surrogate recovery due to peak interference. ⁶High surrogate recovery due to peak interference.

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NM 9805-A	· ·		· · ·	9805-2	A ·			Euni
		×				Spiles	Doroont	Passar
urrogate		Flag	Result	Units	Dilution	Amount	Recoverv	Limits
rifluorotolue	ne (TFT)	0	0.715	mg/Kg	10	0.100	72	10 - 16
-Bromofluor	obenzene (4-BFB)		0.738	mg/Kg	10	0.100	74	10 - 174
							. ·	
ample: 6099	97 - SW Quad 2'							
Analysis:	TPH DRO		Analytica	al Method:	Mod. 8015B		Prep N	Aethod: N/.
C Batch:	17715		Date Ana	lyzed:	2005-04-27		Analy	zed By: DS
rep Batch:	15614		Sample P	reparation:	2005-04-27		Prepar	ed By: DS
			RL					
arameter	Flag		Result		Units		Dilution	R
<u>DRO</u>			340		mg/Kg		1	50.
		·			· · · ·	Spike	Percent	Recover
Surrogate	Flag	Result	Units	Di	lution	Amount	Recovery	Limits
n-Triacontane	e 7	177	mg/Kg		1	150	118	62.8 - 11
Sample: 609 Analysis: QC Batch:	<b>97 - SW Quad 2'</b> TPH GRO 17745		Analytica Date Ana	l Method: lyzed:	S 8015B 2005-04-28		Prep Met Analyzed	thod: S 503 1 By: JG
Sample: 609 Analysis: QC Batch: Prep Batch:	<b>97 - SW Quad 2'</b> TPH GRO 17745 15640		Analytica Date Ana Sample P	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28		Prep Met Analyzed Prepared	thod: S 503 1 By: JG By: JG
Sample: 609 Analysis: QC Batch: Prep Batch:	<b>97 - SW Quad 2'</b> TPH GRO 17745 15640		Analytica Date Ana Sample P RL	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28		Prep Mer Analyzed Prepared	thod: S 503 1 By: JG By: JG
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter	<b>97 - SW Quad 2'</b> TPH GRO 17745 15640 Flag		Analytica Date Ana Sample P RL Result	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units		Prep Mer Analyzed Prepared Dilution	thod: S 503 1 By: JG By: JG R
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: GRO	97 - SW Quad 2' TPH GRO 17745 15640 Flag		Analytica Date Ana Sample P RL Result <1.00	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg	-	Prep Me Analyzed Prepared Dilution 10	thod: S 503 1 By: JG By: JG R 0.10
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO	97 - SW Quad 2' TPH GRO 17745 15640 Flag		Analytica Date Ana Sample P RL Result <1.00	l Method: lyzed: reparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg	Spike	Prep Met Analyzed Prepared Dilution 10 Percent	thod: S 503 d By: JG By: JG Recover
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate	97 - SW Quad 2' TPH GRO 17745 15640 Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result	l Method: lyzed: reparation: Units	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution	Spike Amount	Prep Met Analyzed Prepared Dilution 10 Percent Recovery	thod: S 503 d By: JG By: JG Recover Limits
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: GRO Surrogate Trifluorotolu	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT)	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27	l Method: lyzed: reparation: Units mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10	Spike Amount 0.100	Prep Met Analyzed Prepared Dilution 10 Percent Recovery 127	thod: S 503 d By: JG By: JG R 0.10 Recover Limits 10 - 16
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: <u>Parameter</u> <u>GRO</u> Surrogate Trifluorotolu 4-Bromofluo	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB)	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10	Spike Amount 0.100 0.100	Prep Mei Analyzed Prepared Dilution 10 Percent Recovery 127 78	thod: S 503 1 By: JG By: JG R 0.10 Recover Limits 10 - 16 10 - 17
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: <u>Parameter</u> GRO Surrogate Trifluorotolu 4-Bromofluo	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10	Spike Amount 0.100 0.100	Prep Met Analyzed Prepared Dilution 10 Percent Recovery 127 78	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17
Sample: 609 Analysis: QC Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DPO	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775	l Method: lyzed: reparation: Units mg/Kg mg/Kg	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10	Spike Amount 0.100 0.100	Prep Mei Analyzed Prepared Dilution 10 Percent Recovery 127 78	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: OC Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 988 - SE Quad 0-6 TPH DRO 17715	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10	Spike Amount 0.100 0.100	Prep Me Analyzer Prepared Dilution 10 Percent Recovery 127 78 Prep M	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DRO 17715 15614	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Ana Sample J	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Prenaration	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Me Analyzed Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prep M	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DRO 17715 15614	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Ana Sample J	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Me Analyzed Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepar	thod: S 503 I By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 988 - SE Quad 0-6 TPH DRO 17715 15614	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Ana Sample J RL Rocult	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Me Analyzed Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepar	thod: S 503 I By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DRO 17715 15614 Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Ana Sample J RL Result	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27	Spike Amount 0.100 0.100	Prep Me Analyzed Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepared	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS red By: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter DRO	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DRO 17715 15614 Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Am Sample J RL Result 758	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27 Units mg/Kg	Spike Amount 0.100 0.100	Prep Me Analyzed Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepared Dilution 5	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS red By: DS red By: DS red Sy: DS
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch:	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 988 - SE Quad 0-6 TPH DRO 17715 15614 Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date Ana Sample J RL Result 758	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation:	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 10 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27	Spike Amount 0.100 0.100 Spike	Prep Me Analyzer Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepared Dilution 5 Percent	thod: S 503 d By: JG By: JG Recover Limits 10 - 16 10 - 17 Method: N/ zed By: DS red By: DS Recover Recover
Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter GRO Surrogate Trifluorotolu 4-Bromofluo Sample: 609 Analysis: QC Batch: Prep Batch: Prep Batch: Parameter DRO Surrogate	97 - SW Quad 2' TPH GRO 17745 15640 Flag ene (TFT) robenzene (4-BFB) 998 - SE Quad 0-6 TPH DRO 17715 15614 Flag Flag	Flag	Analytica Date Ana Sample P RL Result <1.00 Result 1.27 0.775 Analytic Date An Sample J RL Result 758 Units	l Method: lyzed: reparation: Units mg/Kg mg/Kg al Method: alyzed: Preparation: D	S 8015B 2005-04-28 2005-04-28 Units mg/Kg Dilution 10 10 Mod. 8015B 2005-04-27 2005-04-27 2005-04-27 Units mg/Kg	Spike Amount 0.100 0.100 Spike Amount	Prep Me Analyzer Prepared Dilution 10 Percent Recovery 127 78 Prep M Analy Prepared Dilution 5 Percent Recovery	thod: S 50: d By: JG By: JG Recove Limit: 10 - 16 10 - 17 Method: N/ zed By: D: red By: D: Recover Limits

⁷High surrogate recovery due to peak interference. ⁸High surrogate recovery due to peak interference.

