

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 Reynoldscjreynolds@paalp.comPlains All American Pipeline5805 E. Hwy. 80Midland, 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

Sincerely,

Televier

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:

Hains - 231,735 Jacility - PAC 0605252933 Inspect - ePAC0605253060

erracon Midland, Texas incident - NPACO605253899 application - pPACO605253362

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

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:

rann 2 Smit

Shanna L. Smith Project Manager

Reviewed by:

Barrett Bole, P.G. Sr. Project Manager



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

Terracon

TABLE OF CONTENTS

Page No.

4.0	FINDINGS AND CONCLUSIONS	5
3.0	DATA EVALUATION	4
2.0	FIELD ACTIVITIES	3
1.0		1

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 <u>June 17, 2005</u>, on the Plains Pipeline Hobbs Pipeline and Gathering System in Lea County, New Mexico. Approximately <u>15 barrels of crude oil</u> were released in the area surrounding the Littman Gathering 6" pipeline. The cause of the spill was reported as <u>external</u> <u>corrosion</u>. 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

Site Name	Littman Gathering 6" Pipeline
Site Location/GPS	Lea County, New Mexico / 32° 29' 20.0" N, 103° 07' 12.9" W
General Site Description	The release occurred in the immediate area surrounding the
General Site Description	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.

Terracon

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 distar	nce from lowerm	ost 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 that	n 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.

lerracon

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.

lerracon

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.

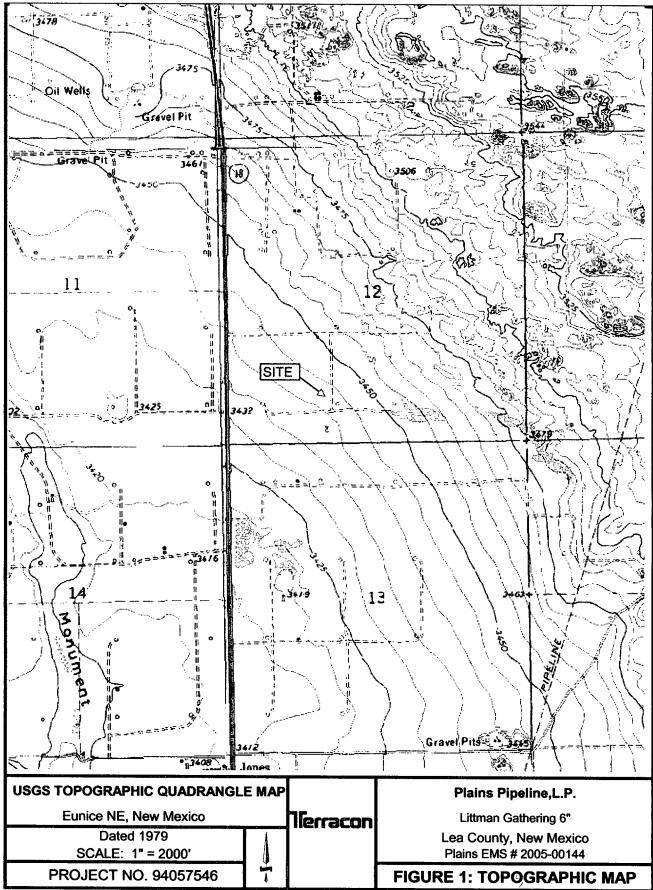
DISTRIBUTION

- 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 Plains Marketing, L.P. 3112 West Highway 82 Lovington, NM 88260 <u>cireynolds@paalp.com</u>
- Copy 3: Jeff Dann Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, TX 77002 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

APPENDIX A

Figure 1 – Topographic Map Figure 2 – Site Plan and Confirmation Sample Location Map

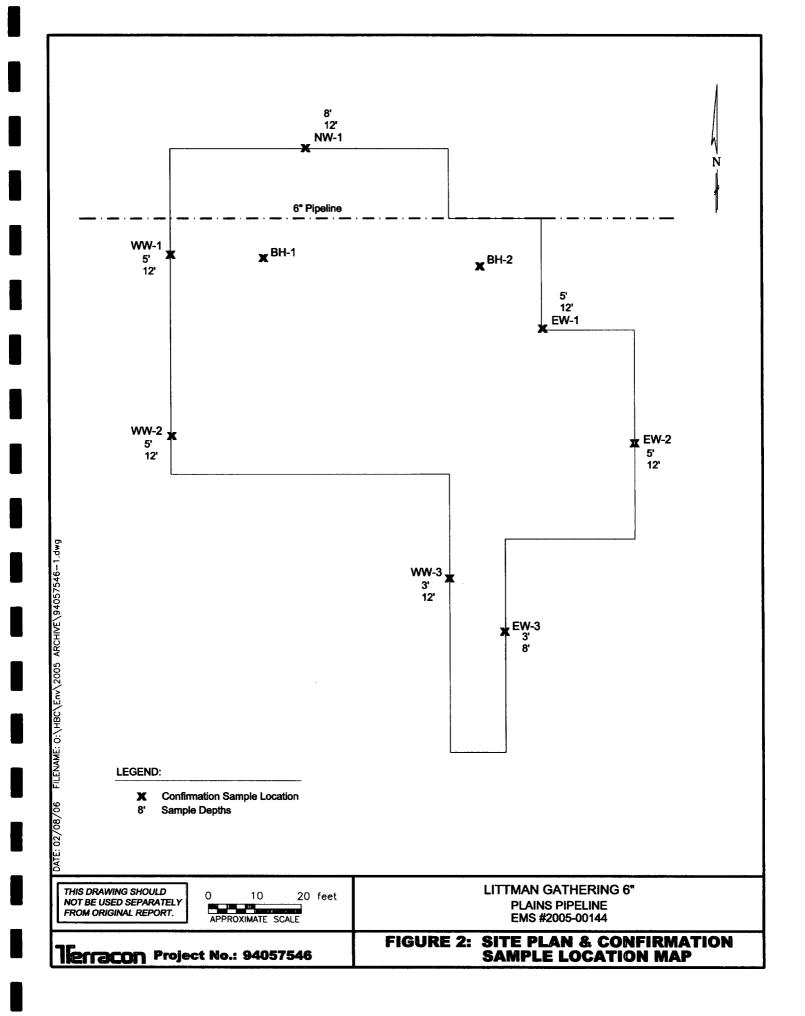
1



Ĭ.

