



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

February 20, 2006

Camille Reynolds     [cjreynolds@paalp.com](mailto:cjreynolds@paalp.com)  
Plains All American Pipeline  
5805 E. Hwy. 80  
Midland, TX 79706

Re:     Littman Gathering Line Remediation Project  
         Site Location: UL-N Sec 12 T-21S R-37 E     Lea County, NM  
         Original C-141 Date: June 17, 2005  
         Closure Proposal Submittal Dated: February 8, 2006

Dear Ms. Reynolds,

The **Closure Proposal** submitted to the New Mexico Oil Conservation (OCD) by Terracon Consulting (TC) as agent for Plains All American Pipeline is **hereby approved**. Based on the information provided, no further action is required at this time.

Please be advised that OCD approval does not relieve Plains All American Pipeline of responsibility should remaining contaminants pose a future threat to ground water, surface water, human health or the environment. Additionally, OCD approval does not relieve Plains All American Pipeline of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions call: (505) 393-6161, ext. 111, or email: [lwjohnson@state.nm.us](mailto:lwjohnson@state.nm.us)

Sincerely,

A handwritten signature in cursive script that reads "Larry Johnson".

Larry Johnson – OCD Environmental Engineer

Cc:

Chris Williams - District I Supervisor  
Paul Sheeley – Environmental Engineer

**Closure Compliance Report**

**Littman Gathering 6" Pipeline  
UL-N, Section 12, T21S, R37E  
Plains SRS Number 2005-00144  
Lea County, New Mexico**

**Terracon Project Number 94057546**

**February 8, 2006**

***Prepared for:***

**Plains Pipeline, L.P.  
3705 East Highway 158  
P.O. Box 3119  
Midland, Texas 79702  
OCD ID Number 231735**



***Prepared by:***

**Terracon  
Midland, Texas**

*Plains - 231,735  
facility - APAC0605252933  
inspect - ePAC0605253060*

*incident - nPAC0605253099  
application - pPAC0605253362*

February 8, 2006

Plains Pipeline, L.P.  
3705 East Highway 158  
P.O. Box 3119  
Midland, Texas 79702  
Attn: Ms. Camille Reynolds

Telephone: (505) 396-3341  
Fax: (505) 396-2754

Re: Closure Compliance Report  
Littman Gathering 6"  
UL-N, Section 12, T21S, R37E  
Plains SRS Number 2005-00144  
Lea County, New Mexico  
Terracon Project No. 94057546

**Terracon**  
Consulting Engineers & Scientists

Terracon Consultants, Inc.  
24 Smith Road, Suite 261  
Midland, Texas 79705  
Phone 432.684.9600  
Fax 432.684.9608  
www.terracon.com

Dear Ms. Camille Reynolds:

Terracon is pleased to submit three copies of the Closure Compliance Report for the above referenced site.

We appreciate the opportunity to participate in the site remediation project at Littman Gathering 6" Pipeline for Plains Pipeline, L.P. Please contact either of the undersigned at (432) 684-9600 if you have questions regarding the information provided in the report.

Sincerely,

**Terracon**

Prepared by:



Shanna L. Smith  
Project Manager

Reviewed by:



Barrett Bole, P.G.  
Sr. Project Manager

## TABLE OF CONTENTS

|                                    | Page No. |
|------------------------------------|----------|
| 1.0 INTRODUCTION.....              | 1        |
| 2.0 FIELD ACTIVITIES .....         | 3        |
| 3.0 DATA EVALUATION .....          | 4        |
| 4.0 FINDINGS AND CONCLUSIONS ..... | 5        |

### LIST OF APPENDICES

- Appendix A: Figure 1- Topographic Map  
Figure 2 – Site Plan and Confirmation Sample Location Map
- Appendix B: Analytical Summary Tables, Laboratory Data Sheets, Chain-of-Custody
- Appendix C: Photographs
- Appendix D: Regulatory Reports
- Appendix E: Waste Manifests

## Closure Compliance Report

### Littman Gathering 6" Pipeline

~~UL-N, Section 12, T21S, R37E~~

Plains SRS Number ~~2005-00144~~

Lea County, New Mexico

Terracon Project Number 94057546

#### 1.0 INTRODUCTION

This site is located in Lea County, New Mexico approximately 3.5 miles north of Eunice, New Mexico and approximately one half mile east of State Road 18 near an oilfield lease road (Figure 1). The property is owned by the McNeil Ranch.

The release occurred on June 17, 2005, on the Plains Pipeline Hobbs Pipeline and Gathering System in Lea County, New Mexico. Approximately 15 barrels of crude oil were released in the area surrounding the Littman Gathering 6" pipeline. The cause of the spill was reported as external corrosion. The crude oil flowed south of the 6" pipeline covering an area approximately 35 feet wide and 52 feet long, then southeast along a cow trail approximately 1.5 feet wide and 68 feet long.

#### 1.1 Site Description

|                                 |   |
|---------------------------------|---|
| <b>Site Name</b>                | Littman Gathering 6" Pipeline   |
| <b>Site Location/GPS</b>        | Lea County, New Mexico <u>(32° 29' 20.0" N, 103° 07' 12.9" W)</u>   |
| <b>General Site Description</b> | The release occurred in the immediate area surrounding the pipeline and flowed south southeast along a cow trail. |

A topographic map (Figure 1) and a site map (Figure 2) are included in Appendix A.

#### 1.2 Scope of Services

The Scope of Services for Terracon as requested by Plains Pipeline included:

- Excavation and hauling of the area of concern;
- Collection of confirmation soil samples in the area of concern; and
- Submittal of a Closure Compliance Report detailing field activities, analytical results, site maps and photos.

Closure Compliance Report  
Littman Gathering 6" Pipeline  
Plains SRS # 2005-00144  
Terracon Project #94057546  
February 8, 2006

### 1.3 Regulatory Framework

Crude oil facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Contamination of soil due to a surface release of crude oil is addressed within a NMOCD guideline titled *Guidelines for Remediation of Leaks, Spills and Release*.

Soils which are impacted by petroleum constituents are scored according to the ranking criteria to determine their relative threat to public health, fresh water, and the environment. Such limits are defined by the depth to groundwater, wellhead protection area, and distance to surface water. Based on these ranking criteria, the remediation action level at this site is as follows:

Depth to Ground Water      50-99 feet      Ranking Score = 0  
(As defined as vertical distance from lowermost contaminants to seasonal high water level)

Wellhead Protection Area      <1000' to water source  
   <200' to domestic well      Ranking Score = 20  
A windmill is located less than 1000 feet from the release point.

Distance to Surface Water      >1000 horizontal feet      Ranking Score = 0

Total Ranking Score = 20

Based on total ranking criteria of 20, resulting in the following remediation levels:

Benzene = 10 ppm  
BTEX = 50 ppm  
TPH = 100 ppm

### 1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report.

## **1.5 Additional Scope Limitations**

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this remediation activities. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

## **1.6 Reliance**

This report has been prepared for the exclusive use of PLAINS PIPELINE, LP, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of PLAINS PIPELINE, LP and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in this report, and Terracon's Terms and Conditions. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

## **2.0 FIELD ACTIVITIES**

### **2.1 Excavation and Remediation**

During initial emergency response activities, Plains personnel stockpiled approximately 70 cubic yards of impacted surface soil in a plastic lined bermed area as a result of pipeline repair activities.

On November 10 through 29, 2005, Hungry Horse, working in conjunction with Terracon, commenced excavating impacted soil from the source area. The impacted soil excavated at the source area was approximately 100 feet wide, 130 feet long and 20 feet below ground surface (bgs). Approximately 4,212 cubic yards of impacted soil was hauled to the Plains Lea Station land farm. Waste manifests are provided in Appendix E.

On November 23, 2005, 16 excavation confirmation samples were collected, split with Phoenix Environmental, and analyzed for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, xylenes (BTEX) to ensure the NMOCD remediation action levels of 10 mg/kg benzene, 50 mg/kg total BTEX, and 100 mg/kg TPH had been achieved. Analytical results from six confirmation samples of the walls and floor at total depth indicated the TPH concentrations exceeded the NMOCD standard of 100 mg/kg TPH. The east and west walls and base of the excavation were further excavated and six more soil samples from the excavation were collected on December 13, 2005, to evaluate the TPH concentrations. One soil sample (east wall) exceeded the 100 mg/kg TPH standard and thus the east wall was further excavated and re-sampled on December 15, 2005.

The site excavation was backfilled with approximately 2,460 cubic yards of caliche and 960 cubic yards of topsoil and was restored, as near possible to the natural grade of the surrounding area on January 3 through 5, 2006.

## **2.2 Soil Sampling**

Terracon's soil sampling program included the collection of 23 confirmation soil samples from the impacted area. The soil samples were analyzed for TPH using EPA method 8015 modified and BTEX using EPA method 8021 B.

The soil samples collected were placed in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler which was secured with a custody seal. The sample and completed chain-of-custody form was relinquished to Environmental Lab of Texas in Odessa, Texas for analysis. The executed chain-of-custody forms, laboratory data sheets are provided in Appendix B.

## **3.0 DATA EVALUATION**

Twenty-three confirmation soil samples were collected from the side walls and floor excavated areas. The laboratory results from the final excavation confirmation samples subsequent to over excavation activities indicated BTEX concentrations below the NMOCD remediation action levels of 10 mg/kg benzene and 50 mg/kg total BTEX. The TPH concentrations of the confirmation soil samples were below 100 mg/kg TPH NMOCD standard for the site. The laboratory results are presented in Appendix B, Table 1.

**Closure Compliance Report  
Littman Gathering 6" Pipeline  
Plains SRS # 2005-00144  
Terracon Project #94057546  
February 8, 2006**



#### **4.0 FINDINGS AND CONCLUSIONS**

Terracon submits this closure compliance report to Plains which documents the site remediation and closure activities. Based on results of our field activities and laboratory analyses, the NMOCD approved backfilling and site restoration activities. Terracon recommends Plains submit this report to the NMOCD as documentation that remediation was completed to NMOCD standards and recommends Plains requests a "no further action" letter for this site.

## DISTRIBUTION

Copy 1: Larry Johnson  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division, District 1  
1625 French Drive  
Hobbs, NM 88240

Copy 2: Camille Reynolds  
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Lovington, NM 88260  
[cireynolds@paalp.com](mailto:cireynolds@paalp.com)

Copy 3: Jeff Dann  
Plains Marketing, L.P.  
333 Clay Street  
Suite 1600  
Houston, TX 77002  
[jpdann@paalp.com](mailto:jpdann@paalp.com)

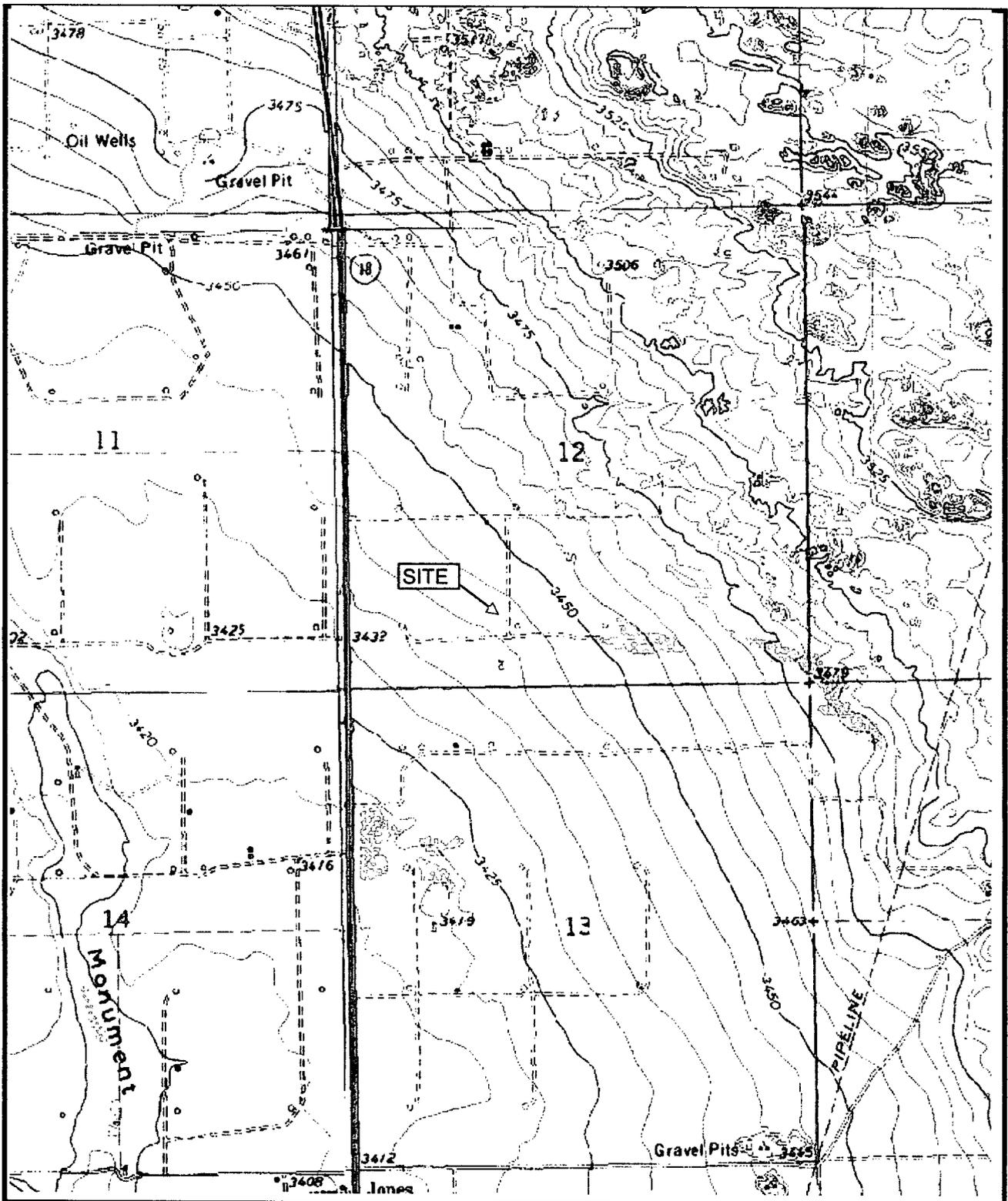
Copy 4: Hungry Horse, LLC  
% Paige McNeil  
POB 1058  
Hobbs, New Mexico 88241