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Report Date: May 9, 2005 INM 9805-A	.: .	Wo	ork Order: 1 9805-4	5042711 A	 	Page Nu	mber: 8 of 14 Eunice
ample: 60998 - SE Quad 0-6				· · ·		·	
Analysis: TPH GRO		Analytical	Method:	S 8015B	•	Pren Metl	hod: \$ 5035
C Batch: 17800		Date Analy	zed:	2005-04-30		Analyzed	By: AG
Prep Batch: 15680		Sample Pre	eparation:	2005-04-30	· .	Prepared	By: MT
Parameter Flag		RL Result		Units		Dilution	RI
GRO		<2.00		mg/Kg		20	0.100
					Spiles	Porcont	Decovor
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	<u>_</u>	1.06	mg/Kg	20	0.100	53	10 - 160
4-Bromofluorobenzene (4-BFB)		0.957	mg/Kg	20	0.100	48	10 - 174
Sample: 60999 - SE Quad 1'							
Analysis: TPH DRO		Analytical Data Anal	l Method:	Mod. 8015B		Prep M	lethod: N/A
QC Batch: 17/15 Pren Batch: 15614		Sample P	iyzea:	2005-04-27		Anaiyz	ed By: DS
		bampie 1	reparation.	2005-04-27		Tepar	<i>aby. bb</i>
		RL		<b></b>	·. ·	<b>D</b> 11.1	
Parameter Flag		A67		Units		Dilution	
		407	<u> </u>	IIIg/Kg	·····		50.0
Surrogate Flag	Result	Units	Di	lution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	147	mg/Kg		1	150	98	62.8 - 115
Sample: 60999 - SE Quad 1' Analysis: TPH GRO QC Batch: 17800 Prep Batch: 15680		Analytical Date Anal Sample Pr	Method: yzed: eparation:	S 8015B 2005-04-30 2005-04-30		Prep Met Analyzed Prepared	hod: S 5035 By: AG By: MT
		RL					
Parameter Flag		Result		Units		Dilution	RL
GRO		<2.00		mg/Kg		20	0.100
					Spike	Percent	Recovery
Surrogate Triffuorotoluono (TET)	Flag	Result	Units	Dilution	Amount	Recovery	Limits
4-Bromofluorobenzene (4-BFB)		0.647	mg/Kg mg/Kg	20	0.100	30	10 - 180
							· · ·
Sample: 61000 - SE Quad 2'							
Analysis: TPH DRO QC Batch: 17715 Prep Batch: 15614		Analytica Date Ana Sample P	l Method: lyzed: reparation:	Mod. 8015B 2005-04-27 2005-04-27		Prep N Analyz Prepar	fethod: N/A zed By: DS ed By: DS
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NM 9805-A			9805-2	5042711 A		Page Number: 9 of 14 Eunice		
· .	Page Number       Page Number $g805-A$ RL         Flag       Result       Units       Dilution $f74$ mg/Kg       1         Flag       Result       Units       Dilution $f74$ mg/Kg       1         Flag       Result       Units       Dilution $g805-A$ Spike       Percent       I         Flag       Result       Units       Dilution       Amount       Recovery $g805-A$ Sample Preparation:       2005-04-30       Analyzed By:       Analyzed By:         0       Sample Preparation:       2005-04-30       Prep Method:         0       Sample Preparation:       2005-04-30       Prepared By:         0       RL       Flag       Result       Units       Dilution         <<2.00       mg/Kg       20       .0100       37         czne (4-BFB)       0.732       mg/Kg       20       0.100       37         czne (4-BFB)       0.745       mg/Kg       20       .0100       37         QC Batch:       17715       MDL       Flag       Result       Units       Spike       Percent       I							
Flag		RL Pomult		Linita		Dilution 1 Percent Recovery 147 Prep Met Analyzed Prepared Dilution 20 Percent Recovery	DT	
arameter riag		Kesult		ma/Ka			50.0	
		0/4		ing/Kg			50.0	
					Spike	Percent	Recovery	
urrogate Flag	Result	Units	Di	lution	Amount	Recovery	Limits	
-Triacontane 9	220	mg/Kg		1	150	147	62.8 - 115	
ample: 61000 - SE Quad 2'				·		•		
TIL CDO		Amplertical 1	Matha di	0 90160		Dron Math	ad. 5 5025	
Maysis. IFA OKO NC Ratch: 17800	ysis: TPH GRO Analytical Method: S 8015B Prep Metho Batch: 17800 Date Analyzed; 2005-04-30 Analyzed B		$\frac{1}{2}$					
Pren Batch: 15680		Sample Pre	naration.	2005-04-30		Prenared	By. AG By∙ MT	
10p Dawn, 15000		Sumple 110	paration.	2002-04-20		repareu	-j. 1VII	
		RL						
arameter Flag		Result		Units	· C	Dilution	RI	
JRO		<2.00		mg/Kg		20	0.100	
					Snike	Percent	Recover	
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)		0.732	mg/Kg	20	0.100	37	10 - 160	
-Bromofluorobenzene (4-BFB)		0.745	mg/Kg	20	0.100	37	10 - 174	
Method Blank (1) QC Batch: Parameter DRO	17715 Flag		MDI Resul	t	Uni mg/l	ts		
Method Blank (1) QC Batch: Parameter DRO	17715 Flag		MDI Resul	t 4	Uni mg/J	ts Kg		
Method Blank (1) QC Batch: Parameter DRO	17715 Flag		MDI Resul	t 4	Uni mg/l Spike	ts Kg Percent	RI 5( Recovery	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag	I7715 Flag Result	Units	MDI Resul <7.24	t 4 ilution	Uni mg/J Spike Amount	ts Kg Percent Recovery	RI 50 Recovery Limits	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag n-Triacontane	I7715 Flag Result 103	Units mg/Kg	MDI Resul <7.24 D	t 4 ilution 1	Uni mg/J Spike Amount 150	ts Kg Percent Recovery 69	RI 5( Recovery Limits 62.8 - 11:	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch:	17715 Flag Result 103	Units mg/Kg	MDI Resul <7.24 D	t 4 ilution 1	Uni mg/J Spike Amount 150	ts Kg Percent Recovery 69	RI 50 Recovery Limits 62.8 - 11	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch:	17715         Flag         Result         103         17745	Units mg/Kg	MDI Resul <7.24 D	t 4 ilution 1 L	Uni mg/l Spike Amount 150	ts Kg Percent Recovery 69	RI 50 Recovery Limits 62.8 - 11:	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag a-Triacontane Method Blank (1) QC Batch: Parameter	17715 Flag Result 103 17745 Flag	Units mg/Kg	MDI Resul <7.24 D	t 4 ilution 1 L lt	Uni mg/l Spike Amount 150 Un	ts Kg Percent Recovery 69	Recovery Limits 62.8 - 11:	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch: Parameter GRO	17715 Flag Result 103 17745 Flag	Units mg/Kg	MDI Resul <7.24 Dr Dr MD Resu <0.38	t 4 ilution 1 L lt k1	Uni mg/J Spike Amount 150 Un mg/	ts Kg Percent Recovery 69 its Kg	RI 50 Recovery Limits 62.8 - 11 62.8 - 11 8 0.	
Method Blank (1)       QC Batch:         Parameter	17715 Flag Result 103 17745 Flag	Units mg/Kg	MDI Resul <7.24 D MD Resu <0.38	t t 4 ilution 1 L lt il t ilution	Uni mg/l Spike Amount 150 Un mg/ Spike	ts Kg Percent Recovery 69 its Kg Percent Recovery	RI 50 Recovery Limits 62.8 - 11: 62.8 - 11: RI 0. Ri 0.	
Method Blank (1) QC Batch: Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch: Parameter GRO Surrogate Trifluorotoluene (TET)	17715 Flag Result 103 17745 Flag Flag	Units mg/Kg Result	MDI Resul <7.24 D MD Resu <0.38 Units	t 4 ilution 1 L L lt lt lt l1	Uni mg/l Spike Amount 150 Un mg/ Spike Amount 0 100	ts Kg Percent Recovery 69 its Kg Percent Recovery 102	RI 50 Recovery Limits 62.8 - 11 62.8 - 11 RI 0. Recovery Limits 81.8 - 10	
Method Blank (1)       QC Batch:         Parameter	I7715 Flag Result 103 17745 Flag Flag	Units mg/Kg Result 1.02 0.875	MDI Resul <7.24 D MD Resu <0.38 Units mg/Kg	t 4 ilution 1 L L It B1 Dilution 10 10	Uni mg/J Spike Amount 150 Un mg/ Spike Amount 0.100 0 100	ts Kg Percent Recovery 69 its Kg Percent Recovery 102 88	Ri So Recovery Limits 62.8 - 11 62.8 - 11 0. Recovery Limits 81.8 - 10 50 7 - 11	
Method Blank (1)       QC Batch:         Parameter       DRO         Surrogate       Flag         n-Triacontane       Flag         Method Blank (1)       QC Batch:         Parameter       GRO         Surrogate       Flag         Trifluorotoluene (TFT)       4-Bromofluorobenzene (4-BFB)	17715 Flag Result 103 17745 Flag Flag	Units mg/Kg Result 1.02 0.875	MDI Resul <7.24 D MD Resu <0.38 Units mg/Kg	t 4 ilution 1 L lt il Dilution 10 10	Uni mg/J Spike Amount 150 Un mg/ Spike Amount 0.100 0.100	ts Kg Percent Recovery 69 its Kg Percent Recovery 102 88	Recover Limits 62.8 - 11 Recover Limits 81.8 - 10 50.7 - 11	
Method Blank (1)       QC Batch:         Parameter	17715 Flag Result 103 17745 Flag Flag	Units mg/Kg Result 1.02 0.875	MDI Resul <7.24 D MD Resu <0.38 Units mg/Kg mg/Kg	t 4 ilution 1 L lt lt lt Dilution 10 10	Uni mg/l Spike Amount 150 Un mg/ Spike Amount 0.100 0.100	ts Kg Percent Recovery 69 its Kg Percent Recovery 102 88	Recover Limits 62.8 - 11 Recover Limits 81.8 - 10 50.7 - 11	

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⁹High surrogate recovery due to peak interference.