FRUJEUI

240



APPENDIX B

Analytical Summary Tables Laboratory Data Sheets Laboratory Chain of Custody Documents

Table 1

CONCENTRATIONS OF TPH & 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

		EPA	8015 mod	ified		EPA Method 8021B						
SAMPLE DATE	SAMPLE LOCATION	TPH C ₆ -C ₁₂	TPH >C ₁₂ -C ₃₅	ТРН С ₆ -С ₃₅	BENZENE	TOLUENE	ETHYL- BENZENE	M,P- XYLENES	0- 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	448	527	<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'	105	540	645	<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	l	
	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	301	318	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1	
	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	119	119	<0.025	0.0299	0.0507	0.0929	0.0348	0.2083		
	EW-2 12'	261	1920	2180	<0.025	0.0139	0.0378	0.0940	0.0475	0.1932	1	
	EW-3 3'	<10.0	46.6	46.6	< 0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	1	
	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	196	884	1080	<0.025	0.034	0.200	0.601	0.370	1.205		
12/13/05	WW-1A 5'	<10.0	<10.0	<10.0	<u> </u>							
	WW-2A 5'	<10.0	7.96	<10.0	1		l		1		t	
	EW-1A 5'	11.5	505	517							1	
	EW-2A 5'	<10.0	44.3	44.3			1		1		 	
	EW-2A 12	<10.0	<10.0	<10.0		1	· · · · ·	<u> </u>	1	· · · · ·	1	
	BH-2A	<10.0	<10.0	<10.0		1			1			
	SS-1										61.8	
40/45/05	EW 4D EL		(10.0	<10.0								
12/15/05	EW-1B 5'	<10.0	<10.0	<10.0	+	<u> </u>	ļ				·· · · · ·	

All concentrations are in mg/kg

CONCENTRATIONS IN BOLD ARE ABOVE REGULATORY LIMITS



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	Project: Littman Gat	Fax: (432) 687-4914								
1301 S. County Road 1150 Midland TX, 79706-4476	Project Number: 2005-00144 Project Manager: Camille Rey		Reported: 12/05/05 12:15							
	· · · · · · · · · · · · · · · · · · ·			12/03/03 12:13						
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	Project: Littman Gathering 6"								Fax: (432) 687-4914		
1301 S. County Road 1150	Project Number: 2005-00144								Reported:		
Midland TX, 79706-4476		Project Ma	nager: Can	ille Reyno	lds			12/05/05	12:15		
		Or	ganics by	y GC							
		Environ	nental La	ab of Te	xas						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No		
NW-1 8' (5K28007-01) Soil											
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B			
Toluene	ND	0.0250	"	"	u		н	"			
Ethylbenzene	J [0.0220]	0.0250	"	н		u	н				
Xylene (p/m)	0.0428	0.0250		*1		"	*	"			
Xylene (o)	ND	0.0250	"	"			••	"			
Surrogate: a,a,a-Trifluorotoluene	·····	100 %	80-1	20	"	"	"	"			
Surrogate: 4-Bromofluorobenzene		90.0 %	80-1		"	"	"	"			
Gasoline Range Organics C6-C12	J [6.84]	10.0	mg/kg dry	1	EK52911	11/29/05	11/29/05	EPA 8015M			
Diesel Range Organics >C12-C35	46.9	10.0				11	"	"			
Total Hydrocarbon C6-C35	46.9	10.0	**		н		"				
Surrogate: 1-Chlorooctane		87.0%	70-1	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		93.2 %	70-1	30	n	"	"	"			
NW-1 12' (5K28007-02) Soil											
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B			
Toluene	ND	0.0250	"		8	**	**	"			
Ethylbenzene	ND	0.0250	"	'n		"	H	"			
Xylene (p/m)	ND	0.0250	"	*	ч	"	۳	"			
Xylene (o)	ND	0.0250	"	*	н		н	"			
		100 %	80-1	20	"	"	"	н			
Surrogate: 4-Bromofluorobenzene		86.5 %	80-1	20	"	"	н	"			
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		"	n	"	14	"			
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	н	"	N			
Surrogate: 1-Chlorooctane		88.0 %	70-1	30	"	"	"	н			
Surrogate: 1-Chlorooctadecane		92.2 %			"	"	"	"			
WW-1 5' (5K28007-03) Soil											
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B			
Toluene	J [0.0134]	0.0250		н		u		n			
Ethylbenzene	0.0676	0.0250			M	11	**				
Xylene (p/m)	0.180	0.0250	u		"		**	*			
Xylene (0)	0.0970	0.0250	н	н	"	"	D	"			
Surrogate: a,a,a-Trifluorotoluene		100 %	80-1	120	n	"	"	"			
Surrogate: 4-Bromofluorobenzene		110 %			"	"	"	n			
Gasoline Range Organics C6-C12	79.4	10.0		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					u				

Enviro

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.

Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Toluene	ND	0.0250		"	н		"		
Ethylbenzene	ND	0.0250		4	н	"	۲	•	
Xylene (p/m)	ND	0.0250	*	**	u	"	"	•	•
Xylene (o)	ND	0.0250	"	"	н		м	•	
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	"		n	"	"	99	
Total Hydrocarbon C6-C35	ND	10.0	"	۳	"	н	"	н	
Surrogate: 1-Chlorooctane		88.0 %	70-130		"	"	"	н	
Surrogate: 1-Chlorooctadecane		<i>92.2 %</i>	70-130	ł	"	"	"	"	
									

ronmental	Lab	of	Texas	

Plains All American EH & S		Project: Littman Gathering 6"								
1301 S. County Road 1150		Reported:								
Midland TX, 79706-4476	Project Number: 2005-00144 Project Manager: Camille Reynolds								12:15	
		Or	ganics by	y GC				· · · · · · · · · · · · · · · · · · ·		
		Environ	nental La	ab of Te	xas					
		Reporting								
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not	
WW-1 5' (5K28007-03) Soil										
Surrogate: 1-Chlorooctane		96.4 %	70-1	30	EK52911	11/29/05	11/29/05	EPA 8015M		
Surrogate: 1-Chlorooctadecane		109 %	70-1	30	"	"	"	"		
WW-1 12' (5K28007-04) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B		
Toluene	ND	0.0250			n	*	"	10		
Ethylbenzene	ND	0.0250		n			u			
Xylene (p/m)	0.0253	0.0250		14		"		**		
Xylene (o)	ND	0.0250			"	μ	"	11		
Surrogate: a,a,a-Trifluorotoluene		92.2 %	80-1	20	"	"	#	"		
Surrogate: 4-Bromofluorobenzene		91.2 %	80-1	20	"	"	"	"		
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			"	11	"	н		
Total Hydrocarbon C6-C35	46.0	10.0	*1	w	"	**		W		
Surrogate: 1-Chlorooctane		96.6 %	70-1	30	"	n	"	"		
Surrogate: 1-Chlorooctadecane		103 %	70-1	30	"	n	"	n		
WW-2 5' (5K28007-05) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B		
Toluene	J [0.0131]	0.0250	"	"	**		*	"		
Ethylbenzene	0.0710	0.0250	"	н	*	n	ĸ	n		
Xylene (p/m)	0.165	0.0250	"	"	**	н	м	н		
Xylene (o)	0.0899	0.0250	п	"	u	11	n	**		
Surrogate: a,a,a-Trifluorotoluene		96.0 %	80-1	20	"	"	n	"	_	
Surrogate: 4-Bromofluorobenzene		108 %	80-1	20	"	"	"	"		
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	n		n	u.	u	"		
Total Hydrocarbon C6-C35	645	10.0	14	n	N	u	"	n		
Surrogate: 1-Chlorooctane		101 %	70-1	130	"	"	"	"		
Surrogate: 1-Chlorooctadecane		114 %	70-1	130	"	"	"	"		