Copy 5: Terracon  
24 Smith Road  
Suite 261  
Midland, TX 79705  
[slsmith@terracon.com](mailto:slsmith@terracon.com)

**APPENDIX A**

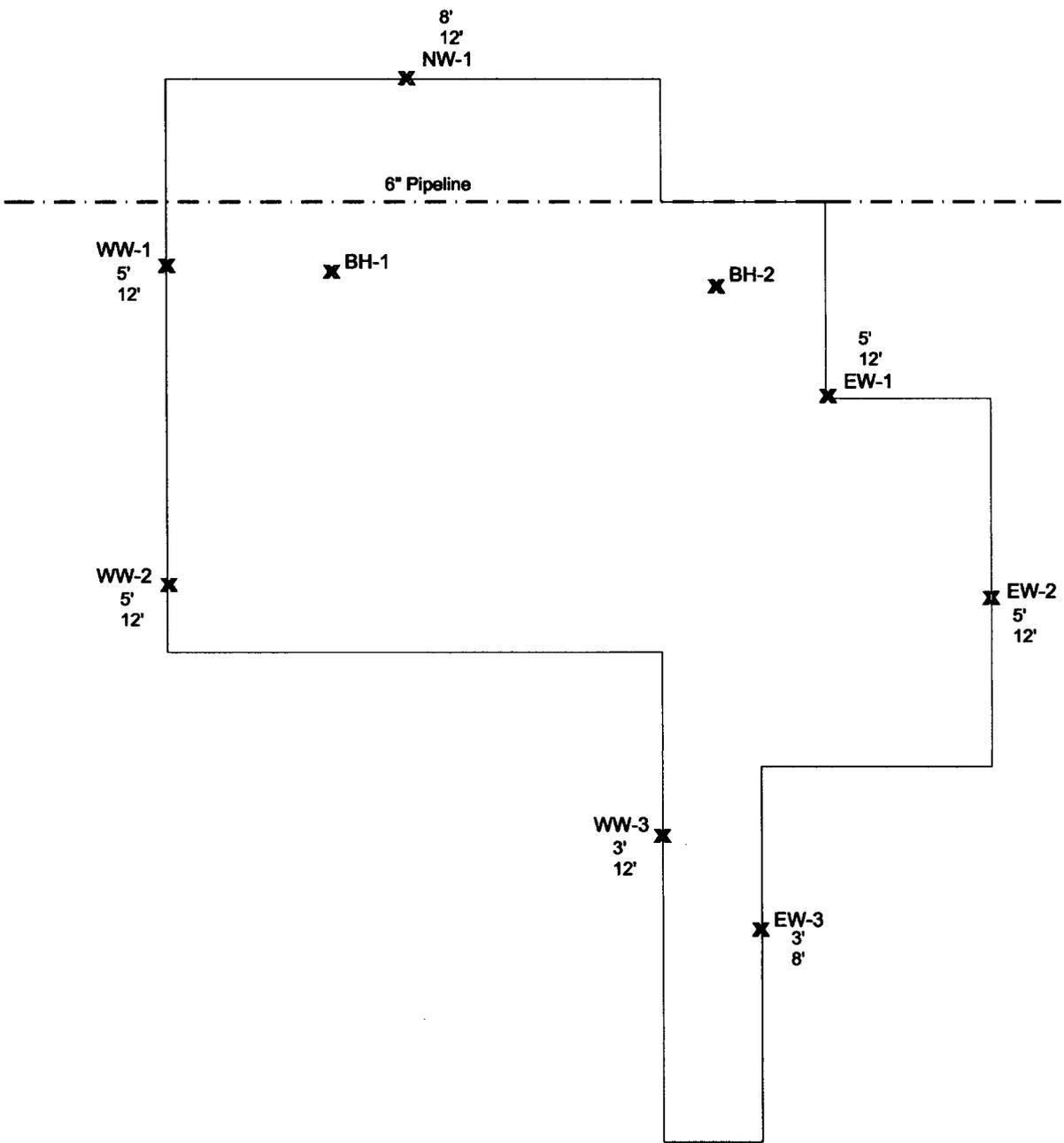
**Figure 1 – Topographic Map**

**Figure 2 – Site Plan and Confirmation Sample Location Map**



|  |  |  |
|--|--|--|
| <p><b>USGS TOPOGRAPHIC QUADRANGLE MAP</b></p> <p>Eunice NE, New Mexico</p> |  | <p><b>Plains Pipeline, L.P.</b></p> <p>Littman Gathering 6"</p> <p>Lea County, New Mexico</p> <p>Plains EMS # 2005-00144</p> |
| <p>Dated 1979</p> <p>SCALE: 1" = 2000'</p>                                 |  | <p><b>FIGURE 1: TOPOGRAPHIC MAP</b></p>  |
| <p>PROJECT NO. 94057546</p>  |  |  |

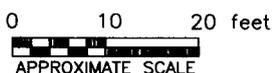
DATE: 02/08/06 FILENAME: O:\HBC\Env\2005 ARCHIVE\94057546-1.dwg



**LEGEND:**

- X** Confirmation Sample Location
- 8'** Sample Depths

THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.



LITTMAN GATHERING 6"  
PLAINS PIPELINE  
EMS #2005-00144

**APPENDIX B**

**Analytical Summary Tables**

**Laboratory Data Sheets**

**Laboratory Chain of Custody Documents**

Table 1

## CONCENTRATIONS OF TPH &amp; BTEX IN SOIL

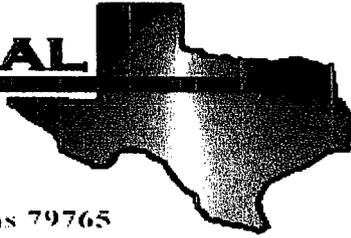
Plains Pipeline, L.P.  
Littman Gathering 6"  
UL - N, Sec 12, T21S, R37E  
3 Miles North of Eunice, Lea County, New Mexico  
Plains All American Pipeline Leak Number 2005-00144  
Terracon Project Number 94057546

All concentrations are in mg/kg

| SAMPLE DATE | SAMPLE LOCATION | EPA 8015 modified                      |  |  | EPA Method 8021B |         |                   |                 |               |        | SW 846 9253 |
|-------------|-----------------|--|--|--|------------------|---------|-------------------|-----------------|---------------|--------|-------------|
|             |                 | TPH<br>C <sub>6</sub> -C <sub>12</sub> | TPH<br>>C <sub>12</sub> -C <sub>35</sub> | TPH<br>C <sub>6</sub> -C <sub>35</sub> | BENZENE          | TOLUENE | ETHYL-<br>BENZENE | M,P-<br>XYLENES | O-<br>XYLENES | BTEX   | Chlorides   |
| 11/23/05    | NW-1 8'         | 6.84                                   | 46.9                                     | 46.9                                   | <0.025           | <0.025  | 0.022             | 0.0428          | <0.025        | 0.0648 |             |
|             | NW-1 12'        | <10.0                                  | <10.0                                    | <10.0                                  | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | WW-1 5'         | 79.4                                   | <b>448</b>                               | <b>527</b>                             | <0.025           | 0.0134  | 0.0676            | 0.180           | 0.097         | 0.358  |             |
|             | WW-1 12'        | <10.0                                  | 46.0                                     | 46.0                                   | <0.025           | <0.025  | <0.025            | 0.0253          | <0.025        | 0.0253 |             |
|             | WW-2 5'         | <b>105</b>                             | <b>540</b>                               | <b>645</b>                             | <0.025           | 0.0131  | 0.071             | 0.165           | 0.0899        | 0.339  |             |
|             | WW-2 12'        | <10.0                                  | <10.0                                    | <10.0                                  | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | WW-3 3'         | <10.0                                  | 37.1                                     | 37.1                                   | <0.025           | <0.025  | 0.0153            | 0.0309          | <0.025        | 0.0462 |             |
|             | WW-3 12'        | 6.48                                   | 51.9                                     | 51.9                                   | <0.025           | <0.025  | 0.0188            | 0.0413          | <0.025        | 0.0601 |             |
|             | EW-1 5'         | 16.9                                   | <b>301</b>                               | <b>318</b>                             | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | EW-1 12'        | 5.20                                   | 95.4                                     | 95.4                                   | <0.025           | 0.0185  | 0.0234            | 0.0507          | 0.0173        | 0.1099 |             |
|             | EW-2 5'         | 7.30                                   | <b>119</b>                               | <b>119</b>                             | <0.025           | 0.0299  | 0.0507            | 0.0929          | 0.0348        | 0.2083 |             |
|             | EW-2 12'        | <b>261</b>                             | <b>1920</b>                              | <b>2180</b>                            | <0.025           | 0.0139  | 0.0378            | 0.0940          | 0.0475        | 0.1932 |             |
|             | EW-3 3'         | <10.0                                  | 46.6                                     | 46.6                                   | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | EW-3 8"         | <10.0                                  | <10.0                                    | <10.0                                  | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | BH-1            | 8.58                                   | 86.7                                     | 86.7                                   | <0.025           | <0.025  | <0.025            | <0.025          | <0.025        | <0.025 |             |
|             | BH-2            | <b>196</b>                             | <b>884</b>                               | <b>1080</b>                            | <0.025           | 0.034   | 0.200             | 0.601           | 0.370         | 1.205  |             |
| 12/13/05    | WW-1A 5'        | <10.0                                  | <10.0                                    | <10.0                                  |                  |         |                   |                 |               |        |             |
|             | WW-2A 5'        | <10.0                                  | 7.96                                     | <10.0                                  |                  |         |                   |                 |               |        |             |
|             | EW-1A 5'        | 11.5                                   | <b>505</b>                               | <b>517</b>                             |                  |         |                   |                 |               |        |             |
|             | EW-2A 5'        | <10.0                                  | 44.3                                     | 44.3                                   |                  |         |                   |                 |               |        |             |
|             | EW-2A 12'       | <10.0                                  | <10.0                                    | <10.0                                  |                  |         |                   |                 |               |        |             |
|             | BH-2A           | <10.0                                  | <10.0                                    | <10.0                                  |                  |         |                   |                 |               |        |             |
|             | SS-1            |  |  |  |                  |         |                   |                 |               |        | 61.8        |
| 12/15/05    | EW-1B 5'        | <10.0                                  | <10.0                                    | <10.0                                  |                  |         |                   |                 |               |        |             |

CONCENTRATIONS IN BOLD ARE ABOVE REGULATORY LIMITS

**E NVIRONMENTAL  
LAB OF**



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Littman Gathering 6"

Project Number: 2005-00144

Location: None Given

Lab Order Number: 5K28007

Report Date: 12/05/05

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
Reported:  
12/05/05 12:15

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| NW-1 8'   | 5K28007-01    | Soil   | 11/23/05 09:10 | 11/28/05 08:00 |
| NW-1 12'  | 5K28007-02    | Soil   | 11/23/05 09:25 | 11/28/05 08:00 |
| WW-1 5'   | 5K28007-03    | Soil   | 11/23/05 10:30 | 11/28/05 08:00 |
| WW-1 12'  | 5K28007-04    | Soil   | 11/23/05 10:40 | 11/28/05 08:00 |
| WW-2 5'   | 5K28007-05    | Soil   | 11/23/05 11:30 | 11/28/05 08:00 |
| WW-2 12'  | 5K28007-06    | Soil   | 11/23/05 11:45 | 11/28/05 08:00 |
| WW-3 3'   | 5K28007-07    | Soil   | 11/23/05 12:10 | 11/28/05 08:00 |
| WW-3 12'  | 5K28007-08    | Soil   | 11/23/05 12:20 | 11/28/05 08:00 |
| EW-1 5'   | 5K28007-09    | Soil   | 11/23/05 14:15 | 11/28/05 08:00 |
| EW-1 12'  | 5K28007-10    | Soil   | 11/23/05 14:25 | 11/28/05 08:00 |
| EW-2 5'   | 5K28007-11    | Soil   | 11/23/05 14:30 | 11/28/05 08:00 |
| EW-2 12'  | 5K28007-12    | Soil   | 11/23/05 14:45 | 11/28/05 08:00 |
| EW-3 3'   | 5K28007-13    | Soil   | 11/23/05 15:00 | 11/28/05 08:00 |
| EW-3 8'   | 5K28007-14    | Soil   | 11/23/05 15:09 | 11/28/05 08:00 |
| BH-1      | 5K28007-15    | Soil   | 11/23/05 15:45 | 11/28/05 08:00 |
| BH-2      | 5K28007-16    | Soil   | 11/23/05 16:00 | 11/28/05 08:00 |

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

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 12/05/05 12:15

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                           | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>NW-1 8' (5K28007-01) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | J [0.0220] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (p/m)                      | 0.0428     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 100 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 90.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | J [6.84]   | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M | J     |
| Diesel Range Organics >C12-C35    | 46.9       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 46.9       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 87.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 93.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>NW-1 12' (5K28007-02) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 100 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 86.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 88.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 92.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-1 5' (5K28007-03) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | J [0.0134] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                      | 0.0676     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | 0.180      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | 0.0970     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 100 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 110 %           | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | 79.4       | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 448        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 527        | 10.0            | "         | "        | "       | "        | "        | "         |       |

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Plains All American BH & S  
 1301 S. County Road 1150  
 Midland TX, 79706-4476

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/05/05 12:15

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                           | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>WW-1 5' (5K28007-03) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |            | 96.4 %          | 70-130    |          | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |            | 109 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-1 12' (5K28007-04) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | 0.0253     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,c-Trifluorotoluene |            | 92.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 91.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 46.0       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 46.0       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 96.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 103 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-2 5' (5K28007-05) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | J [0.0131] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                      | 0.0710     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | 0.165      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | 0.0899     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,c-Trifluorotoluene |            | 96.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 108 %           | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | 105        | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/29/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 540        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 645        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 101 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 114 %           | 70-130    |          | "       | "        | "        | "         |       |