High surrogate recovery de

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			MDL					
Parameter	Flag		Result			Units		
GRO			< 0.381		mg/K	g	0.1	
	•				Spike	Percent	Recovery	
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)		0.996	mg/Kg	10	0.100	100	81.8 - 109	
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	10	0.100	85	50.7 - 113	

#### Method Blank (1) QC Batch: 17919

			MDI	Ĺ			
Parameter	Flag		Resul	t	Units	3	RL
Benzene	<0.00333			mg/K	g.	0.001	
Toluene		< 0.00352	3	mg/K	g	0.001	
Ethylbenzene		< 0.0033	9	mg/K	g	0.001	
Xylene		<0.0103			mg/K	mg/Kg	
x					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.829	mg/Kg	10	0.100	83	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.793	mg/Kg	10	0.100	79	36.6 - 112

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

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	206	199	mg/Kg	1	250	<7.24	82	3	68.4 - 128	20
Percent recov	very is based o	n the spike r	esult. RPD is	based on t	he spike and	spike duplica	ate result.	<b>C</b> S	ICSD	Rec
Surrogate		Result	Result	Units	Dil.	Amou	nt I	Rec.	Rec.	Limit
n-Triacontan	e	110	107	mg/Kg	1	150		73	72	62.8 - 115

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

	LCS	LCSD			Spike	Matrix			Rec.	RPD
Param	Result	Result	Units	Dil.	Amount	Result	Rec.	RPD	Limit	Limit
GRO	8.45	8.51	mg/Kg	10	1.00	< 0.381	84	1	72 - 124	21

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.02	1.00	mg/Kg	10	0.100	102	100	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.915	0.902	mg/Kg	10	0.100	92	90	72.2 - 119

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

NM 9805-A	iy 9, 2005	· · · · · · · · · · · · · · · · · · ·		Work C	Order: 50427 9805-A	11 			Page Numbe	r: 11 of 14 Eunice
	ICS	LCSD			Snike	Matrix			Rec	RBU
aram	Result	Regult	Unite	Dil	Amount	Result	Rec	RPD	I imit	Limit
RO	8 01	<u>8 22</u>	mg/Kg	10	1.00	<0.381	80	3	72 - 124	21
ercent recovery	is based on t	he spike resu	lt. RPD is b	ased on th	e spike and s	pike dupli	cate result.			
		-	LCS	LCSD		- <b>-</b>	Spike	LCS	LCSD	Rec.
urrogate			Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
rifluorotoluene	(TFT)		0.988	0.970	mg/Kg	10	0.100	99	97	80.4 - 113
-Bromofluorob	enzene (4-BF	B)	0.919	0.914	mg/Kg	10	0.100	92	91	72.2 - 119
aboratory Co.	ontrol Spike	(LCS-1)	QC Batch: 1	7919						
	T CS	I COD			Q., 11.,				Dee	DDD
	LUS	t Damelt	ITalita	D:I	Spike	IVIAUTIX	Daa	רזפס	Kec.	KPD
enzene	<u> </u>	1 <u>0052</u>	ma/Ka	<u> </u>	<u>A 100</u>		3 02	<u></u> >	70.8 114	<u></u> 20
oluene	0,93	5 0.932	mg/Kg	10	0.100	<0.035	3 93	1	79.7 - 115	20
thylbenzene	0.92	0.931	mg/Kg	10	0.100	<0.033	9 91	2	787-115	20
vlene	2 69	2 0.751	mg/Kg	10	0.100	<0.055	3 90	2	787-118	20
ercent recovery	y is based on	the spike res	ılt. RPD is t	based on th	ne spike and s	pike dupli	cate result.			
	·		LCS	LCSD			Spike	LCS	LCSD	Rec.
			Result	Result	Units	Dil.	Amount	Rec	Rec	Limit
Surrogate			1000000	1.000010				100.	1	Linne
Surrogate Trifluorotoluene	(TFT)		0.828	0.841	mg/Kg	10	0.100	83	84	76.6 - 114
Surrogate rifluorotoluene -Bromofluorob	e (TFT) benzene (4-B]	FB)	0.828 0.831	0.841 0.839	mg/Kg mg/Kg	10 10	0.100 0.100	83 83	84 84	76.6 - 114 72 - 111
Surrogate Frifluorotoluene I-Bromofluorob Matrix Spike (1	e (TFT) benzene (4-B) <b>MS-1)</b> Q6 MS	FB) C Batch: 178 MSD	0.828 0.831 00 Spike	0.841 0.839	mg/Kg mg/Kg 60998 Spike	10 10 Matrix	0.100 0.100	83 83	84 84 84 Rec.	76.6 - 114 72 - 111
urrogate rifluorotoluene -Bromofluorob Matrix Spike (1 Param	e (TFT) penzene (4-B) <b>MS-1)</b> Q MS Result	FB) C Batch: 178 MSD Result	0.828 0.831 00 Spike Units	0.841 0.839 ed Sample: Dil.	mg/Kg mg/Kg 60998 Spike Amount	10 10 Matrix Result	0.100 0.100 Rec.	83 83 RPD	Rec. Limit	RPD Limi
urrogate rifluorotoluene -Bromofluorob Matrix Spike (1 Param BRO	e (TFT) penzene (4-Bl MS-1) Qu MS Result 7.43	FB) C Batch: 178 MSD Result 7.69	0.828 0.831 00 Spike Units mg/Kg	0.841 0.839 ed Sample: Dil. 20	mg/Kg mg/Kg 60998 Spike Amount 1.00	10 10 Matrix Result <0.763	0.100 0.100 Rec. 37	RPD 3	Rec. Limit 10 - 182	RPD Limi 19.6
Surrogate Frifluorotoluene Bromofluorob Matrix Spike () Param GRO Percent recover	e (TFT) penzene (4-Bl MS-1) Qu MS Result 7.43 y is based on	FB) C Batch: 178 MSD Result 7.69 the spike res	0.828 0.831 00 Spike Units mg/Kg ult. RPD is t	0.841 0.839 ed Sample: Dil. 20 pased on th	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s	10 10 Matrix Result <0.763 spike dupli	0.100 0.100 Rec. 37 icate result.	RPD 3	Rec. Limit 10 - 182	RPD Limi 19.6
Surrogate Frifluorotoluene I-Bromofluorob Matrix Spike (1 Param BRO Percent recover Surrogate	e (TFT) penzene (4-Bl MS-1) Qu MS Result 7.43 y is based on	FB) C Batch: 178 MSD Result 7.69 the spike res	0.828 0.831 00 Spike Units mg/Kg ult. RPD is to MS Result	0.841 0.839 ed Sample: Dil. 20 pased on the MSD Result	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s	10 10 Matrix Result <0.763 spike dupli	0.100 0.100 Rec. 37 icate result. Spike	RPD 3 MS	Rec. Limit 10 - 182	RPD Limi 19.6 Rec. Limi
Surrogate Frifluorotoluene I-Bromofluorob Matrix Spike (1 Param GRO Percent recover Surrogate	e (TFT) penzene (4-B) MS-1) Q MS Result 7.43 y is based on	FB) C Batch: 178 MSD Result 7.69 the spike res	0.828 0.831 00 Spike Units mg/Kg ult. RPD is to MS Result 0.773	0.841 0.839 ed Sample: Dil. 20 pased on the MSD Result	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s Units	10 10 Matrix Result <0.763 spike dupli Dil.	Rec. 37 icate result. Spike Amount	RPD 3 MS Rec.	Rec. Limit 10 - 182 MSD Rec. 29	RPD Limi 19.6 Rec. Limit
Surrogate Param Param Percent recover Surrogate Frifluorotoluene Bromofluorot	e (TFT) penzene (4-B) MS-1) Q4 MS Result 7.43 y is based on e (TFT) penzene (4-B)	FB) C Batch: 178 MSD Result 7.69 the spike res	0.828 0.831 00 Spike Units mg/Kg ult. RPD is t MS Result 0.773 0.825	0.841 0.839 ed Sample: Dil. 20 pased on the MSD Result 0.765 0.815	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s Units mg/Kg mg/Kg	10 10 Matrix Result <0.763 spike dupli Dil. 20 20	0.100 0.100 Rec. 37 icate result. Spike Amount 0.1 0.1	RPD 3 MS Rec. 39 41	Rec. Limit 10 - 182 MSD Rec. 38 41	RPD Limit 19.6 Rec. Limit 10 - 160 10 - 174
Surrogate Frifluorotoluene I-Bromofluorot Matrix Spike (1 Param Frifluorotoluene I-Bromofluorot Standard (ICV	e (TFT) penzene (4-B) MS-1) Q MS Result 7.43 y is based on e (TFT) penzene (4-B) 7-1) QC B	FB) C Batch: 178 MSD Result 7.69 the spike res FB) Patch: 17715	0.828 0.831 00 Spike Units mg/Kg ult. RPD is b MS Result 0.773 0.825 ICV	0.841 0.839 ed Sample: Dil. 20 pased on the MSD Result 0.765 0.815	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s Units mg/Kg mg/Kg	10 10 Matrix Result <0.763 spike dupli Dil. 20 20	0.100 0.100 Rec. 37 icate result. Spike Amount 0.1 0.1 0.1	RPD 3 MS Rec. 39 41	Rec. Limit 10 - 182 MSD Rec. 38 41	RPD Limit 19.6 Rec. Limit 10 - 160 10 - 174
Surrogate Frifluorotoluene 4-Bromofluorot Matrix Spike (1 Param GRO Percent recover Surrogate Frifluorotoluene 4-Bromofluorot Standard (ICV	e (TFT) penzene (4-B) MS-1) Q4 MS Result 7.43 y is based on e (TFT) penzene (4-B) 7-1) QC B	FB) C Batch: 178 MSD Result 7.69 the spike res FB) FB)	0.828 0.831 00 Spike Units mg/Kg ult. RPD is b MS Result 0.773 0.825 ICV True	0.841 0.839 ed Sample: Dil. 20 pased on the MSD Result 0.765 0.815	mg/Kg mg/Kg 60998 Spike Amount 1.00 ne spike and s Units mg/Kg mg/Kg mg/Kg	10 10 Matrix Result <0.763 spike dupli Dil. 20 20 IC Pere	0.100 0.100 Rec. 37 icate result. Spike Amount 0.1 0.1 0.1	RPD 3 MS Rec. 39 41 Percent Recover	Rec. Limit 10 - 182 MSD Rec. 38 41	RPD Limi 19.6 Rec. Limit 10 - 160 10 - 174 Date