Plains All American EH & S		P	roject: Littm	an Gather	ring 6"			Fax: (432) 6	Fax: (432) 687-4914	
1301 S. County Road 1150		Project Number: 2005-00144 Project Manager: Camille Reynolds						Reported:		
Midland TX, 79706-4476								12/05/05 12:15		
		Or	ganics by	GC						
		Environ	nental La	b of Te	xas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
WW-2 12' (5K:28007-06) Soil										
	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B		
Toluene	ND	0.0250	"	н		"	и	**		
Ethylbenzene	ND	0.0250	**		н	н	p	n		
Xylene (p/m)	ND	0.0250				u		11		
Xylene (o)	ND	0.0250	4	n		n	и	11		
Surrogate: a,a,a-Trifluorotoluene		99.8 %	80-12	0	"	n	"	"		
Surrogate: 4-Bromofluorobenzene		94.8 %	80-12		"	"	n	"		
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	"	н		11	u	u		
Total Hydrocarbon C6-C35	ND	10.0	18	"	"	н	v	12		
Surrogate: 1-Chlorooctane		87.0 %	70-13	10			"			
Surrogate: 1-Chlorooctadecane		93.0 %	70-13		"	"	"	"		
Juroguie. Tremorobeluateune		/0.0/0	/015							
WW-3 3' (5K28007-07) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B		
Toluene	ND	0.0250	u	u	"	u	11	"		
Ethylbenzene	J [0.0153]	0.0250	11	"	H	**	п	ч		
Xylene (p/m)	0.0309	0.0250	11	"	u		H	n		
Xylene (o)	ND	0.0250	N	н	"	u	n	*		
Surrogate: a,a,a-Trifluorotoluene		96.8 %	80-12	20	"	"	"	n		
Surrogate: 4-Bromofluorobenzene		92.5 %	80-12	20	"	"	"	n		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	I	EK52911	11/29/05	11/30/05	EPA 8015M		
Diesel Range Organics >C12-C35	37.1	10.0	11	"	"	и	"	"		
Total Hydrocarbon C6-C35	37.1	10.0	"		"		н			
Surrogate: 1-Chlorooctane		83.4 %	70-13	30	"	"	"	"		
Surrogate: 1-Chlorooctadecane		88.6 %	7 0-1 3	30	"	"	"	"		
WW-3 12' (5K28007-08) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B		
Toluene	ND	0.0250	11	u		н	"	**		
Ethylbenzene	J [0.0188]	0.0250	19	н			"			
Xylene (p/m)	0.0413	0.0250			"	**	"			
Xylene (o)	ND	0.0250			н		"			
Surrogate: a,a,a-Trifluorotoluene	·	98.0 %		20	"	"				
Surrogate: 4-Bromofluorobenzene		91.8%			"	"	"	"		
Gasoline Range Organics C6-C12	J [6.48]	10.0		1	EK 52911	11/29/05	11/30/05	EPA 8015M		
Diesel Range Organics >C12-C35	51.9	10.0		1 11	EK32911 "	11/29/UJ #	11/20/02	"		
Moor Range Organics /012+033	31.7	10.0								

Total Hydrocarbon C6-C35

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

Page 4 of 16

10.0

51.9



Plains All American EH & S		P	roject: Litt	man Gather	ring 6"			Fax: (432) 6	87-4914
1301 S. County Road 1150			umber: 200		-			Report	ed:
Midland TX, 79706-4476			anager: Ca		lds			12/05/05	
		Or	ganics b	v GC					
		Environ	-	•	exas				
		Reporting	· · · · · · · · · · · · · · · · · · ·	v					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
WW-3 12' (5K28007-08) Soil									
Surrogate: 1-Chlorooctane		95.2 %	70-1	130	EK52911	11/29/05	11/30/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		101 %	70	130	"	"	n	"	
EW-1 5' (5K28007-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Foluene	ND	0.0250	u	n	*	n	w	*	
Ethylbenzene	ND	0.0250	"	и	"	u		u	
Xylene (p/m)	ND	0.0250		•			"	14	
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	u	n	n	н	ч	u	
Total Hydrocarbon C6-C35	318	10.0	u	**	"	M	u	"	
Surrogate: 1-Chlorooctane		96.8 %	70-	130	"	n	"	"	
Surrogate: 1-Chlorooctadecane		112 %	70-	130	"	"	"	"	
EW-1 12' (5K28007-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Toluene	J [0.0185]	0.0250			•	"	n	u	
Ethylbenzene	J [0.0234]	0.0250	"	*	*1		u		
Xylene (p/m)	0.0507	0.0250	•	"	"	"	11		
Xylene (o)	J [0.0173]	0.0250	"	u	"	11	"		
Surrogate: a,a,a-Trifluorotoluene		92.5 %	80-	120	"	"	"	#	
Surrogate: 4-Bromofluorobenzene		84.2 %	80-	120	"	"	"	H	
Gasoline Range Organics C6-C12	J [5.20]	10.0	mg/kg dry	1	EK52911	11/29/05	11/30/05	EPA 8015M	
Diesel Range Organics >C12-C35	95.4	10.0	**	"	"	11		"	
Total Hydrocarbon C6-C35	95.4	10.0	"	11	"	H	u	1)	
Surrogate: 1-Chlorooctane		89.8 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.2 %	70-	130	n	"	"	"	