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 Midland TX, 79706-4476

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
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**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                           | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>WW-2 12' (5K28007-06) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 99.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 94.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 87.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 93.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-3 3' (5K28007-07) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | J [0.0153] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (p/m)                      | 0.0309     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 96.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 92.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 37.1       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 37.1       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 83.4 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 88.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-3 12' (5K28007-08) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | J [0.0188] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (p/m)                      | 0.0413     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 98.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 91.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | J [6.48]   | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M | J     |
| Diesel Range Organics >C12-C35    | 51.9       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 51.9       | 10.0            | "         | "        | "       | "        | "        | "         |       |

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 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 12/05/05 12:15

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                           | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>WW-3 12' (5K28007-08) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |            | 95.2 %          | 70-130    |          | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |            | 101 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-1 5' (5K28007-09) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 92.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 92.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | 16.9       | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 301        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 318        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 96.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 112 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-1 12' (5K28007-10) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | J [0.0185] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                      | J [0.0234] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (p/m)                      | 0.0507     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | J [0.0173] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Surrogate: a,a,a-Trifluorotoluene |            | 92.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 84.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | J [5.20]   | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M | J     |
| Diesel Range Organics >C12-C35    | 95.4       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 95.4       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 89.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 95.2 %          | 70-130    |          | "       | "        | "        | "         |       |

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 Reported:  
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**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                           | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>EW-2 5' (5K28007-11) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | 0.0299     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | 0.0507     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | 0.0929     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | 0.0348     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 98.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 87.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | J [7.30]   | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M | J     |
| Diesel Range Organics >C12-C35    | 119        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 119        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 96.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 105 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-2 12' (5K28007-12) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | J [0.0139] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                      | 0.0378     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | 0.0940     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | 0.0475     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 104 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 93.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | 261        | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 1920       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 2180       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 102 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 139 %           | 70-130    |          | "       | "        | "        | "         | S-04  |
| <b>EW-3 3' (5K28007-13) Soil</b>  |            |                 |           |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 97.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 89.5 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND         | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 46.6       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 46.6       | 10.0            | "         | "        | "       | "        | "        | "         |       |

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**Organics by GC**  
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| Analyte                           | Result   | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------------|----------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>EW-3 3' (5K28007-13) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |          | 91.2 %          | 70-130    |          | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |          | 95.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-3 8' (5K28007-14) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Benzene                           | ND       | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |          | 101 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |          | 89.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | ND       | 10.0            | mg/kg dry | 1        | EK52911 | 11/29/05 | 11/30/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |          | 94.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |          | 99.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>BH-1 (5K28007-15) Soil</b>     |          |                 |           |          |         |          |          |           |       |
| Benzene                           | ND       | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                           | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                      | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                      | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                        | ND       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |          | 103 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |          | 92.0 %          | 80-120    |          | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | J [8.58] | 10.0            | mg/kg dry | 1        | EL50106 | 12/01/05 | 12/02/05 | EPA 8015M | J     |
| Diesel Range Organics >C12-C35    | 86.7     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35          | 86.7     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane         |          | 89.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |          | 97.2 %          | 70-130    |          | "       | "        | "        | "         |       |

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

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/05/05 12:15

**Organics by GC  
 Environmental Lab of Texas**

| Analyte                                  | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>BH-2 (5K28007-16) Soil</b>            |        |                 |           |          |         |          |          |           |       |
| Benzene                                  | ND     | 0.0250          | mg/kg dry | 25       | EL50105 | 12/01/05 | 12/01/05 | EPA 8021B |       |
| Toluene                                  | 0.0340 | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                             | 0.200  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                             | 0.601  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                               | 0.370  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: <i>a,a,x-Trifluorotoluene</i> |        | 107 %           |           | 80-120   | "       | "        | "        | "         |       |
| Surrogate: <i>4-Bromofluorobenzene</i>   |        | 113 %           |           | 80-120   | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12           | 196    | 10.0            | mg/kg dry | 1        | EL50106 | 12/01/05 | 12/02/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35           | 884    | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35                 | 1080   | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: <i>1-Chlorooctane</i>         |        | 102 %           |           | 70-130   | "       | "        | "        | "         |       |
| Surrogate: <i>1-Chlorooctadecane</i>     |        | 120 %           |           | 70-130   | "       | "        | "        | "         |       |

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

| Analyte                           | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>NW-1 8' (5K28007-01) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 3.2    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>NW-1 12' (5K28007-02) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 6.9    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-1 5' (5K28007-03) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 8.5    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-1 12' (5K28007-04) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 4.5    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-2 5' (5K28007-05) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 10.7   | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-2 12' (5K28007-06) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 5.2    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-3 3' (5K28007-07) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 3.9    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>WW-3 12' (5K28007-08) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 2.3    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>EW-1 5' (5K28007-09) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 4.4    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>EW-1 12' (5K28007-10) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 4.9    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>EW-2 5' (5K28007-11) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                        | 3.4    | 0.1             | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |

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Page 9 of 16

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Midland TX, 79706-4476

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Project Number: 2005-00144  
Project Manager: Camille Reynolds

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Reported:  
12/05/05 12:15

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

| Analyte                           | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>EW-2 12' (5K28007-12) Soil</b> |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 4.0    | 0.1                | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>EW-3 3' (5K28007-13) Soil</b>  |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 4.0    | 0.1                | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>EW-3 8' (5K28007-14) Soil</b>  |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 2.1    | 0.1                | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>BH-1 (5K28007-15) Soil</b>     |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 8.6    | 0.1                | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |
| <b>BH-2 (5K28007-16) Soil</b>     |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 7.7    | 0.1                | %     | 1        | EK52902 | 11/28/05 | 11/29/05 | % calculation |       |

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 Reported:  
 12/05/05 12:15

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EK52911 - Solvent Extraction (GC)**

**Blank (EK52911-BLK1)**

Prepared & Analyzed: 11/29/05

|                                |      |      |           |      |  |      |        |  |  |  |
|--------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | ND   | 10.0 | mg/kg wet |      |  |      |        |  |  |  |
| Diesel Range Organics >C12-C35 | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Total Hydrocarbon C6-C35       | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane      | 40.1 |      | mg/kg     | 50.0 |  | 80.2 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 41.9 |      | "         | 50.0 |  | 83.8 | 70-130 |  |  |  |

**LCS (EK52911-BS1)**

Prepared & Analyzed: 11/29/05

|                                |      |      |           |      |  |      |        |  |  |  |
|--------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | 400  | 10.0 | mg/kg wet | 500  |  | 80.0 | 75-125 |  |  |  |
| Diesel Range Organics >C12-C35 | 514  | 10.0 | "         | 500  |  | 103  | 75-125 |  |  |  |
| Total Hydrocarbon C6-C35       | 914  | 10.0 | "         | 1000 |  | 91.4 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane      | 46.9 |      | mg/kg     | 50.0 |  | 93.8 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 46.0 |      | "         | 50.0 |  | 92.0 | 70-130 |  |  |  |

**Calibration Check (EK52911-CCV1)**

Prepared: 11/29/05 Analyzed: 11/30/05

|                                |      |  |       |      |  |      |        |  |  |  |
|--------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | 438  |  | mg/kg | 500  |  | 87.6 | 80-120 |  |  |  |
| Diesel Range Organics >C12-C35 | 572  |  | "     | 500  |  | 114  | 80-120 |  |  |  |
| Total Hydrocarbon C6-C35       | 1010 |  | "     | 1000 |  | 101  | 80-120 |  |  |  |
| Surrogate: 1-Chlorooctane      | 60.8 |  | "     | 50.0 |  | 122  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 57.0 |  | "     | 50.0 |  | 114  | 70-130 |  |  |  |

**Matrix Spike (EK52911-MS1)**

Source: 5K28003-30

Prepared & Analyzed: 11/29/05

|                                |      |      |           |      |    |      |        |  |  |  |
|--------------------------------|------|------|-----------|------|----|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | 384  | 10.0 | mg/kg dry | 505  | ND | 76.0 | 75-125 |  |  |  |
| Diesel Range Organics >C12-C35 | 542  | 10.0 | "         | 505  | ND | 107  | 75-125 |  |  |  |
| Total Hydrocarbon C6-C35       | 925  | 10.0 | "         | 1010 | ND | 91.6 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane      | 42.7 |      | mg/kg     | 50.0 |    | 85.4 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 47.8 |      | "         | 50.0 |    | 95.6 | 70-130 |  |  |  |

**Matrix Spike Dup (EK52911-MSD1)**

Source: 5K28003-30

Prepared & Analyzed: 11/29/05

|                                |      |      |           |      |    |      |        |      |    |  |
|--------------------------------|------|------|-----------|------|----|------|--------|------|----|--|
| Gasoline Range Organics C6-C12 | 420  | 10.0 | mg/kg dry | 505  | ND | 83.2 | 75-125 | 8.96 | 20 |  |
| Diesel Range Organics >C12-C35 | 577  | 10.0 | "         | 505  | ND | 114  | 75-125 | 6.26 | 20 |  |
| Total Hydrocarbon C6-C35       | 997  | 10.0 | "         | 1010 | ND | 98.7 | 75-125 | 7.49 | 20 |  |
| Surrogate: 1-Chlorooctane      | 41.8 |      | mg/kg     | 50.0 |    | 83.6 | 70-130 |      |    |  |
| Surrogate: 1-Chlorooctadecane  | 46.4 |      | "         | 50.0 |    | 92.8 | 70-130 |      |    |  |

Plains All American EH & S  
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Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/05/05 12:15

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EL50105 - EPA 5030C (GC)**

| <b>Blank (EL50105-BLK1)</b>       |      | Prepared & Analyzed: 12/01/05 |           |      |  |      |        |  |  |  |
|-----------------------------------|------|-------------------------------|-----------|------|--|------|--------|--|--|--|
| Benzene                           | ND   | 0.0250                        | mg/kg wet |      |  |      |        |  |  |  |
| Toluene                           | ND   | 0.0250                        | "         |      |  |      |        |  |  |  |
| Ethylbenzene                      | ND   | 0.0250                        | "         |      |  |      |        |  |  |  |
| Xylene (p/m)                      | ND   | 0.0250                        | "         |      |  |      |        |  |  |  |
| Xylene (o)                        | ND   | 0.0250                        | "         |      |  |      |        |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 38.2 |                               | ug/kg     | 40.0 |  | 95.5 | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 37.1 |                               | "         | 40.0 |  | 92.8 | 80-120 |  |  |  |

| <b>LCS (EL50105-BS1)</b>          |        | Prepared & Analyzed: 12/01/05 |           |        |  |      |        |  |  |  |
|-----------------------------------|--------|-------------------------------|-----------|--------|--|------|--------|--|--|--|
| Benzene                           | 0.0407 | 0.00100                       | mg/kg wet | 0.0500 |  | 81.4 | 80-120 |  |  |  |
| Toluene                           | 0.0486 | 0.00100                       | "         | 0.0500 |  | 97.2 | 80-120 |  |  |  |
| Ethylbenzene                      | 0.0526 | 0.00100                       | "         | 0.0500 |  | 105  | 80-120 |  |  |  |
| Xylene (p/m)                      | 0.100  | 0.00100                       | "         | 0.100  |  | 100  | 80-120 |  |  |  |
| Xylene (o)                        | 0.0528 | 0.00100                       | "         | 0.0500 |  | 106  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 38.6   |                               | ug/kg     | 40.0   |  | 96.5 | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 41.3   |                               | "         | 40.0   |  | 103  | 80-120 |  |  |  |

| <b>Calibration Check (EL50105-CCV1)</b> |        | Prepared & Analyzed: 12/01/05 |           |        |  |      |        |  |  |  |
|---|--------|-------------------------------|-----------|--------|--|------|--------|--|--|--|
| Benzene                                 | 0.0403 |                               | mg/kg wet | 0.0500 |  | 80.6 | 80-120 |  |  |  |
| Toluene                                 | 0.0448 |                               | "         | 0.0500 |  | 89.6 | 80-120 |  |  |  |
| Ethylbenzene                            | 0.0450 |                               | "         | 0.0500 |  | 90.0 | 80-120 |  |  |  |
| Xylene (p/m)                            | 0.0858 |                               | "         | 0.100  |  | 85.8 | 80-120 |  |  |  |
| Xylene (o)                              | 0.0447 |                               | "         | 0.0500 |  | 89.4 | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene       | 41.0   |                               | ug/kg     | 40.0   |  | 102  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene         | 32.4   |                               | "         | 40.0   |  | 81.0 | 80-120 |  |  |  |

| <b>Matrix Spike (EL50105-MS1)</b> |        | Source: 5K28003-29 |           | Prepared & Analyzed: 12/01/05 |    |      |        |  |  |  |
|-----------------------------------|--------|--------------------|-----------|-------------------------------|----|------|--------|--|--|--|
| Benzene                           | 0.0417 | 0.00100            | mg/kg dry | 0.0517                        | ND | 80.7 | 80-120 |  |  |  |
| Toluene                           | 0.0496 | 0.00100            | "         | 0.0517                        | ND | 95.9 | 80-120 |  |  |  |
| Ethylbenzene                      | 0.0522 | 0.00100            | "         | 0.0517                        | ND | 101  | 80-120 |  |  |  |
| Xylene (p/m)                      | 0.0988 | 0.00100            | "         | 0.103                         | ND | 95.9 | 80-120 |  |  |  |
| Xylene (o)                        | 0.0517 | 0.00100            | "         | 0.0517                        | ND | 100  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 40.1   |                    | ug/kg     | 40.0                          |    | 100  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 35.8   |                    | "         | 40.0                          |    | 89.5 | 80-120 |  |  |  |