Standard (CCV-1)

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QC Batch: 17715

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eport Date: 1 NM 9805-A	May 9, 2005		Wor	k Order: 5042711 9805-A		Page N	umber: 12 of 14 Eunice
						<u></u>	
		·	CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
aram	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
RO		mg/Kg	250	200	80	75 - 125	2005-04-27
tandard (CC	CV-2) OC	Batch: 17715				· · · ·	
			COVe	COV	COM	Descent	
	*		True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc	Conc	Recovery	Limite	Analyzed
DRO		mg/Kg	250	204	81	75 - 125	2005-04-27
Standard (IC	CV-1) QC	Batch: 17745					
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
JRO		mg/L	1.00	0.851	85	85 - 115	2005-04-28
Param GRO	Flag	Units mg/L	CCVs True Conc. 1.00	CCVs Found Conc. 0.961	CCVs Percent Recovery. 96	Percent Recovery Limits 85 - 115	Date Analyzed 2005-04-28
Standard (IC	CV-1) QC	Batch: 17800	ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
<b>Standard (IC</b> Param	CV-1) QC Flag	Batch: 17800 Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Standard (IC Param GRO	CV-1) QC Flag	Batch: 17800 Units mg/L	ICVs True Conc. 1.00	ICVs Found Conc. 0.994	ICVs Percent Recovery 99	Percent Recovery Limits 85 - 115	Date Analyzed 2005-04-30
Standard (IC Param GRO Standard (C	CV-1) QC Flag CV-1) QC	Batch: 17800 Units mg/L C Batch: 17800	ICVs True Conc. 1.00 CCVs True	ICVs Found Conc. 0.994 CCVs Found	ICVs Percent Recovery 99 CCVs Percent	Percent Recovery Limits 85 - 115 Percent Recovery	Date Analyzed 2005-04-30 Date
Standard (IC Param GRO Standard (C Param	CV-1) QC Flag CV-1) QC Flag	Batch: 17800 Units mg/L C Batch: 17800 Units	ICVs True Conc. 1.00 CCVs True Conc.	ICVs Found Conc. 0.994 CCVs Found Conc.	ICVs Percent Recovery 99 CCVs Percent Recovery	Percent Recovery Limits 85 - 115 Percent Recovery Limits	Date Analyzed 2005-04-30 Date Analyzed
Standard (IC Param GRO Standard (C Param GRO	CV-1) QC Flag CV-1) QC Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L	ICVs True Conc. 1.00 CCVs True Conc. 1.00	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970	ICVs Percent Recovery 99 CCVs Percent Recovery 97	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30
Standard (IC Param GRO Standard (C Param GRO Standard (C	CV-1) QC Flag CV-1) QC Flag CV-1) QC	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919	ICVs True Conc. 1.00 CCVs True Conc. 1.00	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970	ICVs Percent Recovery 99 CCVs Percent Recovery 97	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30
Standard (IC Param GRO Standard (C Param GRO Standard (C Param	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Ulnits	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/K g	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.970	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.970	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.970 0.970	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 97 95 93 93	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene Xylene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100 0.300	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.970 0.920 0.0926 0.275	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93 93 93 92	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene Xylene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100 0.300	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.0947 0.0932 0.0926 0.275	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93 93 92	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene Xylene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100 0.300	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.970 0.920 0.0926 0.275	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93 93 93 92	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene Xylene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100 0.300	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.0947 0.0932 0.0926 0.275	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93 93 93 92	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07 2005-05-07
Standard (IC Param GRO Standard (C Param GRO Standard (C Param Benzene Toluene Ethylbenzene Xylene	CV-1) QC Flag CV-1) QC Flag CV-1) QC Flag Flag	Batch: 17800 Units mg/L C Batch: 17800 Units mg/L C Batch: 17919 g Units mg/Kg mg/Kg mg/Kg mg/Kg	ICVs True Conc. 1.00 CCVs True Conc. 1.00 CCVs True Conc. 0.100 0.100 0.100 0.100 0.300	ICVs Found Conc. 0.994 CCVs Found Conc. 0.970 CCVs Found Conc. 0.0947 0.0932 0.0926 0.275	ICVs Percent Recovery 99 CCVs Percent Recovery 97 CCVs Percent Recovery 95 93 93 92	Percent Recovery Limits 85 - 115 Percent Recovery Limits 85 - 115 85 - 115	Date Analyzed 2005-04-30 Date Analyzed 2005-04-30 Date Analyzed 2005-05-07 2005-05-07 2005-05-07 2005-05-07
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Standard (CC	CV-2) QC Bate	ch: 17919	· .		· .		· . ·
Standard (CC	CV-2) QC Bate	ch: 17919	CCVs	CCVs	CCVs	Percen	ht
Standard (CC	CV-2) QC Bate	ch: 17919	CCVs True	CCVs Found	CCVs Percent	Percen Recove	nt ry Date
Standard (CC Param	CV-2) QC Bato Flag	ch: 17919 Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percen Recove Limits	nt ry Date s Analyzed
aram Benzene	CV-2) QC Bate	ch: 17919 Units mg/Kg	CCVs True Conc. 0.100	CCVs Found Conc.	CCVs Percent Recovery 91	Percen Recove Limits 85 - 11	nt sy Date s <u>Analyzed</u> 5 2005-05-07
Standard (CC Param Benzene Toluene	CV-2) QC Bato Flag	ch: 17919 Units mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100	CCVs Found Conc. 0.0909 0.0894	CCVs Percent Recovery 91 89	Percen Recove Limits 85 - 11 85 - 11	nt sry Date s Analyzed 5 2005-05-07 5 2005-05-07
Standard (CC Param Benzene Foluene Ethylbenzene	CV-2) QC Bata	ch: 17919 Units mg/Kg mg/Kg mg/Kg	CCVs True Conc. 0.100 0.100 0.100	CCVs Found Conc. 0.0909 0.0894 0.0876	CCVs Percent Recovery 91 89 88	Percen Recove Limits 85 - 11 85 - 11 85 - 11	nt s <u>Analyzed</u> 5 2005-05-07 5 2005-05-07 5 2005-05-07

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Report Date: May 9, 2005 TNM 9805-A Work Order: 5042711 9805-A Page Number: 14 of 14 Eunice

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12600 West I-20 East - Odessa, Texas 79765

# Analytical Report

Prepared for:

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

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

Lab Order Number: 4I01007

Report Date: 09/08/04

Project: No Project Project Number: 98-05A Project Manager: Plains All American Pipeline, L.P. Fax: (432) 687-4914 Reported: 09/08/04 11:46

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NE Quad 0-6 inch	4101007-01	Soil	08/27/04 09:30	09/01/04 14:47
NE Quad 1'	4101007-02	Soil	08/27/04 09:50	09/01/04 14:47
NE Quad 2'	4I01007-03	Soil	08/27/04 10:21	09/01/04 14:47
NW Quad 0'6 inch	4101007-04	Soil	08/27/04 09:35	09/01/04 14:47
NW Quad 1'	4101007-05	Soil	08/27/04 09:55	09/01/04 14:47
NW Quad 2'	4101007-06	Soil	08/27/04 10:35	09/01/04 14:47
SW Quad 0-6 inch	4101007-07	Soil	08/27/04 09:45	09/01/04 14:47
SW Quad 1'	4101007-08	Soil	08/27/04 10:07	09/01/04 14:47
SW Quad 2'	4101007-09	Soil	08/27/04 10:47	09/01/04 14:47
SE Quad 0-6 inch	4101007-10	Soil	08/27/04 09:40	09/01/04 14:47
SE Quad 1'	4101007-11	Soil	08/27/04 10:00	09/01/04 14:47
SE Quad 2'	4101007-12	Soil	08/27/04 11:03	. 09/01/04 14:47

Project: No Project Project Number: 98-05A Project Manager: Plains All American Pipeline, L.P. Fax: (432) 687-4914