Plains All American EH & S		P	roject: Litt	man Gather	ring 6"			Fax: (432)	687-4914
1301 S. County Road 1150		Project N	umber: 200	5-00144				Repo	rted:
Midland TX, 79706-4476		Project Ma	nager: Ca	nille Reyno	olds			12/05/0	5 12:15
		Or	ganics b	y GC					
		Environi	nental L	ab of Te	xas		·		
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
EW-2 5' (5K28007-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Foluene	0.0299	0.0250	н		11	"	u	**	
Ethylbenzene	0.0507	0.0250	n	"			м	н	
Kylene (p/m)	0.0929	0.0250	**	"	n	w	n	"	
Kylene (o)	0.0348	0.0250	"	u	н	н	н	"	
Surrogate: a,a,a-Trifluorotoluene		98.0 %	80-	120	n	"		"	
Surrogate: 4-Bromofluorobenzene		87.0%	80-		"	"	"	"	
Gasoline Range Organics C6-C12	J [7.30]	10.0	mg/kg dry	1	EK52911	11/29/05	11/30/05	EPA 8015M	
Diesel Range Organics >C12-C35	119	10.0			"	"	"	н	
Total Hydrocarbon C6-C35	119	10.0			n	н		"	
Surrogate: 1-Chlorooctane		96.2 %	70-	130	п	"	"	"	
Surrogate: 1-Chlorooctadecane		105 %		130	"	**	"	"	
EW-2 12' (5K28007-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Toluene	J [0.0139]	0.0250	н н		ELJ0103	12/01/03	12/01/05	BIA 0021D	
Ethylbenzene	0.0378	0.0250	м						
-			*1						
Xylene (p/m) Xylene (a)	0.0940	0.0250	**			"	11		
Xylene (o)	0.0475	0.0250			"		11 	"	
Surrogate: a,a,a-Trifluorotoluene		104 %		120					
Surrogate: 4-Bromofluorobenzene		93.8 %		120	n	n	n	н	
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	"	u	**	n	**	n	
Total Hydrocarbon C6-C35	2180	10.0	**	н	n	"	H	N	
Surrogate: 1-Chlorooctane		102 %	70-	130	"	"	n	"	
Surrogate: 1-Chlorooctadecane		139 %	70-	130	"	"	"	"	
EW-3 3' (5K28007-13) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Toluene	ND	0.0250	"	"	н	11	н	"	
Ethylbenzene	ND	0.0250	"	"			n	ts	
Xylene (p/m)	ND	0.0250	п	u	"	"	"	"	
Xylene (o)	ND	0.0250		"			"	"	
Surrogate: a,a,a-Trifluorotoluene		97.5 %		120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %		120	"	n	"	"	
Gasoline Range Organics C6-C12	ND	10.0		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	•	"			и		

with written approval of Environmental Lab of Texas.

Page 6 of 16

Plains All American EH & S		P	roject: Litt	man Gathei	ring 6"			Fax: (432) 687-4914				
1301 S. County Road 1150			umber: 200					Report	ed:			
Midland TX, 79706-4476		Project Ma	mager: Car	nille Reyno	olds			12/05/05	12:15			
		Or	ganics b	y GC								
		Environ	nental L	ab of Te	exas							
Analyte	Result	Reporting Limit	Units	Dilution	Batal	Dd	A b	Method				
EW-3 3' (5K28007-13) Soil				Dilution	Batch	Prepared	Analyzed		Note			
Surrogate: 1-Chlorooctane		91.2 %	70-1	120	EKEDOLI	11/20/05	11/30/05	277 4 90 I 5 M				
Surrogate: 1-Chlorooctadecane		95.2 %	70-1 70-1		EK52911 "	11/29/05 "	11/30/05	EPA 8015M "				
jurrogaie. 1-Cinoroociauecune		75.2 /0	70-1	50								
EW-3 8' (5K28007-14) Soil												
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B				
Toluene	ND	0.0250	"	и		"	"					
Ethylbenzene	ND	0.0250	"	и	"	H	11	*				
Xylene (p/m)	ND`	0.0250	"	"			"					
Xylene (o)	ND	0.0250	"	"	*	W	"	•				
Surrogate: a,a,a-Trifluorotoluene		101 %	80-	120	n	"		"				
Surrogate: 4-Bromofluorobenzene		89.0 %	80 -	120	"	"	"	"				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	L	EK52911	11/29/05	11/30/05	EPA 8015M				
Diesel Range Organics >C12-C35	ND	10.0	н	"	Ħ	"	**	14				
Total Hydrocarbon C6-C35	ND	10.0	n		Ħ	"		"				
Surrogate: 1-Chlorooctane	<u>_</u> _	94.8 %	70-	130	"	"	"	"				
Surrogate: 1-Chlorooctadecane		99.6 %	70-	130	"	n	"	n				
BH-1 (5K28007-15) Soil												
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B				
Toluene	ND	0.0250	н		"	н	н	"				
Ethylbenzene	ND	0.0250	"	u	"	**	н	п				
Xylene (p/m)	ND	0.0250	"	"			"	۳				
Xylene (o)	ND	0.0250	"	"	4	и		*				
Surrogate: a,a,a-Trifluorotoluene		103 %	80-	120	"	"	"	n				
Surrogate: 4-Bromofluorobenzene		92.0 %	80-	120	"	"	"	н				
Gasoline Range Organics C6-C12	J [8.58]	10.0	mg/kg dry	1	EL50106	12/01/05	12/02/05	EPA 8015M				
Diesel Range Organics >C12-C35	86.7	10.0	и		"		н	u				
Total Hydrocarbon C6-C35	86.7	10.0	*	•	n		n	н				
Surrogate: 1-Chlorooctane		89.2 %	70-	130	11	н	"	"				
Surrogate: 1-Chlorooctadecane		97.2 %		130				n				

Plains All American EH & S	Project: Littman Gathering 6"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00144	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	12/05/05 12:15

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2 (5K28007-16) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EL50105	12/01/05	12/01/05	EPA 8021B	
Toluene	0.0340	0.0250	w	n	н			n	
Ethylbenzene	0.200	0.0250	n	"	"	"	"		
Xylene (p/m)	0.601	0.0250	"	"	*1				
Xylene (o)	0.370	0.0250	"	"				"	
Surrogate: a,a,a-Trifluorotoluene		107 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	80-1	20	"	n	"	"	
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	**	"		м	•	н	
Total Hydrocarbon C6-C35	1080	10.0	**	n	n	H	и	н	
Surrogate: 1-Chlorooctane		102 %	70-1	30	"	"	n	"	
Surrogate: 1-Chlorooctadecane		120 %	70-1	30	"	n	"	"	

Environmental Lab of Texas

Plains All American EH & S			-	tman Gathe	ring 6"			Fax: (432) 6	87-4914
1301 S. County Road 1150 Midland TX, 79706-4476		Project Nu Project Ma		05-00144 mille Reyno	olds			Report 12/05/05	
	General Chem	-		•		d Method	S		
		Environn	aental I	Lab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
NW-1 8' (5K28007-01) Soil									
% Moisture	3.2	0.1	%	1	EK.52902	11/28/05	11/29/05	% calculation	
NW-1 12' (5K28007-02) Soil									_
% Moisture	6.9	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	
WW-1 5' (5K23007-03) Soil				·····					
% Moisture	8.5	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	
WW-1 12' (5K:28007-04) Soil									_
% Moisture	4.5	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	_
WW-2 5' (5K23007-05) Soil									
% Moisture	10.7	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	
WW-2 12' (5K28007-06) Soil									
% Moisture	5.2	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	
WW-3 3' (5K23007-07) Soil									
% Moisture	3.9	0.1	%	ł	EK52902	11/28/05	11/29/05	% calculation	_
WW-3 12' (5K28007-08) Soil									
% Moisture	2.3	0.1	%	1	EK.52902	11/28/05	11/29/05	% calculation	
EW-1 5' (5K28007-09) Soil									
% Moisture	4.4	0.1	%	1	EK.52902	11/28/05	11/29/05	% calculation	
EW-1 12' (5K28007-10) Soil									
% Moisture	4.9	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	<u> </u>
EW-2 5' (5K28007-11) Soil									
% Moisture	3.4	0.1	%	1	EK 52902	11/28/05	11/29/05	% calculation	