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Reported:  
 12/05/05 12:15

**Organics by GC - Quality Control  
 Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EL50105 - EPA 5030C (GC)**

| <b>Matrix Spike Dup (EL50105-MSD1)</b> |        | <b>Source: 5K28003-29</b> |           |        | <b>Prepared &amp; Analyzed: 12/01/05</b> |      |        |       |    |  |
|--|--------|---------------------------|-----------|--------|--|------|--------|-------|----|--|
| Benzene                                | 0.0419 | 0.00100                   | mg/kg dry | 0.0517 | ND                                       | 81.0 | 80-120 | 0.371 | 20 |  |
| Toluene                                | 0.0489 | 0.00100                   | "         | 0.0517 | ND                                       | 94.6 | 80-120 | 1.36  | 20 |  |
| Ethylbenzene                           | 0.0514 | 0.00100                   | "         | 0.0517 | ND                                       | 99.4 | 80-120 | 1.60  | 20 |  |
| Xylene (p/m)                           | 0.0977 | 0.00100                   | "         | 0.103  | ND                                       | 94.9 | 80-120 | 1.05  | 20 |  |
| Xylene (o)                             | 0.0516 | 0.00100                   | "         | 0.0517 | ND                                       | 99.8 | 80-120 | 0.200 | 20 |  |
| Surrogate: a,a,a-Trifluorotoluene      | 40.3   |                           | ug/kg     | 40.0   |  | 101  | 80-120 |       |    |  |
| Surrogate: 4-Bromofluorobenzene        | 36.4   |                           | "         | 40.0   |  | 91.0 | 80-120 |       |    |  |

**Batch EL50106 - Solvent Extraction (GC)**

| <b>Blank (EL50106-BLK1)</b>    |      | <b>Prepared: 12/01/05 Analyzed: 12/02/05</b> |           |      |  |      |        |  |  |  |
|--------------------------------|------|--|-----------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | ND   | 10.0   | mg/kg wet |      |  |      |        |  |  |  |
| Diesel Range Organics >C12-C35 | ND   | 10.0   | "         |      |  |      |        |  |  |  |
| Total Hydrocarbon C6-C35       | ND   | 10.0   | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane      | 46.5 |  | mg/kg     | 50.0 |  | 93.0 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 47.4 |  | "         | 50.0 |  | 94.8 | 70-130 |  |  |  |

| <b>LCS (EL50106-BS1)</b>       |      | <b>Prepared: 12/01/05 Analyzed: 12/02/05</b> |           |      |  |      |        |  |  |  |
|--------------------------------|------|--|-----------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12 | 384  | 10.0   | mg/kg wet | 500  |  | 76.8 | 75-125 |  |  |  |
| Diesel Range Organics >C12-C35 | 466  | 10.0   | "         | 500  |  | 93.2 | 75-125 |  |  |  |
| Total Hydrocarbon C6-C35       | 850  | 10.0   | "         | 1000 |  | 85.0 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane      | 51.7 |  | mg/kg     | 50.0 |  | 103  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane  | 49.0 |  | "         | 50.0 |  | 98.0 | 70-130 |  |  |  |

| <b>Calibration Check (EL50106-CCV1)</b> |      | <b>Prepared: 12/01/05 Analyzed: 12/02/05</b> |       |      |  |      |        |  |  |  |
|---|------|--|-------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12          | 401  |  | mg/kg | 500  |  | 80.2 | 80-120 |  |  |  |
| Diesel Range Organics >C12-C35          | 466  |  | "     | 500  |  | 93.2 | 80-120 |  |  |  |
| Total Hydrocarbon C6-C35                | 867  |  | "     | 1000 |  | 86.7 | 80-120 |  |  |  |
| Surrogate: 1-Chlorooctane               | 53.1 |  | "     | 50.0 |  | 106  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane           | 52.9 |  | "     | 50.0 |  | 106  | 70-130 |  |  |  |

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

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/05/05 12:15

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EL50106 - Solvent Extraction (GC)**

| <b>Matrix Spike (EL50106-MS1)</b>      |      | <b>Source: 5K29001-01</b> |           | <b>Prepared: 12/01/05</b> |    | <b>Analyzed: 12/02/05</b> |        |       |    |  |
|--|------|---------------------------|-----------|---------------------------|----|---------------------------|--------|-------|----|--|
| Gasoline Range Organics C6-C12         | 462  | 10.0                      | mg/kg dry | 610                       | ND | 75.7                      | 75-125 |       |    |  |
| Diesel Range Organics >C12-C35         | 580  | 10.0                      | "         | 610                       | ND | 95.1                      | 75-125 |       |    |  |
| Total Hydrocarbon C6-C35               | 1040 | 10.0                      | "         | 1220                      | ND | 85.2                      | 75-125 |       |    |  |
| Surrogate: 1-Chlorooctane              | 51.0 |                           | mg/kg     | 50.0                      |    | 102                       | 70-130 |       |    |  |
| Surrogate: 1-Chlorooctadecane          | 47.4 |                           | "         | 50.0                      |    | 94.8                      | 70-130 |       |    |  |
| <b>Matrix Spike Dup (EL50106-MSD1)</b> |      | <b>Source: 5K29001-01</b> |           | <b>Prepared: 12/01/05</b> |    | <b>Analyzed: 12/02/05</b> |        |       |    |  |
| Gasoline Range Organics C6-C12         | 459  | 10.0                      | mg/kg dry | 610                       | ND | 75.2                      | 75-125 | 0.651 | 20 |  |
| Diesel Range Organics >C12-C35         | 566  | 10.0                      | "         | 610                       | ND | 92.8                      | 75-125 | 2.44  | 20 |  |
| Total Hydrocarbon C6-C35               | 1030 | 10.0                      | "         | 1220                      | ND | 84.4                      | 75-125 | 0.966 | 20 |  |
| Surrogate: 1-Chlorooctane              | 50.0 |                           | mg/kg     | 50.0                      |    | 100                       | 70-130 |       |    |  |
| Surrogate: 1-Chlorooctadecane          | 48.3 |                           | "         | 50.0                      |    | 96.6                      | 70-130 |       |    |  |

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Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/05/05 12:15

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EK52902 - General Preparation (Prep)**

**Blank (EK52902-BLK1)**

Prepared: 11/28/05 Analyzed: 11/29/05

% Solids 100 %

**Duplicate (EK52902-DUP1)**

Source: 5K28001-01

Prepared: 11/28/05 Analyzed: 11/29/05

% Solids 97.2 % 96.7 0.516 20

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Midland TX, 79706-4476

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/05/05 12:15

### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: \_\_\_\_\_

*Raland K Tuttle*

Date: \_\_\_\_\_

12/5/2005

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
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

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Page 16 of 16



Office Location: Midland  
 Project Manager: Shawna Smith

Sampler's Name: Shawna Smith  
 Sampler's Signature: *Shawna Smith*

Laboratory: CLOT  
 Address: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 POISO #: 2005-00144

Project Name: Lithium Gathering Co  
 No/Type of Containers: 12

| Matrix | Date  | Time | Identifying Marks of Sample(s) |   |      | Depth | VOA | AVG<br>1 L. | 250<br>ml | P/O | Lab Sample ID (Lab Use Only) |
|--------|-------|------|--------------------------------|---|------|-------|-----|-------------|-----------|-----|------------------------------|
|        |       |      | C                              | G | Comp |       |     |             |           |     |                              |
| S      | 11/23 | 910  |                                |   |      | 8'    |     |             |           |     | SK 28009-01                  |
|        |       | 925  |                                |   |      | 12'   |     |             |           |     | -02                          |
|        |       | 1030 |                                |   |      | 5'    |     |             |           |     | -05                          |
|        |       | 1040 |                                |   |      | 12'   |     |             |           |     | -04                          |
|        |       | 1130 |                                |   |      | 5'    |     |             |           |     | -05                          |
|        |       | 1145 |                                |   |      | 12'   |     |             |           |     | -00                          |
|        |       | 1210 |                                |   |      | 3'    |     |             |           |     | -07                          |
|        |       | 1220 |                                |   |      | 12'   |     |             |           |     | -08                          |
|        |       | 1415 |                                |   |      | 5'    |     |             |           |     | -09                          |
|        |       | 1425 |                                |   |      | 12'   |     |             |           |     | -10                          |

TEST SALS AND FERT  
GTE 80218

ANALYSIS REQUESTED

Lab use only  
Due Date:

Temp. of coolers when received (C): 4.0

Page 1 of 2

NOTES:

Plains Camille Reynolds

Labels/Seal

| Relinquished by (Signature) | Date     | Time | Received by (Signature) | Date     | Time |
|-----------------------------|----------|------|-------------------------|----------|------|
| <i>Shawna Smith</i>         | 11/23/05 | 7:30 | <i>Camille Reynolds</i> | 11/23/05 | 7:30 |
| <i>Wendy Miller</i>         | 11/23/05 | 8:00 | <i>Camille Reynolds</i> | 11/23/05 | 8:00 |
|                             |          |      |                         |          |      |
|                             |          |      |                         |          |      |

Matrix: WW - Westwater, VOA - 40 ml vial  
 Container: W - Water, S - Soil, SD - Solid, AG - 40 ml vial  
 L - Liquid, A - Air Bag, 250 ml - Glass wide mouth, P/O - Plastic or other

Turn around time:  Normal,  25% Rush,  50% Rush,  100% Rush

Houston Office: 11525 Clay Road, Suite 100, Houston, Texas 77043, (713) 690-8989, Fax (713) 690-8787  
 Dallas Office: 8901 Carpenter Freeway, Suite 100, Dallas, Texas 75247, (214) 630-1010, Fax (214) 630-7070  
 Fort Worth Office: 2601 Gravel Drive, Fort Worth, Texas 76118, (817) 268-8600, Fax (817) 268-8602  
 Austin Office: 5307 Industrial Oaks Blvd. # 160, Austin, Texas 78735, (512) 442-1122, Fax (512) 442-1181  
 Midland Office: 24 Smith Rd., # 261, Midland, Texas 79705, (432) 684-9600, Fax (432) 684-9608



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

Client: TERRACON  
 Date/Time: 11/28/05 8:00  
 Order #: SK28007  
 Initials: CK

**Sample Receipt Checklist**

|   |   |    |                        |
|---|---|----|------------------------|
| Temperature of container/cooler?                          | Yes                                     | No | 4.0 C                  |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> YES | No |                        |
| Custody Seals intact on shipping container/cooler?        | Yes                                     | No | <del>Not present</del> |
| Custody Seals intact on sample bottles?                   | <input checked="" type="checkbox"/> YES | No | Not present            |
| Chain of custody present?                                 | <input checked="" type="checkbox"/> YES | No |                        |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="checkbox"/> YES | No |                        |
| Chain of Custody signed when relinquished and received?   | <input checked="" type="checkbox"/> YES | No |                        |
| Chain of custody agrees with sample label(s)              | <input checked="" type="checkbox"/> YES | No |                        |
| Container labels legible and intact?                      | <input checked="" type="checkbox"/> YES | No |                        |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="checkbox"/> YES | No |                        |
| Samples in order container/bottle?                        | <input checked="" type="checkbox"/> YES | No |                        |
| Samples properly preserved?                               | <input checked="" type="checkbox"/> YES | No |                        |
| Sample bottles intact?                                    | <input checked="" type="checkbox"/> YES | No |                        |
| Preservations documented on Chain of Custody?             | <input checked="" type="checkbox"/> YES | No |                        |
| Containers documented on Chain of Custody?                | <input checked="" type="checkbox"/> YES | No |                        |
| Sufficient sample amount for indicated test?              | <input checked="" type="checkbox"/> YES | No |                        |
| All samples received within sufficient hold time?         | <input checked="" type="checkbox"/> YES | No |                        |
| VOC samples have zero headspace?                          | <input checked="" type="checkbox"/> YES | No | Not Applicable         |

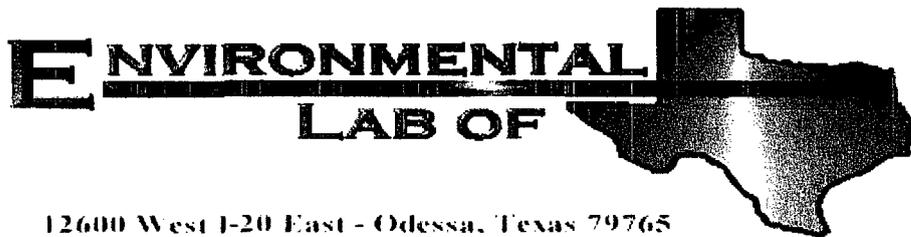
Other observations:

**Variance Documentation:**

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

Corrective Action Taken:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Littman Gathering 6"

Project Number: 2005-00144

Location: None Given

Lab Order Number: 5L13005

Report Date: 12/14/05

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/14/05 15:36

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| WW-1A 5'  | 5L13005-01    | Soil   | 12/13/05 07:40 | 12/13/05 13:17 |
| WW-2A 5'  | 5L13005-02    | Soil   | 12/13/05 07:43 | 12/13/05 13:17 |
| EW-1A 5'  | 5L13005-03    | Soil   | 12/13/05 07:52 | 12/13/05 13:17 |
| EW-2A 5'  | 5L13005-04    | Soil   | 12/13/05 07:55 | 12/13/05 13:17 |
| EW-2A 12' | 5L13005-05    | Soil   | 12/13/05 07:57 | 12/13/05 13:17 |
| BH-2A     | 5L13005-06    | Soil   | 12/13/05 08:00 | 12/13/05 13:17 |

Plains All American EH & S  
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 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/14/05 15:36

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                            | Result   | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------------------|----------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>WW-1A 5' (5L13005-01) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12     | ND       | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35     | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35           | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane          |          | 95.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane      |          | 91.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>WW-2A 5' (5L13005-02) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12     | ND       | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35     | J [7.96] | 10.0            | "         | "        | "       | "        | "        | "         | J     |
| Total Hydrocarbon C6-C35           | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane          |          | 97.4 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane      |          | 95.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-1A 5' (5L13005-03) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12     | 11.5     | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35     | 505      | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35           | 517      | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane          |          | 98.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane      |          | 124 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-2A 5' (5L13005-04) Soil</b>  |          |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12     | ND       | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35     | 44.3     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35           | 44.3     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane          |          | 95.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane      |          | 96.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>EW-2A 12' (5L13005-05) Soil</b> |          |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12     | ND       | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35     | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35           | ND       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane          |          | 88.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane      |          | 85.0 %          | 70-130    |          | "       | "        | "        | "         |       |