Reported: 09/08/04 11:46

## Organics by GC

### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NE Quad 0-6 inch (4101007-01) Soil				•		•••••••••			·
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	n		n	*	H	
Total Hydrocarbon C6-C35	ND	10.0	11		Ħ	"		*	
Surrogate: 1-Chlorooctane		78.2 %	70-1	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.4 %	70-1	130	"	"	"	"	
NE Quad 1' (4101007-02) Soil									
Gasoline Range Organics C6-C12	24.4	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1010	10.0	Ħ		"	μ	۳		
Total Hydrocarbon C6-C35	1030	10.0	"	"	н	"	/ <b>"</b>	20	
Surrogate: 1-Chlorooctane		71.2 %	70	130	"	"	/ n	"	
Surrogate: 1-Chlorooctadecane		101 %	70	130	"	"	"	"	
NE Quad 2' (4101007-03) Soil						,			
Gasoline Range Organics C6-C12	49.7	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1820	10.0	н		*	н		n	
Total Hydrocarbon C6-C35	1870	10.0	*	n	"	11		14	
Surrogate: 1-Chlorooctane		82.6 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		119 %	70-	130	"	"	"	"	
NW Quad 0'6 inch (4101007-04) Soil									
Gasoline Range Organics C6-C12	11.4	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1080	10.0	"	"	*	H		11	
Total Hydrocarbon C6-C35	1090	10.0	"			11	n	H	
Surrogate: 1-Chlorooctane		91.0%	70-	130	"	"	. "	"	<u> </u>
Surrogate: 1-Chlorooctadecane		121 %	70-	130	"	"	,,	"	
NW Quad 1' (4101007-05) Soil									
Gasoline Range Organics C6-C12	J [7.55]	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	1
Diesel Range Organics >C12-C35	553	10.0	H H	"			Ħ	и	
Total Hydrocarbon C6-C35	553	10.0		"	n			H	
Surrogate: 1-Chlorooctane		85.0 %	70-	-130		11	"	"	
Surrogate: 1-Chlorooctadecane		115 %	5 70-	-130	"	"	n	"	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 2 of 9

Analyte

Project: No Project Project Number: 98-05A Project Manager: Plains All American Pipeline, L.P. Fax: (432) 687-4914

Reported: 09/08/04 11:46

Notes

Method

	Org Environm	ganics   lental ]	by GC Lab of T	exas	••	
Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed

NW Quad 2' (4101007-06) Soil Gasoline Range Organics C6-C12 EPA 8015M 12.0 10.0 mg/kg dry EI40207 09/02/04 09/06/04 1 Diesel Range Organics >C12-C35 147 10.0 H н Total Hydrocarbon C6-C35 . 159 10.0 ., н 19 Surrogate: 1-Chlorooctane 73.0 % 70-130 " " H " " " Surrogate: 1-Chlorooctadecane 90.4 % 70-130 "

### SW Quad 0-6 inch (4I01007-07) Soil

					the second se				
Gasoline Range Organics C6-C12	ND	20.0 n	ng/kg dry	2	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	340	20.0	*	"	"	и		**	
Total Hydrocarbon C6-C35	340	20.0	0	н	**		<b>H</b>	n	
Surrogate: 1-Chlorooctane	······································	29.8 %	70-13	0	"	" /	11	"	S-06
Surrogate: 1-Chlorooctadecane		33.0 %	70-13	0	n	"	n	"	S-06

## SW Quad 1' (4101007-08) Soil

Gasoline Range Organics C6-C12	ND	10.0 n	ng/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		11	"	N	*1	n	
Total Hydrocarbon C6-C35	ND	10.0	".	W	Ħ	"		"	_
Surrogate: 1-Chlorooctane		71.6 %	70-13	0	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.2 %	70-13	0	"	"	"	"	

#### SW Quad 2' (4I01007-09) Soil

									and the second se
Gasoline Range Organics C6-C12	35.8	10.0	mg/kg d <b>r</b> y	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	1610	10.0	*			Ħ	n	18	
Total Hydrocarbon C6-C35	1650	10.0	н	"		11	"	11	
Surrogate: 1-Chlorooctane		83.8 %	70-13	10	19	"	,	"	
Surrogate: I-Chlorooctadacana		118 %	70-13	20	"	"	"	"	

#### SE Quad 0-6 inch (4101007-10) Soil

Gasoline Range Organics C6-C12	J [8.82]	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	J
Diesel Range Organics >C12-C35	547	10.0	n	H	H	n	"		
Total Hydrocarbon C6-C35	547	10.0		"	n	۳	*	10	
Surrogate: 1-Chlorooctane		70.4 %	70-1	130	- "	"	17	"	
Surrogate: 1-Chlorooctadecane		82.6 %	70-1	130	"	"	"	n	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 3 of 9

· 1			
	Plains All American EH & S	Project: No Project	Fax: (432) 687-4914
	1301 S. County Road 1150	Project Number: 98-05A	Reported:
	Midland TX, 79706-4476	Project Manager: Plains All American Pipeline, L.P.	09/08/04 11:46
		Organics by GC	
	, •	Environmental Lab of Texas	
(		David Maria	·····

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SE Quad 1' (4101007-11) Soil						· · ·			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	۳			н .	19		
Total Hydrocarbon C6-C35	ND	10.0	"		*	Ħ	**	n	
Surrogate: 1-Chlorooctane		72.2 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		76.8 %	70-1	30	"	"	"	"	
SE Quad 2' (4101007-12) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI40207	09/02/04	09/06/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0			"		*	*	
Total Hydrocarbon C6-C35	ND	10.0	**		n		7	H	
Surrogate: 1-Chlorooctane		70.2 %	70-1	130	"	"	"	*	
Surrogate: 1-Chlorooctadecane		73.2 %	70-1	130	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 4 of 9

Project: No Project Project Number: 98-05A Project Manager: Plains All American Pipeline, L.P. Fax: (432) 687-4914 Reported:

09/08/04 11:46

Analyte NE Quad 0-6 inch (4101007-01) Soil % Solids NE Quad 1' (4101007-02) Soil % Solids	Result 80.0	Environm Reporting Limit	Units	Lab of T Dilution	'exas Batch EI40711	Prepared 09/02/04	Analyzed 09/02/04	Method % calculation	Note
Analyte NE Quad 0-6 inch (4101007-01) Soil % Solids NE Quad 1' (4101007-02) Soil % Solids	Result	Reporting Limit	Units %	Dilution 1	Batch EI40711	Prepared 09/02/04	Analyzed 09/02/04	Method % calculation	Note
NE Quad 0-6 inch (4101007-01) Soil % Solids NE Quad 1' (4101007-02) Soil % Solids	80.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
% Solids NE Quad 1' (4101007-02) Soil % Solids	80.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NE Quad 1' (4101007-02) Soil % Solids	89.0								
% Solids	89.0								•
	0210		%	1	EI40711	09/02/04	09/02/04	% calculation	
NE Quad 2' (4101007-03) Soil									
% Solids	92.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
NW Quad 0'6 inch (4101007-04) Soil									
% Solids	91.0		%	1	EI40711	09/02/04	/ 09/02/04	% calculation	
NW Quad 1' (4101007-05) Soil									
% Solids	85.0	<u></u>	%	1	EI40711	09/02/04	09/02/04	% calculation	
NW Quad 2' (4101007-06) Soil									
% Solids	76.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 0-6 inch (4101007-07) Soil									
% Solids	68.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 1' (4101007-08) Soil									
% Solids	70.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SW Quad 2' (4101007-09) Soil									
% Solids	89.0		%	1	EI40711	09/02/04	09/02/04	% calculation	
SE Quad 0-6 inch (4101007-10) Soil									
% Solids	01 በ		%		F140711	09/02/04	09/02/04	% calculation	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 9