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project Nu	mber: 20	ttman Gather 05-00144 mille Reync				Fax: (432) 6 Report 12/05/05	ed:
	General Che	mistry Para Environn		-		d Method	s		
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EW-2 12' (5K28007-12) Soil									
% Moisture	4.0	0.1	%	1	EK 52902	11/28/05	11/29/05	% calculation	. —
EW-3 3' (5K28007-13) Soil									
– % Moisture	4.0	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	
EW-3 8' (5K28007-14) Soil									
% Moisture	2.1	0.1	%	1	EK.52902	11/28/05	11/29/05	% calculation	
BH-1 (5K28007-15) Soil									
% Moisture	8.6	0.1	%	1	EK 52902	11/28/05	11/29/05	% calculation	
BH-2 (5K28007-16) Soil									
% Moisture	7.7	0.1	%	1	EK52902	11/28/05	11/29/05	% calculation	

Plains All American EH & S		Р	roject: Littr	nan Gatheri	ng 6"				Fax: (432)	687-4914
1301 S. County Road 1150		Project Nu	mber: 2005	5-00144					Repo	rted:
Midland TX, 79706-4476			nager: Carr		ds				12/05/0	5 12:15
	Orį	ganics by	GC - Qu	uality Co	ntrol					
		Environn	nental La	ab of Tex	as					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK52911 - Solvent Extraction (GC)		Link					Ennits			
Blank (EK52911-BLK1)	·····			Prepared &	Anabuzed	11/20/05				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet	Trepared &	, Analyzou.	11/29/05				
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: 1	1/29/05 A	nalyzed: 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		n	50.0		122	70-130			
Surrogate: 1-Chlorooctadecane	57.0		n	50.0		114	70-130			
Matrix Spike (EK52911-MS1)	Sour	ce: 5K2800	3-30	Prepared 8	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)		ce: 5K2800	·		k Analyzed					
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	н	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 1301 S. County Road 1150		Project Nu	roject: Littr imber: 200:	5-00144					Fax: (432) Repo	rted:
Midland TX, 79706-4476		Project Ma	nager: Cam	ille Reynold	ds				12/05/0	5 12:15
	O	rganics by	GC - Q	uality Co	ntrol					
		Environn	nental La	ab of Tex	as					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL50105 - EPA 5030C (GC)										
Blank (EL50105-BLK1)				Prepared &	Analyzed:	12/01/05				
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	۳							
Sthylbenzene	ND	0.0250	n							
(ylene (p/m)	ND	0.0250	u							
(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			
LCS (EL50105-BS1)				Prepared &	Analyzed	12/01/05				
3enzene	0.0407	0.00100	mg/kg wet	0.0500		81.4	80-120			
foluene	0.0486	0.00100	"	0.0500		97.2	80-120			
Ethylbenzene	0.0526	0.00100	u	0.0500		105	80-120			
(ylene (p/m)	0.100	0.00100	"	0.100		100	80-120			
Kylene (0)	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			
Calibration Check (EL50105-CCV1)				Prepared &	2 Analyzed	: 12/01/05				
Benzene	0.0403		mg/kg wet	0.0500		80.6	80-120			
Toluene	0.0448		11	0.0500		89.6	80-120			
Ethylbenzene	0.0450		*1	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			
Matrix Spike (EL50105-MS1)	Sou	ırce: 5K2800	3-29	Prepared 8	k 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	м	0.0517	ND	101	80-120			
Xylene (p/m)	0.0988	0.00100	н	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			

Plains All American EH & S		Р	roject: Littr	nan Gatherin	ng 6"				Fax: (432)	687-4914
1301 S. County Road 1150			mber: 2005						Repo	rted:
Midland TX, 79706-4476				ille Reynold	ls				12/05/0	
ener vit Malle Melat - Vit Vitan - Vitaliti	Or	ganics by	GC - Q	uality Co	ntrol					
		Environn	nental La	ab of Tex	as					
Anølyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL50105 - EPA 5030C (GC)										
Matrix Spike Dup (EL50105-MSD1)	Sou	rce: 5K28003	-29	Prepared &	Analyzed:	12/01/05				
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	н	0.103	ND	94.9	80-120	1.05	20	
Xylene (0)	0.0516	0.00100	N	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		n	40.0		91.0	80-120			
Batch EL50106 - Solvent Extraction (GC			·					<u>-</u>		
Blank (EL50106-BLK1)		<u></u>		Prepared: 1	2/01/05 A	nalyzed: 12	2/02/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	н							
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			
LCS (EL50106-BS1)				Prepared: 1	2/01/05 A	nalyzed: 12	2/02/05			
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			
Calibration Check (EL50106-CCV1)			<u> </u>	Prepared: 1	12/01/05 A	nalyzed: 12	2/02/05			
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			

Plains All American EH & S 1301 S. County Road 1150 Mídland TX, 79706-4476		Project N	umber: 200	man Gatheri 5-00144 nille Reynol					Fax: (432) 687-4 Reported: 12/05/05 12:1		
	O	rganics by	/ GC - Q	uality Co	ontrol			<u></u>			
		Environ	nental L	ab of Tex	kas						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EL50106 - Solvent Extraction (GC)											
Matrix Spike (EL50106-MS1)	Sou	rce: 5K2900	1-01	Prepared: 1	2/01/05 A	nalyzed: 12	/02/05				
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				

Matrix Spike Dup (EL50106-MSD1)	Source	e: 5K29001	-01	Prepared: 1	2/01/05 A	2/02/05				
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	н	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			

1301 S. County Road 1150	Project Number: 2005-00144	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	12/05/05 12:15
General Che	nistry Parameters by EPA / Standard Methods - Qua	

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK52902 - General Preparatio	n (Prep)									
Blank (EK52902-BLK1)				Prepared: 1	1/28/05	Analyzed: 11	/29/05			
% Solids	100		%							
Duplicate (EK52902-DUP1)	Sour	ce: 5K28001-	01	Prepared: 1	1/28/05	Analyzed: 11	/29/05			
% Solids	97.2		%		96.7			0.516	20	