Environmental Lab of Texas

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1301 S. County Road 1150  
Midland TX, 79706-4476

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/14/05 15:36

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>BH-2A (5L13005-06) Soil</b>       |        |                 |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12       | ND     | 10.0            | mg/kg dry | 1        | EL51307 | 12/13/05 | 12/13/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35       | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35             | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>     |        | 91.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctadecane</i> |        | 87.2 %          | 70-130    |          | "       | "        | "        | "         |       |

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Project Number: 2005-00144  
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Fax: (432) 687-4914

Reported:  
12/14/05 15:36

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

| Analyte                            | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|------------------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>WW-1A 5' (5L13005-01) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 5.2    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |
| <b>WW-2A 5' (5L13005-02) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 5.6    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |
| <b>EW-1A 5' (5L13005-03) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 1.7    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |
| <b>EW-2A 5' (5L13005-04) Soil</b>  |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 5.8    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |
| <b>EW-2A 12' (5L13005-05) Soil</b> |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 8.2    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |
| <b>BH-2A (5L13005-06) Soil</b>     |        |                 |       |          |         |          |          |               |       |
| % Moisture                         | 7.1    | 0.1             | %     | 1        | EL51404 | 12/13/05 | 12/14/05 | % calculation |       |

Environmental Lab of Texas

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Page 4 of 7

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 Midland TX, 79706-4476

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 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914  
 Reported:  
 12/14/05 15:36

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EL51307 - Solvent Extraction (GC)**

**Blank (EL51307-BLK1)**

Prepared & Analyzed: 12/13/05

|                                      |      |      |           |      |  |     |        |  |  |  |
|--------------------------------------|------|------|-----------|------|--|-----|--------|--|--|--|
| Gasoline Range Organics C6-C12       | ND   | 10.0 | mg/kg wet |      |  |     |        |  |  |  |
| Diesel Range Organics >C12-C35       | ND   | 10.0 | "         |      |  |     |        |  |  |  |
| Total Hydrocarbon C6-C35             | ND   | 10.0 | "         |      |  |     |        |  |  |  |
| <i>Surrogate: 1-Chlorooctane</i>     | 52.5 |      | mg/kg     | 50.0 |  | 105 | 70-130 |  |  |  |
| <i>Surrogate: 1-Chlorooctadecane</i> | 53.7 |      | "         | 50.0 |  | 107 | 70-130 |  |  |  |

**LCS (EL51307-BS1)**

Prepared & Analyzed: 12/13/05

|                                      |      |      |           |      |  |      |        |  |  |  |
|--------------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12       | 423  | 10.0 | mg/kg wet | 500  |  | 84.6 | 75-125 |  |  |  |
| Diesel Range Organics >C12-C35       | 525  | 10.0 | "         | 500  |  | 105  | 75-125 |  |  |  |
| Total Hydrocarbon C6-C35             | 948  | 10.0 | "         | 1000 |  | 94.8 | 75-125 |  |  |  |
| <i>Surrogate: 1-Chlorooctane</i>     | 54.8 |      | mg/kg     | 50.0 |  | 110  | 70-130 |  |  |  |
| <i>Surrogate: 1-Chlorooctadecane</i> | 56.9 |      | "         | 50.0 |  | 114  | 70-130 |  |  |  |

**Calibration Check (EL51307-CCV1)**

Prepared & Analyzed: 12/13/05

|                                      |      |  |       |      |  |      |        |  |  |  |
|--------------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Gasoline Range Organics C6-C12       | 400  |  | mg/kg | 500  |  | 80.0 | 80-120 |  |  |  |
| Diesel Range Organics >C12-C35       | 473  |  | "     | 500  |  | 94.6 | 80-120 |  |  |  |
| Total Hydrocarbon C6-C35             | 873  |  | "     | 1000 |  | 87.3 | 80-120 |  |  |  |
| <i>Surrogate: 1-Chlorooctane</i>     | 49.1 |  | "     | 50.0 |  | 98.2 | 70-130 |  |  |  |
| <i>Surrogate: 1-Chlorooctadecane</i> | 52.2 |  | "     | 50.0 |  | 104  | 70-130 |  |  |  |

**Matrix Spike (EL51307-MS1)**

Source: 5L13005-01

Prepared & Analyzed: 12/13/05

|                                      |      |      |           |      |    |      |        |  |  |  |
|--------------------------------------|------|------|-----------|------|----|------|--------|--|--|--|
| Gasoline Range Organics C6-C12       | 397  | 10.0 | mg/kg dry | 527  | ND | 75.3 | 75-125 |  |  |  |
| Diesel Range Organics >C12-C35       | 504  | 10.0 | "         | 527  | ND | 95.6 | 75-125 |  |  |  |
| Total Hydrocarbon C6-C35             | 901  | 10.0 | "         | 1050 | ND | 85.8 | 75-125 |  |  |  |
| <i>Surrogate: 1-Chlorooctane</i>     | 50.5 |      | mg/kg     | 50.0 |    | 101  | 70-130 |  |  |  |
| <i>Surrogate: 1-Chlorooctadecane</i> | 52.1 |      | "         | 50.0 |    | 104  | 70-130 |  |  |  |

**Matrix Spike Dup (EL51307-MSD1)**

Source: 5L13005-01

Prepared & Analyzed: 12/13/05

|                                      |      |      |           |      |    |      |        |      |    |  |
|--------------------------------------|------|------|-----------|------|----|------|--------|------|----|--|
| Gasoline Range Organics C6-C12       | 397  | 10.0 | mg/kg dry | 527  | ND | 75.3 | 75-125 | 0.00 | 20 |  |
| Diesel Range Organics >C12-C35       | 487  | 10.0 | "         | 527  | ND | 92.4 | 75-125 | 3.43 | 20 |  |
| Total Hydrocarbon C6-C35             | 884  | 10.0 | "         | 1050 | ND | 84.2 | 75-125 | 1.90 | 20 |  |
| <i>Surrogate: 1-Chlorooctane</i>     | 50.1 |      | mg/kg     | 50.0 |    | 100  | 70-130 |      |    |  |
| <i>Surrogate: 1-Chlorooctadecane</i> | 52.7 |      | "         | 50.0 |    | 105  | 70-130 |      |    |  |

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

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/14/05 15:36

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte   | Result | Reporting Limit | Units | Spike Level | Source Result  | %REC | %REC Limits | RPD   | RPD Limit | Notes |
|---|--------|-----------------|-------|-------------|--|------|-------------|-------|-----------|-------|
| <b>Batch EL51404 - General Preparation (Prep)</b> |        |                 |       |             |  |      |             |       |           |       |
| <b>Blank (EL51404-BLK1)</b>                       |        |                 |       |             |  |      |             |       |           |       |
|   |        |                 |       |             | Prepared: 12/13/05 Analyzed: 12/14/05                    |      |             |       |           |       |
| % Solids  | 100    |                 | %     |             |  |      |             |       |           |       |
| <b>Duplicate (EL51404-DUP1)</b>                   |        |                 |       |             |  |      |             |       |           |       |
|   |        |                 |       |             | Source: 5L12007-01 Prepared: 12/13/05 Analyzed: 12/14/05 |      |             |       |           |       |
| % Solids  | 97.0   |                 | %     |             | 97.4   |      |             | 0.412 | 20        |       |
| <b>Duplicate (EL51404-DUP2)</b>                   |        |                 |       |             |  |      |             |       |           |       |
|   |        |                 |       |             | Source: 5L13011-04 Prepared: 12/13/05 Analyzed: 12/14/05 |      |             |       |           |       |
| % Solids  | 91.7   |                 | %     |             | 91.3   |      |             | 0.437 | 20        |       |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/14/05 15:36

### Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:

*Raland K Tuttle*

Date: 12/14/2005

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
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 entirety, with written approval of Environmental Lab of Texas.*

Page 7 of 7



Office Location Midland, TX

Project Manager Shawna Smith

Sampler's Name Shawna Smith

Project Name Lithium Gathering Co "

No/Type of Containers 6 / 2oz

Identifying Marks of Sample(s) WW-1A 5'

WW-2A 5'

EW-1A 5'

EW-2A 5'

AW-2A 12'

BH-2A

5L-3005-01

-02

-03

-04

-05

-06

X

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Laboratory: ELOT

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

PO/SO #: 2005-00144

Sampler's Signature Shawna Smith

ANALYSIS REQUESTED

Lab use only  
Due Date:

Temp. of coolers when received (C°): 35

1 2 3 4 5

Page 1 of 1

| Turn around time | Normal | 25% Rush | 50% Rush | 100% Rush | Relinquished by (Signature) | Date            | Time        | Received by (Signature) | Date            | Time         | Relinquished by (Signature) | Date | Time | Received by (Signature) | Date | Time | Relinquished by (Signature) | Date | Time |
|------------------|--------|----------|----------|-----------|-----------------------------|-----------------|-------------|-------------------------|-----------------|--------------|-----------------------------|------|------|-------------------------|------|------|-----------------------------|------|------|
|                  |        |          |          |           | <u>Shawna Smith</u>         | <u>12/13/05</u> | <u>7:40</u> | <u>Shawna Smith</u>     | <u>12/13/05</u> | <u>12:17</u> |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |
|                  |        |          |          |           |                             |                 |             |                         |                 |              |                             |      |      |                         |      |      |                             |      |      |

NOTES:

Plains Camille Reynolds  
551-11149 cell  
verbale to  
Shawna  
ASAP

Labels/Seal

Labels/Seal

Labels/Seal

Labels/Seal

Labels/Seal

Labels/Seal

Labels/Seal

Matrix: WW - Wastewater  
Container: VQA - 40 ml vial  
W - Water  
S - Soil  
SD - Solid  
A/G - Amber / Or Glass 1 Liter  
L - Liquid  
250 ml - Glass wide mouth  
A - Air Bag  
C - Charcoal tube  
P/O - Plastic or other  
O - Oil

Houston Office  
11555 Clay Road, Suite 100  
Houston, Texas 77045  
(713) 690-8989 Fax (713) 690-8787

Dallas Office  
2901 Carpenter Freeway, Suite 100  
Dallas, Texas 75247  
(214) 630-1010 Fax (214) 630-7070

Fort Worth Office  
2601 Gravel Drive  
Fort Worth, Texas 76118  
(817) 268-8600 Fax (817) 268-8602

Austin Office  
5307 Industrial Oaks Blvd. # 160  
Austin, Texas 78735  
(512) 442-1122 Fax (512) 442-1181

Midland Office  
24 Smith Rd., # 261  
Midland, Texas 79705  
(432) 684-9600 Fax (432) 684-9608

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Rains

Date/Time: 12/13/05

Order #: 5L13005

Initials: OK

### Sample Receipt Checklist

|   | Yes                                 | No                       |                |
|---|-------------------------------------|--------------------------|----------------|
| Temperature of container/cooler?                          |                                     |                          | 3.5 C          |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Custody Seals intact on shipping container/cooler?        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Not present    |
| Custody Seals intact on sample bottles?                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Not present    |
| Chain of custody present?                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Chain of Custody signed when relinquished and received?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Chain of custody agrees with sample label(s)              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Container labels legible and intact?                      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Samples in proper container/bottle?                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Samples properly preserved?                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Sample bottles intact?                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Preservations documented on Chain of Custody?             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Containers documented on Chain of Custody?                | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| Sufficient sample amount for indicated test?              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| All samples received within sufficient hold time?         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                |
| VOC samples have zero headspace?                          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Not Applicable |

Other observations:

---



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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

### Corrective Action Taken:

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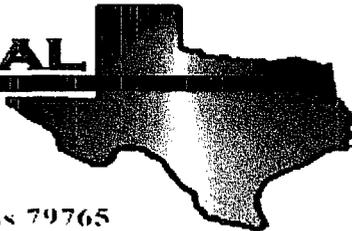


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**E** NVIRONMENTAL  
LAB OF



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Littman Gathering 6"

Project Number: 2005-00144

Location: None Given

Lab Order Number: 5L13006

Report Date: 12/16/05

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
Reported:  
12/16/05 17:47

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| SS-1      | 5L13006-01    | Soil   | 12/13/05 08:02 | 12/13/05 13:17 |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914  
Reported:  
12/16/05 17:47

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

| Analyte                | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| SS-1 (5L13006-01) Soil |        |                    |       |          |         |          |          |           |       |
| Chloride               | 61.8   | 5.00               | mg/kg | 10       | EL51601 | 12/15/05 | 12/16/05 | EPA 300.0 |       |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/16/05 17:47

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EL51601 - Water Extraction</b>  |        |                 |       |             |               |      |             |      |           |       |
| <b>Blank (EL51601-BLK1)</b> Prepared: 12/15/05 Analyzed: 12/16/05                        |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | ND     | 0.500           | mg/kg |             |               |      |             |      |           |       |
| <b>LCS (EL51601-BS1)</b> Prepared: 12/15/05 Analyzed: 12/16/05                           |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 8.39   |                 | mg/L  | 10.0        |               | 83.9 | 80-120      |      |           |       |
| <b>Calibration Check (EL51601-CCV1)</b> Prepared: 12/15/05 Analyzed: 12/16/05            |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 8.53   |                 | mg/L  | 10.0        |               | 85.3 | 80-120      |      |           |       |
| <b>Duplicate (EL51601-DUP1)</b> Source: 5L14003-01 Prepared: 12/15/05 Analyzed: 12/16/05 |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 1430   | 50.0            | mg/kg |             | 1450          |      |             | 1.39 | 20        |       |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/16/05 17:47

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By: \_\_\_\_\_

*Raland K Tuttle*

Date: \_\_\_\_\_

12/16/2005

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
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.