Plains All American EH & S	<b>~</b> :	· Pr	oject: No	o Project		Weige .		Fax: (432)	687-4914			
1301 S. County Road 1150		Project Nu	mber: 98	-05A				Repo	rted:			
Midland TX, 79706-4476		Project Mar	nager: Pl	ains All An	nerican Pij	peline, L.P.		09/08/04	4 11:46			
G	eneral Chem	istry Parar	neters	by EPA	/ Stand	lard Met	hods					
·		Project: No Project Fax: (432) 687-4914 Project Manager: Plains All American Pipeline, L.P. 09/08/04 11:46 Project Manager: Plains All American Pipeline, L.P. 09/08/04 11:46 Themistry Parameters by EPA / Standard Methods Environmental Lab of Texas att Reporting att Limit Units Dilution Batch Prepared Analyzed Method Nove 1.0 % 1 El40711 09/02/04 09/02/04 % calculation 1.0 % 1 El40711 09/02/04 09/02/04 % calculation										
		Reporting					• •					
analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No			
E Quad I' (4101007-11) Soil	02.0		0/	<u> </u>				9/ notanisti				
o Dongs	85.0		%	1	E140711	09/02/04	09/02/04	76 calculation				
E Quad 2' (4101007-12) Soil												
6 Solids	71.0		%	1	EI40711	09/02/04	09/02/04	% calculation				
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12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S		. Pro	oject: No	Project			<i>.</i> .		Fax: (432)	687-4914	
1301 S. County Road 1150		Project Nur	nber: 98-0	)5A					Repo	rted:	
Midland TX, 79706-4476		Project Man	ager: Plai	ns All Am	erican Pij	beline, L.F			09/08/0	4 11:46	
•	merican EH & S         Project         Fax: (432) 687-4914           nty Road 1150         Project Number: 98-05A         Reporting           77706-4476         Project Number: 98-05A         09/08/04 11:46           Organics by GC - Quality Control Environmental Lab of Texas           Result Units Spike Source VAREC Limits RPD Limit Notes           Value Source VAREC Value Source VAREC Value Source Valu										
	. ]	Environm	ental L	ab of T	exas					•	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EI40207 - Solvent Extraction (	GC)										
Blank (EI40207-BLK1)				Prepared:	09/02/04	Analyzed	1: 09/06/04				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet								
Diesel Range Organics >C12-C35	ND	10.0	Ħ								
Total Hydrocarbon C6-C35	ND	10.0	**								
Surrogate: 1-Chlorooctane	37.3		mg/kg	50.0		74.6	70-130	<u> </u>		· · · · ·	
Surrogate: 1-Chlorooctadecane	41.9		"	50.0		83.8	70-130				
LCS (EI40207-BS1)				Prepared:	: 09/02/04	Analyze	1: 09/07/04				
Gasoline Range Organics C6-C12	444	10.0	mg/kg wet	500		88.8	75-125	;			
Diesel Range Organics >C12-C35	504	10.0	*	500		101	75-125				
Total Hydrocarbon C6-C35	948	10.0	n	1000		94.8	75-125				
Surrogate: 1-Chlorooctane	55.7		mg/kg	50.0		-m	/70-130				
Surrogate: 1-Chlorooctadecane	64.0		"	50.0		128	70-130				
Calibration Check (EI40207-CCV1)				Prepared	: 09/02/04	Analyze	d: 09/07/04				
Gasoline Range Organics C6-C12	442		mg/kg	500		88.4	80-120				
Diesel Range Organics >C12-C35	551		н	500		110	80-120				
Total Hydrocarbon C6-C35	. 993		"	1000		99.3	80-120				
Surrogate: 1-Chlorooctane	64.7		и	50.0		129	70-130				
Surrogate: 1-Chlorooctadecane	63.7		"	50.0		127	70-130				
Matrix Spike (EI40207-MS1)	Se	ource: 410100	07-01	Prepared	: 09/02/04	Analyze	d: 09/07/04				
Gasoline Range Organics C6-C12	571	10.0	mg/kg dry	625	ND	91.4	75-125				
Diesel Range Organics >C12-C35	647	10.0	"	625	ND	104	75-125				
Total Hydrocarbon C6-C35	1220	10.0	"	1250	ND	97.6	75-125				
Surrogate: 1-Chlorooctane	42.4		mg/kg	50.0		84.8	70-130				
Surrogate: 1-Chlorooctadecane	40.7		"	50.0		81.4	70-130				
Matrix Spike Dup (EI40207-MSD1)	S	ource: 41010	07-01	Prepared	: 09/02/04	Analyze	d: 09/07/04				
Gasoline Range Organics C6-C12	583	10.0	mg/kg dry	625	ND	93.3	75-125	2.08	20		
Diesel Range Organics >C12-C35	667	10.0	11	625	ND	107	75-125	3.04	20		
Total Hydrocarbon C6-C35	1250	10.0		1250	ND	100	75-125	2.43	20		
Surrogate: 1-Chlorooctane	43.7		mg/kg	50.0		87.4	70-130		···, ···		
Surrogate: 1-Chlorooctadecane	41.6		"	50.0		83.2	70-130				

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 7 of 9

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

lains All American EH & S 301 S. County Road 1150 Iidland TX, 79706-4476	•	Project Nur Project Man	oject: No nber: 98- ager: Pla	Project -05A iins All Am	erican Pip	eline, L.P.			Fax: (432) Repo 09/08/04	687-491 rted: 4 11:46
General Chem	istry Para	meters by Environm	EPA / ental I	Standar Lab of To	d Meth exas	ods - Q	uality (	Contro	)l	
nalyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch EI40711 - General Preparatio	on (Prep)									
ank (EI40711-BLK1)	100		9/	Prepared	& Analyze	:d: 09/02/(	)4			
Solids	100		70							
uplicate (EI40711-DUP1) Solids	93.0	ource: 4H310	09-01 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Prepared	& Analyze	ed: 09/02/0	)4	1.07	20	
	55.0		70		54.0			1.07	20	
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Environmental Lab of Texas			The	results in th	is report ap	ply to the s	amples ana	lyzed in a	ccordance w	ith the so

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Plains À 301 S. ( Aidland	<pre>Il American EH &amp; S County Road 1150 TX, 79706-4476</pre>	Project: No Project Project Number: 98-05A Project Manager: Plains All American Pipeline, L.P.	Fax: (432) 687-4914 Reported: 09/08/04 11:46
		Notes and Definitions	
5-06	The recovery of this surrogate is matrix interference's.	s outside control limits due to sample dilution required from high analy	te concentration and/or
ſ	Detected but below the Reportir	ng Limit; therefore, result is an estimated concentration (CLP J-Flag).	
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or al	pove the reporting limit	
NR	Not Reported		
dry	Sample results reported on a dry w	veight basis	
RPD	Relative Percent Difference		
LCS	Laboratory Control Spike		
MS	Matrix Spike		
Dup	Duplicate		
		7	
	Ο		
Repo	ort Approved By: <u>Kala</u>	NAKJUD Date: Q-08-04	
Rala	nd K. Tuttle, Lab Manager	Jeanne Mc Murrey, Inorg. Tech Director	
Cele	y D. Keene, Lab Director, Org.	Tech Director James L. Hawkins, Chemist/Geologist	
Pegg	gy Allen, QA Officer	Sandra Biezugbe, Lab Tech.	
This info	material is intended only for the rmation that is privileged and co	e use of the individual (s) or entity to whom it is addressed, and nfidential.	may contain
If yo	ou have received this material in	error, please notify us immediately at 432-563-1800.	

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lient: Plains all american				
Date/Time: 91,104 14:47				
Drder #;				
nitials: <u>CDk</u>				
Sample Receip	ot Checkli	st		
emperature of container/cooler?	Yes	No	-6,0 C	
Shipping container/cooler in good condition?	(res)	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?	(res)	No (		
Dample instructions complete on Unain of Custody?	- Ues			
Chain of Custody signed when reiniquished and received?	Yac )	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?	Jes	No		
Sample bottles intact?	(es)	No		
Preservations documented on Chain of Custody?	Yes	No		
Containers documented on Chain of Custody?	(es)	No		
Sufficient sample amount for indicated test?	(Yes)	No		
All samples received within sufficient hold time?	Kes	No		
Other observations:				
Other observations: Variance Doci Contact Person: Date/Time:	umentatio	n:	Contacted by:	
Other observations: Variance Doci Contact Person: Date/Time: Regarding: Corrective Action Taken:	umentatio	n:	Contacted by:	
Other observations:         Variance Doci         Contact Person: Date/Time:         Regarding:         Corrective Action Taken:	umentatio	on:	Contacted by:	·



## Analytical Report

Prepared for: Camille Reynolds Plains All American EH & S 1301 S. County Road 1150 Midland, TX 79706-4476

Project: TNM-98-05A Project Number: TNM-98-05A Location: Eunice, NM

Lab Order Number: 5J24017

Report Date: 10/26/05

ļ	Plains All American EH & S	 Project:	TNM-98-05A	Fax: (432) 687-4914
ĺ	1301 S. County Road 1150	Project Number:	TNM-98-05A	Reported:
	Midland TX, 79706-4476	Project Manager:	Camille Reynolds	10/26/05 11:38

### ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ESW-1	5J24017-01	Soil	10/24/05 11:30	10/24/05 16:43

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		P Project Na Project Ma	Project: TN umber: TN anager: Car	M-98-05A M-98-05A nille Reyno	olds			Fax: (432) 6 Report 10/26/05	587-4914 t <b>ed:</b> 11:38
		Or Environr	ganics b mental L	y GC ab of Te	exas		******************************		
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ESW-1 (5J24017-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ52406	10/24/05	10/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	n	**	n	н	"	n	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	61	**	
Surrogate: 1-Chlorooctane		78.6 %	70-	30	,,	"	"	N	

70-130

106 %

Environmental Lab of Texas

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Surrogate: 1-Chlorooctadecane

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Plains All American EH & S	Project: T	NM-98-05A	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: T	NM-98-05A	Reported:
Midland TX, 79706-4476	Project Manager: C	amille Reynolds	10/26/05 11:38

		Environn	nental I	Lab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ESW-1 (5J24017-01) Soil								······································	
% Moisture	9.4	0.1	%	1	EJ52503	10/24/05	10/25/05	% calculation	