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

Page 15 of 16

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project Number:	Project: Littman Gathering 6" Project Number: 2005-00144 Project Manager: Camille Reynolds		
		Notes and De	finitions		
S-04	The surrogate recovery for this samp	le is outside of established control	limits due to a sample matrix effect.		
J	Detected but below the Reporting Li	mit; therefore, result is an estimated	1 concentration (CLP J-Flag).		
DET	Analyte DETECTED				
ND	Analyte NOT DETECTED at or above the	ne 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 think 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

				ANALYSIS		Due Date:
		Laboratory:	CLOT	HEQUESTE		
Consulting Engineers & Scientists	a Scientists	Address:				Temp. of coolers $(C^0; A, O)$ when received $(C^0; A, O)$
Office I action Middle	Midlerd	Contact:	artenantematica e l'antenar			/ 1 2 3 4 5
		Phone.	and any and the property of the			Page of 2
Project Manager_Shav	Shawwa Ja. K		2005-00144			د
		11.2		5 - C - C - C - C - C - C - C - C - C -		
Shavua Smith	į	Jann	- Fridd	SPR.		~~~~
	Project Name		. 	No/Type of Containers		
94057546	Littmen G	GLHLDRING (6" An			
Matrix Date Time C	0 ⊢a.	Identitying Marks of Sample(s)	Start Start End thgeth Š			Lab Sample ID (Lab Use Only)
5 11/23 910	-+	×'	2			54 28007-01
208	1-1-11V	121				-20-
1030	- mm	S.		· · ·		59
Inder 1	4 -14141					24
130		2				50-
Smi	5-1111	4				-000
1210	111.3	c.i				5
11.20	huw - 3	G				25
2141		~~~				-69
V V Ivas		-01		シッシー		-10
Turn around time A Normal	O	O 50% Rush	C 100% Rush			
Bailingquished by (Signature)	Pate: A	Time: Recei	Received by (Signature)	Visites Jimes		C
15	1		Received by: (Signature)	Date: Time:	Ylows white	the second second
Relinquished by (Signature)		Tima: Received	ved by: (Signature)	Date: Time:		
Relinquished by (Signature)	Date:	Time: Pecal	Received by: (Signature)	Date: Jime Jime	(abele/sea)	
Matrix WW - Wastewater Container VOA - 40 ml viai	W - Water A/G - Amber /	W - Water S - Soli SD - Solid A/G - Amber / Or Glass 1 Liter	olid L - Liquid / A - Air Bag 250 ml - Glass wide mouth	Γ	SL - sludge O · Ol	
Road, Road	Datlas Office 8901 Carpente Dallas, Texas	Dallas Office 8901 Carpenter Freeway, Suite 100 Dallas, Texas 75247		Fort Worth Office 2601 Gravel Drive Fort Worth, Texas 76118	Austin Office 5307 Industrial Oaks Blvd. # 160 Auetia, Texas 78735	Midland Office 24 Smith Rd., # 26.1 Midland, Texas 79705
7131 690-8989 Pax (713) 600-8787	(214) 630	-1010 Fax (214) 63		NIN Par (\$17) 768,8602		CARLENDER CARLEND CARLENDER (127) ALLENDER

ا**ست** المراجع المراجع

ENVIRONMENTAL GEOTECHNIC	VE CHOLLO	INICAL AND CONSTRUCTION MATERIALS SERVICES	LCHON MALE	KIALS SERVE		
	Laboratory:	atory: CLOT	<u> </u>	ANALYSIS REQUESTED		Due Date:
Consulting Englneers & Scientists	Address;	SS;	Y Martin Andrew State	****		Terrip. of coolers when received (C): A, O
Office Location (Nichland	Contact:	ct:		~		1 2 3 4 5
	Phone:	,		797		/ Pageof 2
Project Manager Shawe Sm. H	PO/SO #:	H: 2005-00NY	an anna 1 Anna 1 Anna 1	E PPQ		
Sampler's Name	Sample	Sampler's Signature		77		
ShANNA SA.A.	60	Jam Ru		803 703		
Project Name			No/Type of Containers			
94057546 Lithman	Getheing	۲. له ^{ik}		TTO THE		
Matrix Date Time C G	Identifying Marks of Sample(s)	mpie(s) traff Start Depth End Depth Frid	AG 250 P/O	Tg Tg		Lab Sample (D (Lab Use Only)
3	2 - 17	ļ	X	XX		
2941		5	ļ	C		21-
		31				4
F-W-3 Post		81				- 4
1-HS SHS						15
V V 1000 64-2	2		-> ->	<u>></u>		16
			·····			
Turn around time Deformal D 25% Rush	tush D 50% Rush	1		ł		
Reinduished by (Signature) Date:	Time:	Received by (Signature)	Pate:	Time:		
ad by (Signature)	A C. CO	Received by: (Signature)	Date:	Time:	Marines Chamilton	Lamilla Keynolds
	Time:	Received by: (Signature)	Date:	Time:		
Relinquished by (Signature) Date:	Time:	Provided by: (Signature)	< 11/28/		lumber cral	
Matrix WW Wastewater W Wat Container VCA - 40 mi vial AG - An	W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter	SD - Solid L - Liquid & Air Bag Litter 250 mi - Glass wide mouth	ľ	C - ^t Charcoal tube S P/O - Plastic or other	SI - sludge & Ol H G - G (65%	
fftee Road, Suite 100 242 77043 2989 fex (713) 690-8787	Datlas Office 3901 Carpener Freewry, Suite 100 Dallas, Texas 75247 (214) 530-1010 Fax (214) 530-7070	0	Fort Worth Office 2601 Gravel Drive For Worth, Texas 76118 (817) 268-8600 Fax (817) 268-8602		Austin Office 5307 Industrial Oaks Blvd. # 160 Austa, 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

4.0

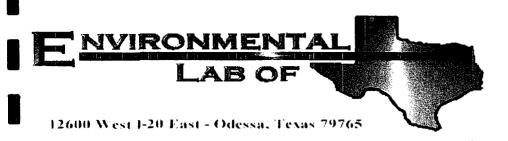
Not Apolicable

Chlot cressent Not present

CI

Client: TEWALON		
late/Time: 11/28/05 \$7:00		
Order #:5K28007		
Initials:		
Sample Receipt C		
Temperature of container/cooler?	Yes	No
Shipping container/cooler in good condition?	CRES	No
Custody Seals intact on shipping container/cooler?	Yes	No
Custody Seals intact on sample contes?	1 Yes 1	No No
Sample Instructions complete on Chain of Custody?	1 Xes	No
Chain of Custody signed when relinguished and received?	1 Yes	No
Chain of custody signed when reiniguished and received?	Yes	No
Container labels legible and intact?	Ves)	No
Sample Matrix and properties same as on chain of custody?	1 Xess	Na
Samples in procer container/bottle?	1 Kes	Na
Samples procerly preserved?	1 795 1 785	No
Sample bottles intact?	Yes	No
Preservations documented on Chain of Custody?		No
Containers documented on Chain of Custody?	tes	No
Sufficient sample amount for indicated test?	Xes	No
All samples received within sufficient hold time?	1 1 265	
VOC samples have zero headspace?	1 Yes	I No
Other observations:		