Office Location Midland, TX

Project Manager Shawna Smith

Sampler's Name Shawna Smith

Sampler's Signature *Shawna Smith*

Proj. No. 94057546 Project Name L. Wilson Spathering 6"

| Matrix | Date     | Time | Identifying Marks of Sample(s) |      |   | No/Type of Containers |     |     |  |
|--------|----------|------|--------------------------------|------|---|-----------------------|-----|-----|--|
|        |          |      | C                              | G    | P | VOA                   | A/G | P/O |  |
| S      | 12/18/05 | 802  |                                | SS-1 |   |                       |     | X   |  |

| Turn around time            | <input checked="" type="checkbox"/> Normal | <input type="checkbox"/> 25% Rush | <input type="checkbox"/> 50% Rush | <input type="checkbox"/> 100% Rush |
|-----------------------------|--|-----------------------------------|-----------------------------------|------------------------------------|
| Relinquished by (Signature) | <i>Shawna Smith</i>                        |                                   |                                   |                                    |
| Relinquished by (Signature) |  |                                   |                                   |                                    |
| Relinquished by (Signature) |  |                                   |                                   |                                    |
| Relinquished by (Signature) |  |                                   |                                   |                                    |

ANALYSIS REQUESTED

Lab use only  
Due Date: \_\_\_\_\_

Temp. of coolers when received (C°): 3.5

Page 1 of 1

*Chlorides*

Lab Sample ID (Lab Use Only)  
SL13000-01

NOTES:

| Relinquished by (Signature) | Date:    | Time: | Received by: (Signature)       | Date:    | Time: |
|-----------------------------|----------|-------|--------------------------------|----------|-------|
| <i>Shawna Smith</i>         | 12/18/05 | 13:17 | <i>Plains Camille Reynolds</i> | 12/18/05 | 13:17 |
|                             |          |       |                                |          |       |
|                             |          |       |                                |          |       |
|                             |          |       |                                |          |       |

*Labels/Seal*

Matrix Container: WW - Wastewater VOA - 40 ml vial

W - Water A/G - Amber / Or Glass 1 Liter

S - Soil SD - Solid

L - Liquid 250 ml - Glass wide mouth

A - Air Bag

C - Charcoal tube

P/O - Plastic or other

SL - sludge

O - Oil

Houston Office: 11555 Clay Road, Suite 100, Houston, Texas 77043 (713) 690-8989 Fax (713) 690-8787

Dallas Office: 8901 Carpenter Freeway, Suite 100, Dallas, Texas 75247 (214) 630-1010 Fax (214) 630-7070

Fort Worth Office: 2601 Gravel Drive, Fort Worth, Texas 76118 (817) 268-8600 Fax (817) 268-8602

Austin Office: 5307 Industrial Oaks Blvd. # 160, Austin, Texas 78735 (512) 442-1122 Fax (512) 442-1181

Midland Office: 24 Smith Rd., # 261, Midland, Texas 79705 (432) 684-9600 Fax (432) 684-9608

# Environmental Lab of Texas

## Variance / Corrective Action Report – Sample Log-In

Client: Plains

Date/Time: 12/13/05 13:17

Order #: 5L13006

Initials: OK

### Sample Receipt Checklist

|   | Yes                                 | No                       |                        |
|---|-------------------------------------|--------------------------|------------------------|
| Temperature of container/cooler?                          |                                     |                          | 3.5 C                  |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Custody Seals intact on shipping container/cooler?        | <input type="checkbox"/>            | <input type="checkbox"/> | <del>Not present</del> |
| Custody Seals intact on sample bottles?                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Not present            |
| Chain of custody present?                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Chain of Custody signed when relinquished and received?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Chain of custody agrees with sample label(s)              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Container labels legible and intact?                      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Samples in proper container/bottle?                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Samples properly preserved?                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Sample bottles intact?                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Preservations documented on Chain of Custody?             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Containers documented on Chain of Custody?                | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| Sufficient sample amount for indicated test?              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| All samples received within sufficient hold time?         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |
| VOC samples have zero headspace?                          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Not Applicable         |

Other observations:

### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

Corrective Action Taken:

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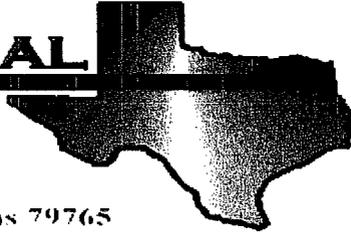
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**E** NVIRONMENTAL  
LAB OF



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Littman Gathering 6"

Project Number: 2005-00144

Location: None Given

Lab Order Number: 5L15017

Report Date: 12/20/05

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/20/05 14:45

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| EW-1B 5'  | 5L15017-01    | Soil   | 12/15/05 09:12 | 12/15/05 12:19 |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/20/05 14:45

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|--------------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>EW-1B 5' (5L15017-01) Soil</b>    |        |                    |           |          |         |          |          |           |       |
| Gasoline Range Organics C6-C12       | ND     | 10.0               | mg/kg dry | 1        | EL51508 | 12/15/05 | 12/19/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35       | ND     | 10.0               | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbon C6-C35             | ND     | 10.0               | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>     |        | 93.6 %             | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctadecane</i> |        | 85.6 %             | 70-130    |          | "       | "        | "        | "         |       |

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

Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/20/05 14:45

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

| Analyte                           | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>EW-1B 5' (SL15017-01) Soil</b> |        |                    |       |          |         |          |          |               |       |
| % Moisture                        | 5.7    | 0.1                | %     | 1        | EL51609 | 12/15/05 | 12/16/05 | % calculation |       |

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

Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

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 Reported:  
 12/20/05 14:45

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte   | Result | Reporting Limit | Units     | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|---|--------|-----------------|-----------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EL51508 - Solvent Extraction (GC)</b>  |        |                 |           |             |               |      |             |      |           |       |
| <b>Blank (EL51508-BLK1)</b> Prepared: 12/15/05 Analyzed: 12/18/05                               |        |                 |           |             |               |      |             |      |           |       |
| Gasoline Range Organics C6-C12  | ND     | 10.0            | mg/kg wet |             |               |      |             |      |           |       |
| Diesel Range Organics >C12-C35  | ND     | 10.0            | "         |             |               |      |             |      |           |       |
| Total Hydrocarbon C6-C35  | ND     | 10.0            | "         |             |               |      |             |      |           |       |
| Surrogate: 1-Chlorooctane   | 56.1   |                 | mg/kg     | 50.0        |               | 112  | 70-130      |      |           |       |
| Surrogate: 1-Chlorooctadecane   | 60.0   |                 | "         | 50.0        |               | 120  | 70-130      |      |           |       |
| <b>LCS (EL51508-BS1)</b> Prepared: 12/15/05 Analyzed: 12/18/05                                  |        |                 |           |             |               |      |             |      |           |       |
| Gasoline Range Organics C6-C12  | 450    | 10.0            | mg/kg wet | 500         |               | 90.0 | 75-125      |      |           |       |
| Diesel Range Organics >C12-C35  | 461    | 10.0            | "         | 500         |               | 92.2 | 75-125      |      |           |       |
| Total Hydrocarbon C6-C35  | 911    | 10.0            | "         | 1000        |               | 91.1 | 75-125      |      |           |       |
| Surrogate: 1-Chlorooctane   | 56.0   |                 | mg/kg     | 50.0        |               | 112  | 70-130      |      |           |       |
| Surrogate: 1-Chlorooctadecane   | 57.6   |                 | "         | 50.0        |               | 115  | 70-130      |      |           |       |
| <b>Calibration Check (EL51508-CCV1)</b> Prepared: 12/15/05 Analyzed: 12/19/05                   |        |                 |           |             |               |      |             |      |           |       |
| Gasoline Range Organics C6-C12  | 435    |                 | mg/kg     | 500         |               | 87.0 | 80-120      |      |           |       |
| Diesel Range Organics >C12-C35  | 476    |                 | "         | 500         |               | 95.2 | 80-120      |      |           |       |
| Total Hydrocarbon C6-C35  | 911    |                 | "         | 1000        |               | 91.1 | 80-120      |      |           |       |
| Surrogate: 1-Chlorooctane   | 57.7   |                 | "         | 50.0        |               | 115  | 70-130      |      |           |       |
| Surrogate: 1-Chlorooctadecane   | 62.4   |                 | "         | 50.0        |               | 125  | 70-130      |      |           |       |
| <b>Matrix Spike (EL51508-MS1)</b> Source: 5L15006-01 Prepared: 12/15/05 Analyzed: 12/18/05      |        |                 |           |             |               |      |             |      |           |       |
| Gasoline Range Organics C6-C12  | 496    | 10.0            | mg/kg dry | 529         | ND            | 93.8 | 75-125      |      |           |       |
| Diesel Range Organics >C12-C35  | 410    | 10.0            | "         | 529         | ND            | 77.5 | 75-125      |      |           |       |
| Total Hydrocarbon C6-C35  | 906    | 10.0            | "         | 1060        | ND            | 85.5 | 75-125      |      |           |       |
| Surrogate: 1-Chlorooctane   | 53.8   |                 | mg/kg     | 50.0        |               | 108  | 70-130      |      |           |       |
| Surrogate: 1-Chlorooctadecane   | 45.5   |                 | "         | 50.0        |               | 91.0 | 70-130      |      |           |       |
| <b>Matrix Spike Dup (EL51508-MSD1)</b> Source: 5L15006-01 Prepared: 12/15/05 Analyzed: 12/18/05 |        |                 |           |             |               |      |             |      |           |       |
| Gasoline Range Organics C6-C12  | 484    | 10.0            | mg/kg dry | 529         | ND            | 91.5 | 75-125      | 2.45 | 20        |       |
| Diesel Range Organics >C12-C35  | 400    | 10.0            | "         | 529         | ND            | 75.6 | 75-125      | 2.47 | 20        |       |
| Total Hydrocarbon C6-C35  | 884    | 10.0            | "         | 1060        | ND            | 83.4 | 75-125      | 2.46 | 20        |       |
| Surrogate: 1-Chlorooctane   | 52.2   |                 | mg/kg     | 50.0        |               | 104  | 70-130      |      |           |       |
| Surrogate: 1-Chlorooctadecane   | 43.6   |                 | "         | 50.0        |               | 87.2 | 70-130      |      |           |       |

Plains All American EH & S  
 1301 S. County Road 1150  
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Project: Littman Gathering 6"  
 Project Number: 2005-00144  
 Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
 12/20/05 14:45

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EL51609 - General Preparation (Prep)**

|                                 |      |  |   |  |      |  |  |       |    |  |
|---------------------------------|------|--|---|--|------|--|--|-------|----|--|
| <b>Blank (EL51609-BLK1)</b>     |      |  |   | Prepared: 12/15/05 Analyzed: 12/16/05                    |      |  |  |       |    |  |
| % Solids                        | 100  |  | % |  |      |  |  |       |    |  |
| <b>Duplicate (EL51609-DUP1)</b> |      |  |   | Source: 5L14008-01 Prepared: 12/15/05 Analyzed: 12/16/05 |      |  |  |       |    |  |
| % Solids                        | 94.3 |  | % |  | 95.6 |  |  | 1.37  | 20 |  |
| <b>Duplicate (EL51609-DUP2)</b> |      |  |   | Source: 5L15001-09 Prepared: 12/15/05 Analyzed: 12/16/05 |      |  |  |       |    |  |
| % Solids                        | 90.7 |  | % |  | 91.0 |  |  | 0.330 | 20 |  |
| <b>Duplicate (EL51609-DUP3)</b> |      |  |   | Source: 5L15014-01 Prepared: 12/15/05 Analyzed: 12/16/05 |      |  |  |       |    |  |
| % Solids                        | 98.0 |  | % |  | 98.5 |  |  | 0.509 | 20 |  |

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

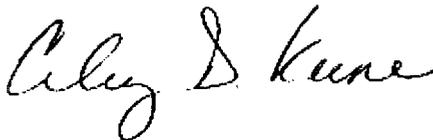
Project: Littman Gathering 6"  
Project Number: 2005-00144  
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:  
12/20/05 14:45

### 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: \_\_\_\_\_

Date: 12/20/2005

Raland K. Tuttle, Lab Manager  
Caley D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
La Tasha Cornish, Chemist  
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**  
**Variance / Corrective Action Report – Sample Log-In**

Client: Plains

Date/Time: 12/15/05 12:19

Order #: SL15017

Initials: ck

**Sample Receipt Checklist**

|   | Yes                                 | No |                |
|---|-------------------------------------|----|----------------|
| Temperature of container/cooler?                          |                                     |    | 3.5 C          |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> | No |                |
| Custody Seals intact on shipping container/cooler?        | Yes                                 | No | Not present    |
| Custody Seals intact on sample bottles?                   | <input checked="" type="checkbox"/> | No | Not present    |
| Chain of custody present?                                 | <input checked="" type="checkbox"/> | No |                |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="checkbox"/> | No |                |
| Chain of Custody signed when relinquished and received?   | <input checked="" type="checkbox"/> | No |                |
| Chain of custody agrees with sample label(s)              | <input checked="" type="checkbox"/> | No |                |
| Container labels legible and intact?                      | <input checked="" type="checkbox"/> | No |                |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="checkbox"/> | No |                |
| Samples in proper container/bottle?                       | <input checked="" type="checkbox"/> | No |                |
| Samples properly preserved?                               | <input checked="" type="checkbox"/> | No |                |
| Sample bottles intact?                                    | <input checked="" type="checkbox"/> | No |                |
| Preservations documented on Chain of Custody?             | <input checked="" type="checkbox"/> | No |                |
| Containers documented on Chain of Custody?                | <input checked="" type="checkbox"/> | No |                |
| Sufficient sample amount for indicated test?              | <input checked="" type="checkbox"/> | No |                |
| All samples received within sufficient hold time?         | <input checked="" type="checkbox"/> | No |                |
| VOC samples have zero headspace?                          | <input checked="" type="checkbox"/> | No | Not Applicable |