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American EH & S		Р	roject: TNN	1-98-05A					Fax: (432)	687-4
ounty Road 1150		Project Nu	mber: TNN	1-98-05A					Repor	rted:
X, 79706-4476		Project Ma	nager: Cam	ille Reynol	ds	<u> </u>			10/26/0	5 11:3
	Or	ganics by	GC - Qı	ality Co	ontrol					
	]	Environn	nental La	b of Tez	as		_			
	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	No
2406 - Solvent Extraction (GC)										
2406-BLK1)				Prepared: 1	0/24/05 A	nalyzed: 10	/26/05			
ge Organics C6-C12	ND	10.0	mg/kg wet							
Organics >C12-C35	ND	10.0	n							
arbon C6-C35	ND	10.0	n							
Chlorooctane	46.9		mg/kg	50.0		93.8	70-130			
Chlorooctadecane	49.7		"	50.0		99.4	70-130			
406-BS1)				Prepared: 1	0/24/05 A	nalyzed: 10	/26/05			
ige Organics C6-C12	467	10.0	mg/kg wet	500		93.4	75-125			
Organics >C12-C35	435	10.0	"	500		87.0	75-125			
arbon C6-C35	902	10.0	n	1000		90.2	75-125			
-Chlorooctane	56.2		mg/kg	50.0		112	70-130			
-Chlorooctadecane	59.3		"	50.0		119	70-130			
n Check (EJ52406-CCV1)				Prepared:	10/24/05 A	nalyzed: 10	)/26/05			
nge Organics C6-C12	501		mg/kg	500		100	80-120			
e Organics >C12-C35	459		19	500		91.8	80-120			
carbon C6-C35	960		11	1000		96.0	80-120			
-Chlorooctane	49.4		π	50.0		98.8	0-200			
-Chlorooctadecane	55.6		n	50.0		111	0-200			
ike (EJ52406-MS1)	Sour	ce: 5J23004	-26	Prepared:	10/24/05 A	nalyzed: 10	0/26/05			
nge Organics C6-C12	450	10.0	mg/kg dry	536	ND	84.0	75-125			
e Organics >C12-C35	422	10.0	"	536	ND	78.7	75-125			
carbon C6-C35	872	10.0	H	1070	ND	81.5	75-125			
-Chlorooctane	52.7		mg/kg	50.0		105	70-130			
-Chlorooctadecane	55.8		"	50.0		112	70-130			
ike Dup (EJ52406-MSD1)	Sour	rce: 5J23004	1-26	Prepared:	10/24/05 A	nalyzed: 1	0/26/05			
nge Organics C6-C12	462	10.0	mg/kg dry	536	ND	86.2	75-125	2.63	20	
e Organics >C12-C35	435	10.0	•	536	ND	81.2	75-125	3.03	20	
carbon C6-C35	897	10.0	"	1070	ND	83.8	75-125	2.83	20	
I-Chlorooctane	53.0		mg/kg	50.0		106	70-130			
e Organics >C12-C35 carbon C6-C35 I-Chlorooctane I-Chlorooctadecane	433 897 53.0 56.1	10.0	" mg/kg r	536 1070 50.0 50.0	ND ND	81.2 83.8 106 112	75-125 75-125 70-130 70-130	3.03	20	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Plains All American EH & S	Project: TNM-98-05A	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM-98-05A	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	10/26/05 11:38
General Ch	emistry Parameters by EPA / Standard Methods - Oual	ity Control

Environmental Lab of Texas										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ52503 - General Preparation (Prep)										
Blank (EJ52503-BLK1)				Prepared:	0/24/05	Analyzed: 10	/25/05			
% Solids	100		%							
Duplicate (EJ52503-DUP1)	Sou	rce: 5J21011-(	)1	Prepared:	10/24/05	Analyzed: 10	/25/05			
% Solids	94.3		%		93.8			0.532	20	
Duplicate (EJ52503-DUP2)	Sou	rce: 5J23004-1	15	Prepared:	10/24/05	Analyzed: 10	/25/05			
% Solids	94.6		%		94.5			0.106	20	
Duplicate (EJ52503-DUP3)	Sou	ırce: 5J23005-(	)4	Prepared:	10/24/05	Analyzed: 10	/25/05			
% Solids	95.4		%		96.1			0.731	20	

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Plains All 1301 S. C Midland T	American EH & S punty Road 1150 'X, 79706-4476	Project: Project Number: Project Manager:	TNM-98-05A TNM-98-05A Camille Reynolds	Fax: (432) 687-4914 Reported: 10/26/05 11:38
		Notes and De	finitions	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the reporting li	mit		
NR	Not Reported			
đry	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, 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.

Date:

10/26/2005

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Ciliz D. Kune

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Environmental Lab of Texas

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

Variance / Corrective Action I	Report	- 5	ample Log-In	
Client: Placos P/L				
Date/Time: 10-24-05 @ 1643			•	
Drder #: 5324017				
nitials: JMM				
Sample Receipt	Checkli	st		
Femperature of container/cooler?	res	No	0,5 C	
Shipping container/cooler in good condition?	Yes	No	NIA	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present Mg	
Custody Seals intact on sample bottles?	Yes	No	Not present	
Chain of custody present?	(YES)	No		
Sample Instructions complete on Chain of Custody?	(es)	No	•	
Chain of Custody signed when relinquished and received?	(Yes)	No		
Chain of custody agrees with sample label(s)	Yes	No	Notabels - written	onlid
Container labels legible and intact?	Yes	No	Notabels - written	on lid
Sample Matrix and properties same as on chain of custody?	(Yes)	No		
Samples in proper container/bottle?	Ves	No		
Samples properly preserved?	(Yes	No		
Sample bottles intact?	(es)	No		
Preservations documented on Chain of Custody?	(Yes)	No		İ
Containers documented on Chain of Custody?	Ves	No		İ
Sufficient sample amount for indicated test?	Ves	No		ł
All samples received within sufficient hold time?	(Yes)	No		4
VOC samples have zero headspace?	Yes	No	Not Applicable	1
		<del>-</del>		
Variance Docu	mentatic	on:		,
Contact Person: Date/Time:			_ Contacted by:	
Regarding:				
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Corrective Action Taken:				•
Conective Action Taken.				
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# Analytical Report

Prepared for: Camille Reynolds Plains All American EH & S 1301 S. County Road 1150

Midland, TX 79706-4476

Project: TNM-98-05A Project Number: TNM-98-05A Location: Eunice, NM

Lab Order Number: 5J25008

Report Date: 10/27/05

Plains All American EH & S	Project: TNM-98-05A	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: TNM-98-05A	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	10/27/05 16:59

### ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
5P- New	5J25008-01	Soil	10/24/05 11:10	10/24/05 17:43

Thans An American Little 5	Project: T	TNM-98-05A	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 1	TNM-98-05A	Reported:
Midland TX, 79706-4476	Project Manager: C	Camille Reynolds	10/27/05 16:59

### Organics by GC

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
5P- New (5J25008-01) Soil								······	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ52621	10/26/05	10/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	n	"	11	"		"	
Total Hydrocarbon C6-C35	ND	10.0		**	**	"	"	**	
Surrogate: 1-Chlorooctane		98.2 %	70-1	30	11	"		11	
Surrogate: 1-Chlorooctadecane		101 %	70-1	30	n	"	"	"	

Environmental Lab of Texas

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Plains All American EH & S		Project: TNM-98-05A					Fax: (432)	687-4914
1301 S. County Road 1150		Project Number:	TNM-98-05A				Reported:	
Midland TX, 79706-4476	Project Manager: Camille Reynolds						10/27/05 16:	
	General Chemist E	ry Paramete Invironmenta	rs by EPA / S al Lab of Tex	Standa as	rd Method	S		