Contact Person: Regarding:	Variance Documentation: Date/Time:	Contacted by:
Corrective Action Taken:	······································	· · · · · · · · · · · · · · · · · · ·



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 Gat Project Number: 2005-00144 Project Manager: Camille Rey ANALYTICAL REPORT FOR SAM	nolds		Fax: (432) 687-4914 Reported: 12/14/05 15:36
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		P	roject: Littn	an Gathe	ring 6"			Fax: (432) 6	87-4914
1301 S. County Road 1150			umber: 2005					Report	ed:
Midland TX, 79706-4476	······································	Project Ma	inager: Cam	ille Reyno	lds			12/14/05	15:36
		Or	ganics by	GC					
		Environ	nental La	b of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
WW-1A 5' (5L13005-01) Soil									
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				12/15/05	12/13/03	"	
Total Hydrocarbon C6-C35	ND	10.0	n	H	11			*	
Surrogate: 1-Chlorooctane		95.0 %	70-13	30	"	"	п		
Surrogate: 1-Chlorooctadecane		91.2 %	70-13		"	"	"	"	
WW-2A 5' (5L13005-02) Soil									
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	"		"	н	н	"	
Total Hydrocarbon C6-C35	ND	10.0	**	n	п	*	u	11	
Surrogate: 1-Chlorooctane		97.4 %	70-1.	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.2 %	70-1.	30	"	"	"	"	
EW-1A 5' (5L13005-03) Soil									
Gasøline 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	"	"		"	**	н	
Total Hydrocarbon C6-C35	517	10.0	"	H	**	h	"	n 	
Surrogate: 1-Chlorooctane		98.6 %	70-1.	30	"	"	11	"	
Surrogate: 1-Chlorooctadecane		124 %	70-1.	30	"	n	"	n	
EW-2A 5' (5L13005-04) Soil									
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	u	•	14	"	н	u	
Total Hydrocarbon C6-C35	44.3	10.0	•	"	IF	"	"	"	
Surrogate: 1-Chlorooctane		95.8 %	70-1	30	n	"	"	"	
Surrogate: 1-Chlorooctadecane		96.8 %	70-1	30	n	**	11	"	
EW-2A 12' (5L13005-05) Soil									
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	*1	n	H	18	"	W	
Total Hydrocarbon C6-C35	ND	10.0	N	**	"	"	"	18	
Surrogate: 1-Chlorooctane		88.2 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		85.0 %	70-1	30	"	"	а	"	

Plains All American EH & S 1301 S. County Road 1150 Mídland TX, 79706-4476		Project N	Project: Litt umber: 200 anager: Can	5-00144				Fax: (432) 6 Report 12/14/05	ed:
		Or Environ	ganics b mental L	•	exas			<u></u>	
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2A (5L13005-06) Soil									
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	۳	"	**	ĸ	w	u	
Total Hydrocarbon C6-C35	ND	10.0	91			"	н		
Surrogate: 1-Chlorooctane		91.6 %	70-1	30	"	"	n	"	

70-130

"

"

...

"

.

87.2 %

Surrogate: 1-Chlorooctadecane

Environmental Lab of Texas

Plains All American EH & S		Pr	oject: Lit	tman Gather	ring 6"			rax: (432) 0	57-4914
1301 S. County Road 1150		Project Nu						Reporte	
Midland TX, 79706-4476		Project Mar	nager: Ca	mille Reyno	lds			12/14/05	15:36
	General Chen	nistry Parar	neters l	oy EPA /	Standar	d Method	S		
		Environm	nental I	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW-1A 5' (5L13005-01) Soil									_
% Moisture	5.2	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	
WW-2A 5' (5L13005-02) Soil									
% Moisture	5.6	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	
EW-1A 5' (5L13005-03) Soil									
% Moisture	1.7	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	
EW-2A 5' (5L13005-04) Soil									
% Moisture	5.8	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	

70 WOBUTC	5.0	0.1	76	I	EL51404	12/13/05	12/14/05	/ calculation	
EW-2A 12' (5L13005-05) Soil								·	
% Moisture	8.2	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	
BH-2A (5L13005-06) Soil									-
% Moisture	7.1	0.1	%	1	EL51404	12/13/05	12/14/05	% calculation	

Environmental Lab of Texas

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

Fax: (432) 687-4914

Plains All American FH & S

Project: Littman Gathering 6"

Plains All American EH & S		P	roject: Littr	nan Gatheri	ng 6"				Fax: (432)	687-4914
1301 S. County Road 1150		Project Nu	mber: 2005	5-00144					Repor	ted:
Midland TX, 79706-4476		Project Ma	nager: Cam	ille Reynol	ds			_	12/14/05	5 15:36
	O	rganics by	GC - Q	uality Co	ontrol					
		Environn	nental La	ab of Tex	as					
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	"							
Surrogale: 1-Chlorooctane	52.5		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	53.7		n	50.0		107	70-130			
LCS (EL51307-BS1)				Prepared &	k 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			
Surrogate: 1-Chlorooctane	54.8		mg/kg	50.0		110	70-130			· · ·
Surrogate: 1-Chlorooctadecane	56.9		"	50.0		114	70-130			
Calibration Check (EL51307-CCV1)				Prepared 8	k 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		н	1000		87.3	80-120			
Surrogate: 1-Chlorooctane	49.1		"	50.0		98.2	70-130			
Surrogate: 1-Chlorooctadecane	52.2		"	50.0		104	70-130			
Matrix Spike (EL51307-MS1)	Sou	irce: 5L1300	5-01	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	n	527	ND	95.6	75-125			
Total Hydrocarbon C6-C35	901	10.0		1050	ND	85.8	75-125			
Surrogate: 1-Chlorooctane	50.5		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	52.1		"	50.0		104	70-130			
Matrix Spike Dup (EL51307-MSD1)	Soi	arce: 5L1300	5-01	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	н	1050	ND	84.2	75-125	1.90	20	
Surrogate: 1-Chlorooctane	50.1	• • • • • • • • • • • • • • • • • • • •	mg/kg	50.0		100	70-130			
Surrogate: 1-Chlorooctadecane	52.7		n	50.0		105	70-130			

Environmental Lab of Texas

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project Nur	mber: 20	tman Gatheri 05-00144 mille Reynole					Fax: (432) Repo 12/14/03	ted:
General	Chemistry Para	meters by Environm				ls - Qual	lity Cont	trol		
		Reporting		Spike	Source	·	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EL51404 - General Preparatio	on (Prep)									
Blank (EL51404-BLK1)				Prepared: 1	2/13/05 A	nalyzed: 12	/14/05			
% Solids	100		%							
Duplicate (EL51404-DUP1)	Sou	rce: 5L12007-	01	Prepared: 1	2/13/05 A	nalyzed: 12	/14/05			
% Solids	97.0		%		97.4		··	0.412	20	