Other observations:  
 \_\_\_\_\_  
 \_\_\_\_\_

**Variance Documentation:**

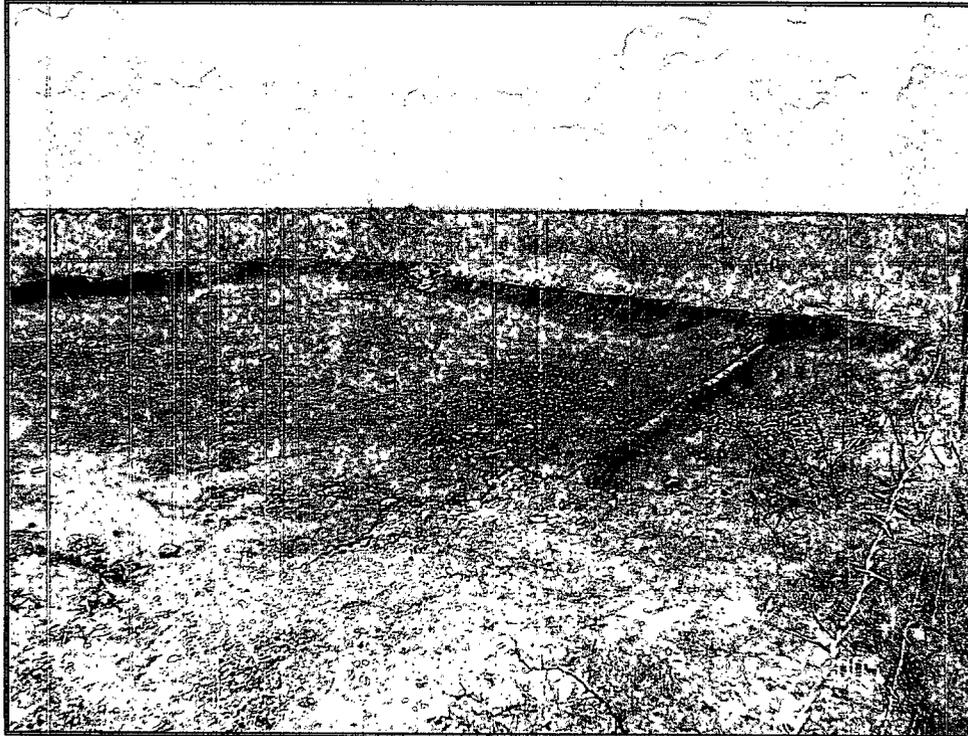
Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

Corrective Action Taken:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

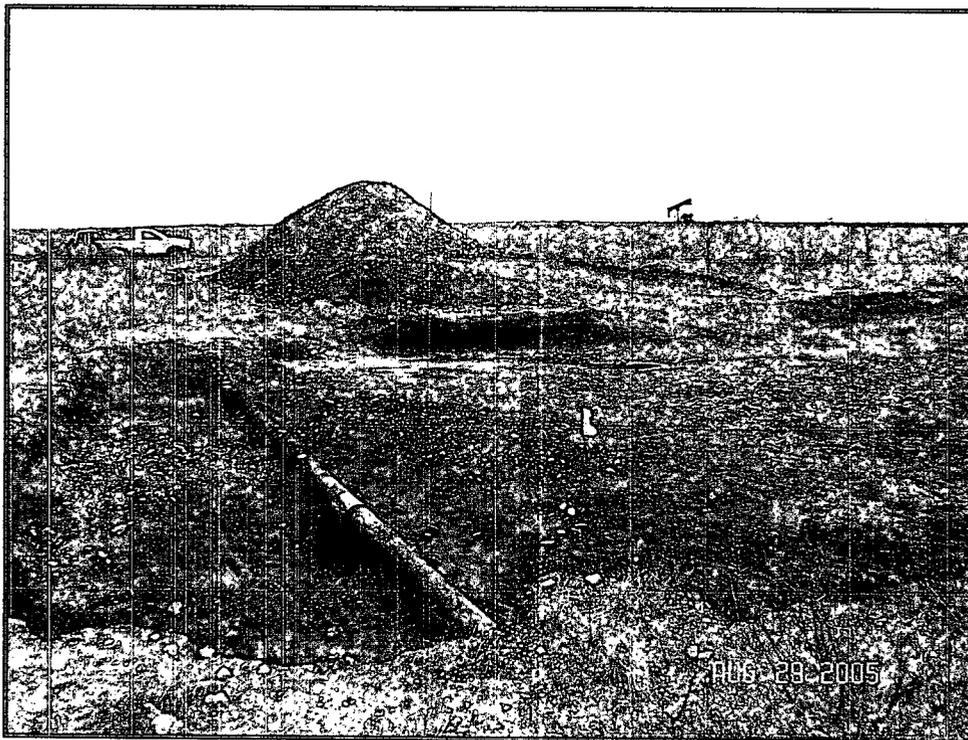
**APPENDIX C**

**Photographs**

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico

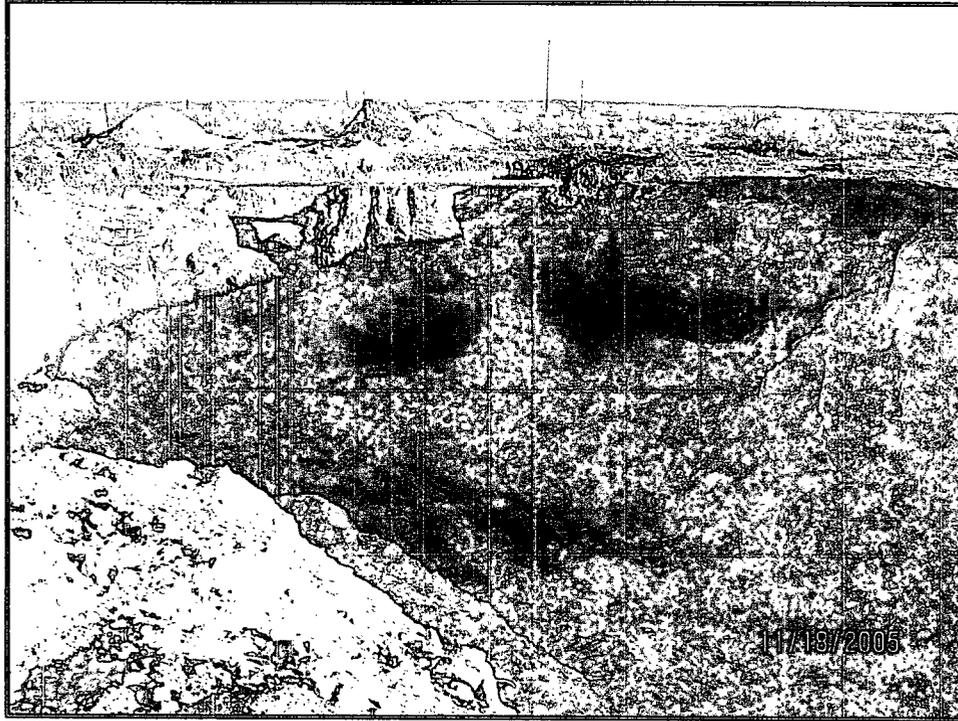


West view of origination point of release.

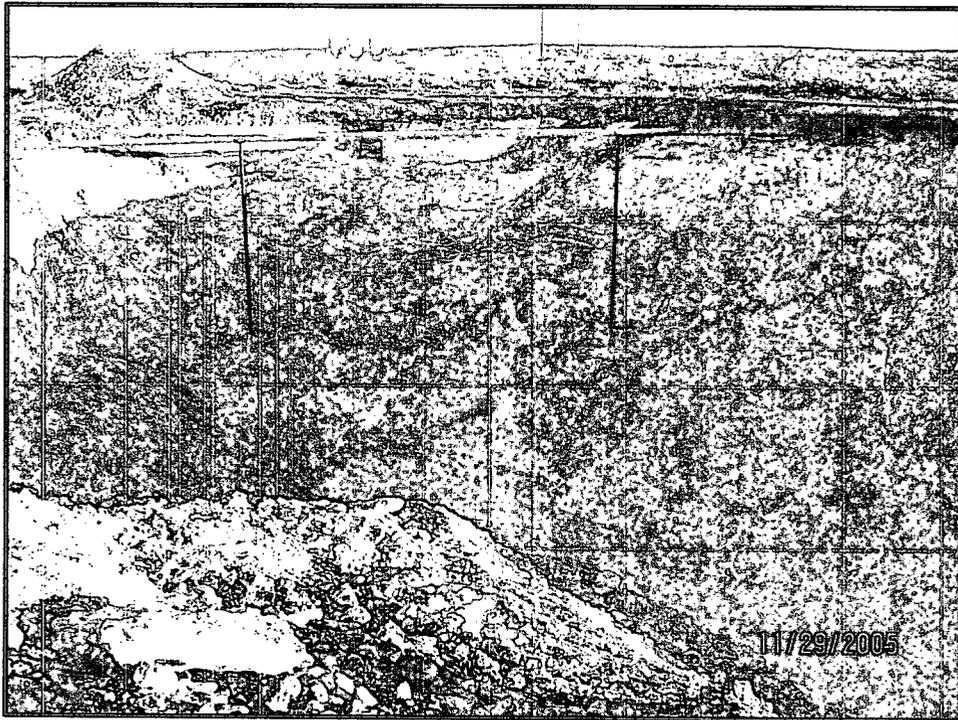


East view of origination point of release.

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico

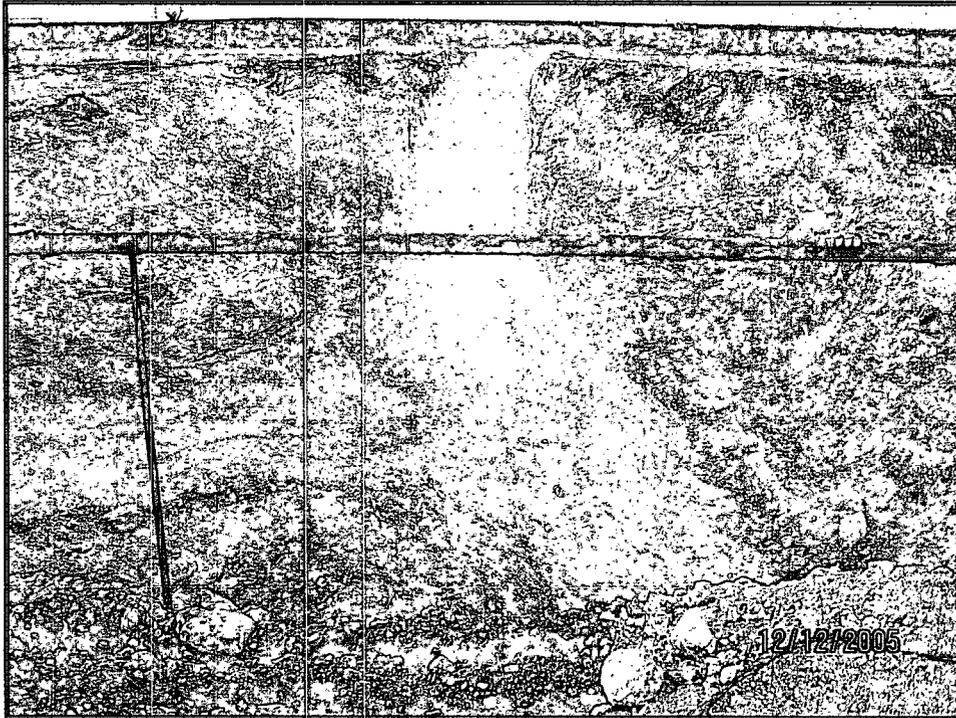


North view of excavation.

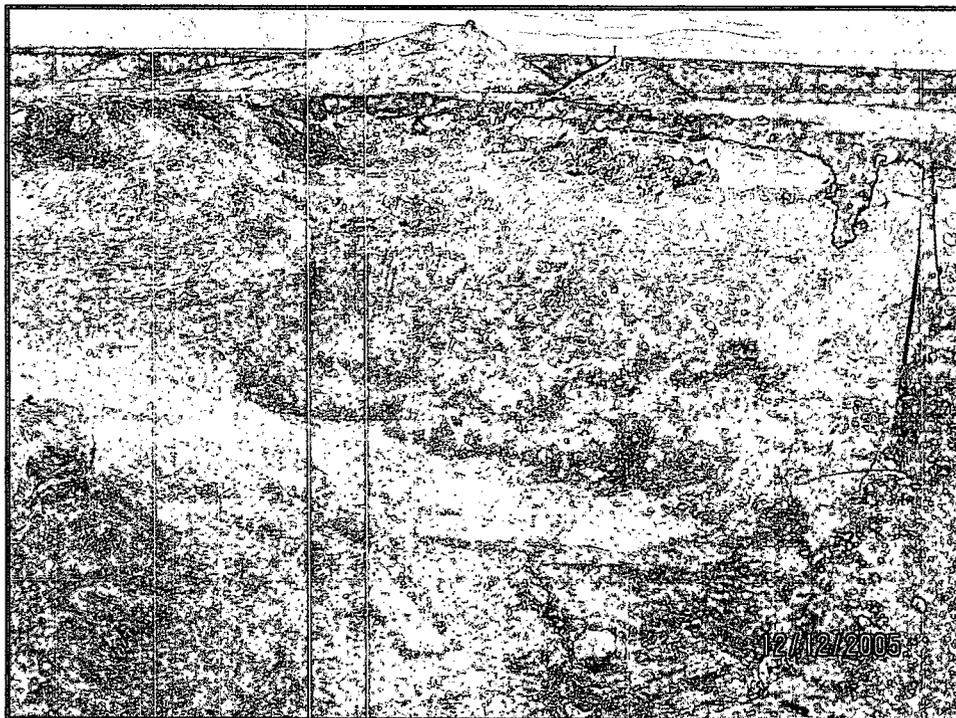


North view of excavation.