%

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EJ52603

10/25/05

0.1

9.7

Environmental Lab of Texas

5P- New (5J25008-01) Soil

% Moisture

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 3 of 6

% calculation

10/26/05

Plains All American EH & S		P	roject: TNM	1-98-05A					Fax: (432)	687-4914
1301 S. County Road 1150		Project N	imber: TNN	1-98-05A					Repo	rted:
Midland TX, 79706-4476		Project Ma	mager: Carr	ille Reynol	ds			10/27/05 16:59		
	Org	ganics by	GC - Q	uality Co	ontrol					
	J	Environr	nental La	ab of Tex	xas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ52621 - Solvent Extraction (GC)									<u> </u>	
Blank (EJ52621-BLK1)		·		Prepared &	2 Analyzed:	10/26/05				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	п							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	40.7	·	mg/kg	50.0		81.4	70-130			
Surrogate: 1-Chlorooctadecane	41.2		"	50.0		82.4	70-130			
LCS (EJ52621-BS1)				Prepared &	2 Analyzed	10/26/05				
Gasoline Range Organics C6-C12	449	10.0	mg/kg wet	500		89.8	75-125			
Diesel Range Organics >C12-C35	428	10.0	*	500		85.6	75-125			
Total Hydrocarbon C6-C35	877	10.0	11	1000		87.7	75-125			
Surrogate: 1-Chlorooctane	51.4		mg/kg	50.0	···· , ···· · _ ····	103	70-130			
Surrogate: 1-Chlorooctadecane	55.7		"	50.0		111	70-130			
Calibration Check (EJ52621-CCV1)				Prepared:	10/26/05 A	nalyzed: 10	)/27/05			
Gasoline Range Organics C6-C12	500		mg/kg	500		100	80-120			
Diesel Range Organics >C12-C35	416		н	500		83.2	80-120			
Total Hydrocarbon C6-C35	916		"	1000		91.6	80-120			
Surrogate: 1-Chlorooctane	50.4		"	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	52.7		"	50.0		105	70-130			
Matrix Spike (EJ52621-MS1)	Sour	ce: 5J25007	7-01	Prepared &	& Analyzed	: 10/26/05				
Gasoline Range Organics C6-C12	489	10.0	mg/kg dry	544	ND	89.9	75-125			
Diesel Range Organics >C12-C35	453	10.0	n	544	ND	83.3	75-125			
Total Hydrocarbon C6-C35	942	10.0	"	1090	ND	86.4	75-125			
Surrogate: 1-Chlorooctane	50.9		mg/kg	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	54.1		n	50.0		108	70-130			
Matrix Spike Dup (EJ52621-MSD1)	Sour	ce: 5J2500	7-01	Prepared &	& Analyzed	: 10/26/05				
Gasoline Range Organics C6-C12	485	10.0	mg/kg dry	544	ND	89.2	75-125	0.821	20	
Diesel Range Organics >C12-C35	449	10.0	u u	544	ND	82.5	75-125	0.887	20	
Total Hydrocarbon C6-C35	934	10.0	"	10 <b>90</b>	ND	85.7	75-125	0.853	20	
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		100	70-130		·····	
Surrogate: 1-Chlorooctadecane	52.3		"	50.0		105	70-130			

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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Plains All American EH & S	Project:	TNM-98-05A	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	TNM-98-05A	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	10/27/05 16:59

		Environm	ental I	Lab of Tex	kas					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EJ52603 - General Preparation (Prep)										
Blank (EJ52603-BLK1)				Prepared: 1	0/25/05 A	nalyzed: 10	/26/05			
% Solids	100		%		<u></u>					
Duplicate (EJ52603-DUP1)	Sou	rce: 5J25001-0	1	Prepared: 10/25/05 An		nalyzed: 10	/26/05			
% Solids	88.7	<u>.,</u>	%		88.7			0.00	20	
Duplicate (EJ52603-DUP2)	Sou	rce: 5J25006-0	8	Prepared: 1	10/25/05 A	nalyzed: 10	/26/05			
% Solids	97.3		%	·	97.2			0.103	20	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project: TNM-98-05A Project Number: TNM-98-05A Project Manager: Camille Reynolds	Fax: (432) 687-4914 Reported: 10/27/05 16:59
		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:

Ciley D. Kune Date:

10/27/2005

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.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its cntirety, with written approval of Environmental Lab of Texas.

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

Page 6 of 6



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ient: <u>NUUVA</u>					
ate/Time: $10/24/051$	7:43				
rder#: <u>5325008</u>					
itials:	AM Spectra and the second second second second second second second second second second second second second s				
	Sample Receipt	t Checkli	st		
mperature of container/cooler?		Yes	No	-0,5 C	
hipping container/cooler in good conditi	on?	Yes	No	S Mot provide	
ustody Seals Intact on shipping contain	er/cooler?	Yes	NO No	tiot present	
hain of custody present?		Ver	No	( NUL DICESSIL	
ample Instructions complete on Chain r	of Custody?	- Yes	No		
hain of Custody signed when relinquist	ed and received?	Yes	No	<u> </u>	
hain of custody agrees with sample lab	el(s)	Yes	No	I.D. on lid	
ontainer labels legible and intact?	······································	Yes	No	MA	
ample Matrix and properties same as o	n chain of custody?	Yes	No		
amples in proper container/bottle?		Yes	No		
amples properly preserved?		yes_	No		
ample bottles intact?	•	Yes	No		
reservations documented on Chain of (	Custody?	Ves	No		
containers documented on Chain of Cus	stody?		No		
unicient sample amount for indicated to	est?	Yeg	I NO		
			1 11/1	,	
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OC samples received within sufficient no OC samples have zero headspace? Other observations:			No	Not Applicable	
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Contact Person: Regarding: Corrective Action Taken:	Variance Docu Date/Time:	Imentatio	on:	_ Not Applicable	

# Appendix B Photographic Documentation

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Client: Plains Marketing, L.P. Location: Lea County, New Mexico Photograph Dates: October 24 – November 4, 2005 Prepared by: NOVA Photographer: Curt Stanley Project Name: TNM 98-05A

Photograph No. 1

Date: 10/26/05

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**Direction:** Facing West



**Description:** Excavation prepared with one foot of base sand, prior to liner installation.

### Photograph No. 2

Date: 10/26/05

**Direction:** Facing West

**Description:** 20 mil liner and 40 mil monitor well boot installation complete, prior to one foot top sand filling activity







Client: Plains Marketing, L.P. Location: Lea County, New Mexico Photograph Dates: October 24 – November 4, 2005 Prepared by: NOVA Photographer: Curt Stanley Project Name: TNM 98-05A

Photograph No. 3

Date: 10/26/05

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Direction: Facing North

**Description:** Sewing and sealing of liner seams



### Photograph No. 4

Date: 10/26/05

Direction: Facing Northwest

**Description:** Top sand above liner. Note extension of monitor well MW-1 casing.




## Photographic Documentation

Client: Plains Marketing, L.P. Location: Lea County, New Mexico Photograph Dates: October 24 – November 4, 2005 Prepared by: NOVA Photographer: Curt Stanley Project Name: TNM 98-05A

## Photograph No. 5

Date: 11/01/05

Direction: Facing Northeast

Description: Excavation backfilling and soil compaction



## Photograph No. 6

Date: 10/26/05

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Direction: Facing West

**Description:** Backfilling and contouring activities completed. Note monitor well MW-1 in center of photo. On November 30, 2005 concrete monitor well pad and well box was installed



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

/27/2005 07:28 FAX 5053982754 LINKENER	LINKENERBY State of New Mexico refinerals and Natural Resources Detment Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 98-05A Submit Appropriation Office by with back		2 002/00	/004	
International State State of N   Bar 1940 Energy - finerals and National State   International State Oil Conservation   International State 2040 South   International State Santa Fe, New State		Ment Form C- 141 Originated 2/13/97 98-05A Submit 2 copies to Appropriate District Office in accordance with Rule 116 cm back side of form			
Release Notification	and Corrective Action				
	Contact		Keport LI FIAL	Report	
dense	Edwin H. Gri	pp			
Box 60028	915-947-9000	)	و المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد المحمد ا		
San Angelo, TX 76906	pipe line				
Nadine Owan		La4+e 1	Na.		
LOCATION	OF RELEASE			لحمين	
Init Letter Section Township Range Foot from the North/South Live 26 215 37E	Fast from the RasyWest Line	County Lea			
NATURE C	of Release				
Sour Crude	38 barrels	Va	4 barrels		
6" gathering line	Date and Hour of Ocsur Unknown	renaz Deta	2/5/98: 10:25 a.m.		
he Immediate Notice Given? X Yes No Net Required	If YES, To When?	me (Clank	2A \		
Johnny W. Chapman	Date and Hour	IS LUTELX	M.4.1		
the a Waterstrume Reschad?	2/5/98; 3:00 1/ 1/ 1/25, Volume Tarpartin	p.M. Is the Watercourse.			
L_1 ¥a ( <u>AN</u> ¥o	N/A				
f a Waaroure was Impaced, Describe Rely. ^a N/A	•	· · · ·	•		
Describe Cause of Problem and Remedial Action Takes."	· · · · · · · · · · · · · · · · · · ·	 			
Internal Corrosion	• · ·	•	· ·	··· [	
Leak successfully clamped off.	•	• = •			
Describe Area Alfond and Cleanup Action Taken®		· · · · ·	• • • •		
Approximately 1260 sq.ft. pasture land. Contaminated soil will be excavated and put or	n plastic.		·· ·· ··	·	
Departure General Conditions Firstalling (Temperature, Predipitation, etc.).*					
Cloudy; 60 degrees				•	
hereby certify that the information given above is true and complete to the best of the overledge and belief	OIL CONSERVATION DIVISION				
Hanied Name Edwin H. Gripp	Approved by District Supervisor:				
District Manager	Approval Dele	Expiration	n Date		
2/12/98 915-947-9000 Attach Additional Sheets II Necessary	rentinen a vibuart		Attached	Section	
•	Elats ("n	, Camminsian			
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