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico

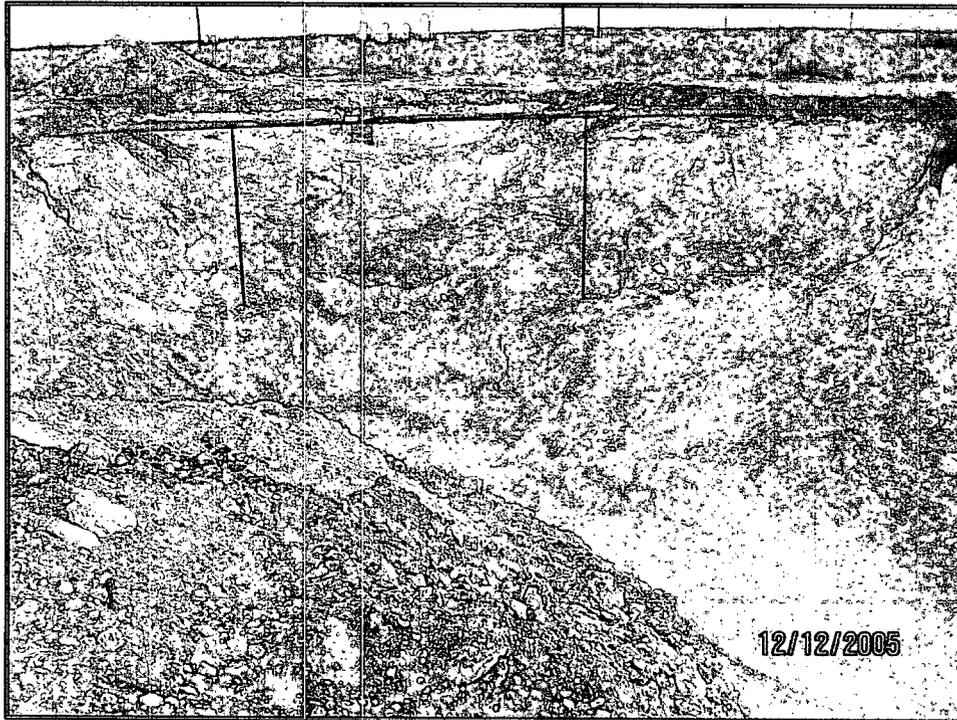


South view of excavation.

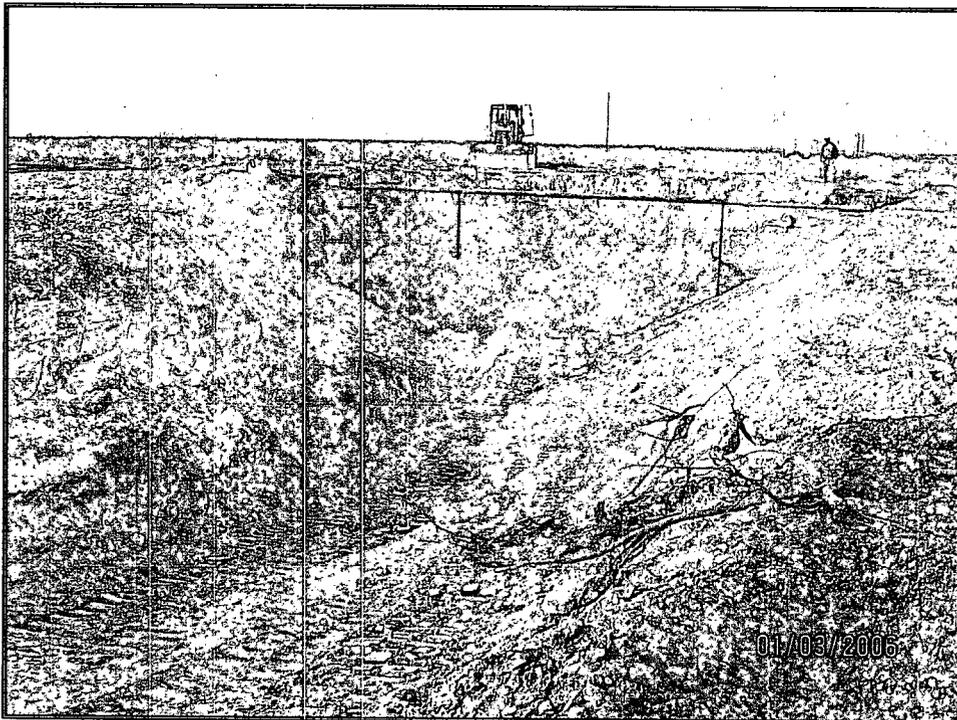


West view of excavation.

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico

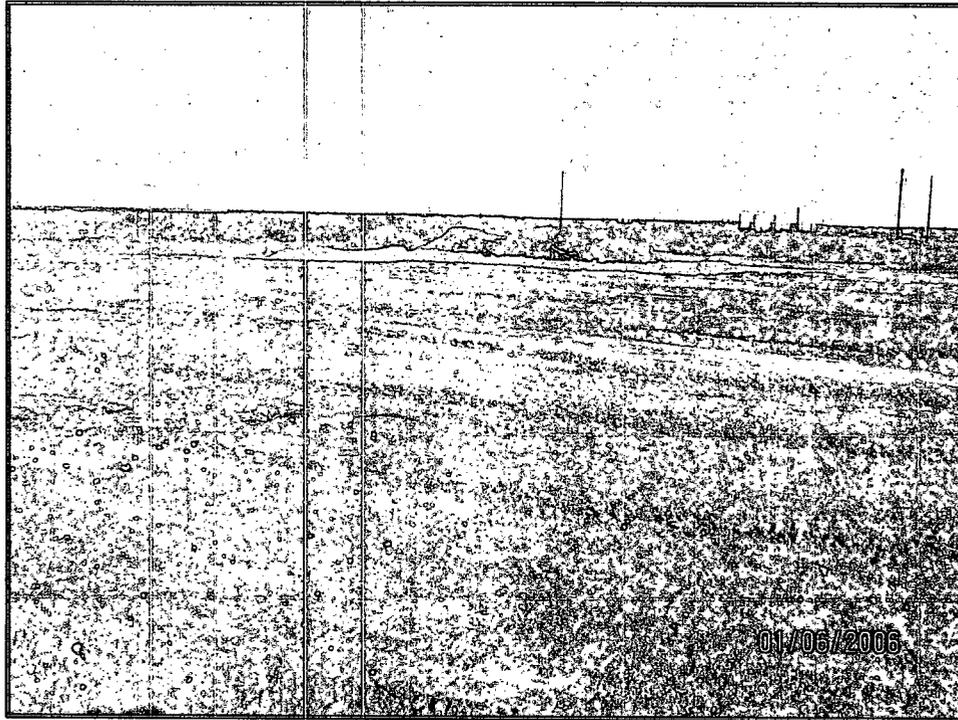


North view of excavation.

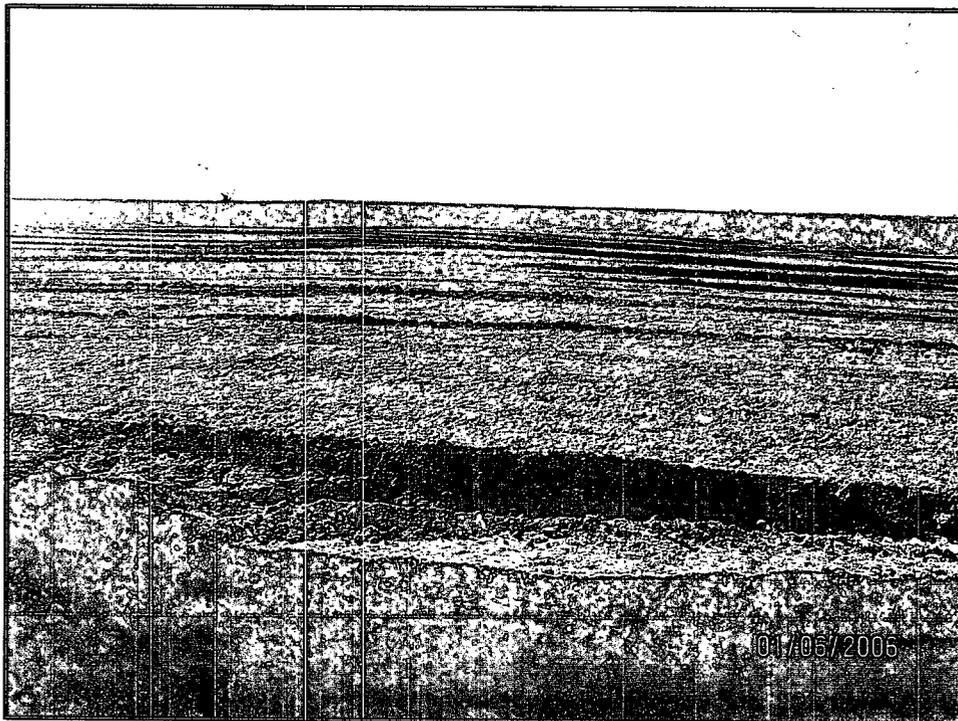


North view of backfilling activities.

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico

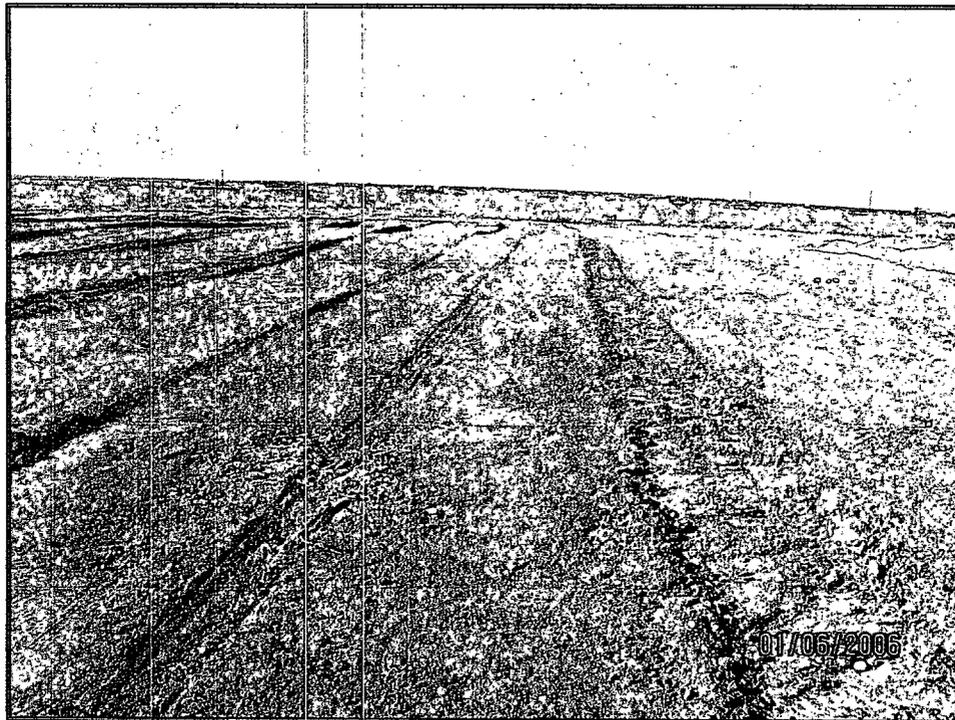


North view of site restoration.



South view of site restoration.

Plains Pipeline  
Littman Gathering 6"  
EMS #2005-00144  
Lea County, New Mexico



West view of site restoration.



East view of site restoration.

**APPENDIX D**

**Regulatory Reports**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

|  |                                 |
|--|---------------------------------|
| Name of Company Plains Marketing, LP         | Contact Camille Reynolds        |
| Address 5805 East Hwy. 80, Midland, TX 79706 | Telephone No. 505-441-0965      |
| Facility Name Littman Gathering 6 Inch       | Facility Type 6" Steel Pipeline |

|                             |               |           |
|-----------------------------|---------------|-----------|
| Surface Owner Paige McNeill | Mineral Owner | Lease No. |
|-----------------------------|---------------|-----------|

**LOCATION OF RELEASE**

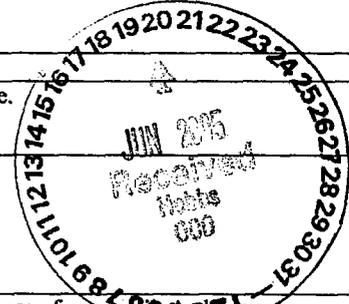
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| N           | 12      | 21S      | 37E   |               |                  |               |                | Lea    |

69'

Latitude 32° 29' 20.0" Longitude 103° 07' 12.9"

**NATURE OF RELEASE**

|  |  |  |
|--|--|--|
| Type of Release Crude Oil  | Volume of Release 15 barrels                   | Volume Recovered 0 barrels                   |
| Source of Release 6" Steel Pipeline  | Date and Hour of Occurrence<br>06-17-05 @06:00 | Date and Hour of Discovery<br>06-17-05@ 7:00 |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Larry Johnson              |  |
| By Whom? Camille Reynolds  | Date and Hour 06-17-05@11:11                   |  |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.      |  |



If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* External corrosion of the 6 inch steel pipeline caused the release of crude oil. A cap was installed on the line to mitigate the release. The line is a 6 inch steel transmission pipeline that produces approximately 1,000 barrels per month. The pressure on the line is approximately 15 psi and the gravity of the crude oil is 38.8. The H<sub>2</sub>S content of the crude is less than 10 parts per million.

Describe Area Affected and Cleanup Action Taken.\* The impacted soil was excavated and stockpiled on plastic. The aerial extent of surface impact was approximately 1,922 square feet.

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

|                                      |                                  |                                   |
|--------------------------------------|----------------------------------|-----------------------------------|
| Signature: <i>Camille Reynolds</i>   | <b>OIL CONSERVATION DIVISION</b> |                                   |
| Printed Name: Camille Reynolds       | Approved by District Supervisor: |                                   |
| Title: Remediation Coordinator       | Approval Date:                   | Expiration Date:                  |
| E-mail Address: cjreynolds@paalp.com | Conditions of Approval:          | Attached <input type="checkbox"/> |
| Date: 6-20-05                        | Phone: 505-441-0965              |                                   |

\* Attach Additional Sheets If Necessary