%

Prepared: 12/13/05 Analyzed: 12/14/05

0.437

20

91.3

Source: 5L13011-04

91.7

Duplicate (EL51404-DUP2) % Solids

Environmental Lab of Texas

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

Reported: 12/14/05 15:36

Notes and Definitions

1	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 thinks 12/14/2005 Date:

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

	LINVII.	UNVIRONMENTAL OF OTECHNICAL		THE ALL AND CONSTRUCTION MATCHINES SUBARCES STRATCES	and the second		
			Laboratory:	atory: ELOT	ANALYSIS REQUESTED	SIS STED / / / / / /	Due Date:
මාමම ඊ	Consulting Engineers & Scientists	& Scientists	Address:				Temp. of coolers when received (C ^o): 2,5
Office	Office Location	and TX	Contact:	;;			
Projec	Project Manager Shaw	Shawa Sm.K	PO/SO #:)#: 2005-00144			
Samplei	حر ا	Smith	Sample	r J	1		
Proj. No.	057546	Project Name	bether into	Lo II NoType of Containers			
Matrix	1	G (dentify	arks of Sar	Start Depth End frig	0/4 0		Lab Sample ID (Lab Use Only)
5	12/3/08 740	1-mm	A G		XX		511205-01
-		<u>6- 90</u>	ASI				42
	-152	6W-1A					-02
	355	EW-31					₹ 7 -
	-£5£	GW-3A	121				-05
->	Koo	8H-2A			シ ト		-06
				· · ·			
ULLI BIOL	Turn around time Q Normal	0 25% Rush	O 50% Rush	lush 🛛 100% Rush			
eliptuis XXXXX	Relinfruished by (Signature) Xitt mm J. 1. C Relinctuished by (Signature)	TT(S) [3]		Paceived by: (Signature) PLULU VOOD Bareload hu: (Signature)	Date: Time:	NOTES: Datas Camille	
elinquis	Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	ľ	-	Vertrals to
elinquis	Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date: Time:	e: [uhels scar]	ASAD
Matrix Container	WW - Wastewater VCA - 40 ml vial	W - Water S - Soli SD - Solid A/G - Amber / Or Glass 1 Liter	S - Soli S Dr Glass 1 L	L - Liquid 250 ml - (C - Charcoal tube P/O - Plastic or other	- °	
Houston Office 11555 Clay Ros Houston, Texas	Houston Office 11555 Clay Road, Suite 100 Houseon, Frans 77043	Dallas Office 8901 Carpents Dallas, Texas	Bce enter Freewa vas 75247	Dallas Office 8901 Carpenter Freeway, Suite 100 2601 Gravel Drive Dallas, Texas 7234	Fort Worth Office 2601 Gravel Drive Fort Worth, Texas 76118	Austin Office 5307 Industrial C Austin, Texas 78	Midland Office 24 Smith Rd., # 261 Midland, Texas 79705
1 1-31 034-0	10/0-100 (C1) VDJ 6000	-DCO (+17)	TAT DELL		TON 101 /) TON- 5007	1971-766 (71C) XB4 7771-786 (71C)	9104-400 (77E) X84 MOA-690 (76E)

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

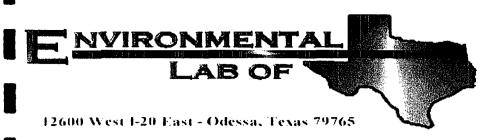
Client:	Plains
Date/Time:	· 12-13/05
Order #:	5413005
nitials:	CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.5 C
Shipping container/cooler in good condition?	YES	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	YSS	No	Not present
Chain of custody present?	Xes	No	
Sample Instructions complete on Chain of Custody?	XES	No	
Chain of Custody signed when relinquished and received?	100	No	
Chain of custody agrees with sample label(s)	Xes	No	
Container labels legible and intact?	Yes,	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	•
Sampies properly preserved?	Yes	No	
Sample bottles intact?	6	No	
Preservations documented on Chain of Custody?	E	No	
Containers documented on Chain of Custody?	Xes	No	
Sufficient sample amount for indicated test?	(es	No	
All samples received within sufficient hold time?	10s	No	
VOC samples have zero headspace?	(res	No	Not Applicable

Other observations:

		***× 4
Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		



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	Project:	Littman Gathering 6"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	2005-00144	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	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	Project: Littman Gathering 6"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00144	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	12/16/05 17:47

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting 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	

Environmental Lab of Texas

Plains All American EH & S	Project: Littman Gathering 6"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00144	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	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
Batch EL51601 - Water Extraction										
Blank (EL51601-BLK1)				Prepared: 1	2/15/05 A	nalyzed: 12	2/16/05			
Chloride	ND	0.500	mg/kg							
LCS (EL51601-BS1)				Prepared: 1	2/15/05 A	nalyzed: 12	2/16/05			
Chloride	8.39		mg/L	10.0		83.9	80-120			
Calibration Check (EL51601-CCV1)				Prepared: 1	12/15/05 A	nalyzed: 12	2/16/05			
Chloride	8.53		mg/L	10.0		85.3	80-120			
Duplicate (EL51601-DUP1)	Sou	rce: 5L14003-	01	Prepared: 1	12/15/05 A	nalyzed: 12	2/16/05			
Chloride	1430	50.0	mg/kg		1450			1.39	20	

Environmental Lab of Texas

Plains All	American EH & S	Project:	Littman Gathering 6"	Fax: (432) 687-4914
	County Road 1150 TX, 79706-4476	Project Number:		Reported: 12/16/05 17:47
L		Notes and De	finitions	
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 Julits

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.

Date:

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

ENVIRONMENTAL GEOLECHINIC	MENTAL 6	DUDCE	NICAL AN	CONS	TRUCH	ON MATH	AL AND CONSTRUCTION MATERIALS SERVICES	vices	CHAIN OF CUSTODY RECORD	RECORD
							ANALVOID		/ / / / / Ab use only	
				ł			ANALYSIS REQUESTED		Due Date:	
		Laboratory:		<u> </u>						
		Address:	s:						Temp. of coolers	ers
Consulting Engineers & Scientists	cientists						1		2:(-) when received (C-):-3	ط (ت): یک رک
Office Location Mid Newd, Tx	TX	Contact:	÷.						1 2 3	4 5
		Phone:							Page	
Project Manager Shawva, Smith	Min	PO/SO #:	2005	72100-	-					
1		Sampler's Sign	Signature							
Shawin Smith		S	لی م				\$			
Proj. No. Project Name	1			Ŷ	No/Type of Containers	mainers	*			
-1	t tryings	Gethering 61	н				-			
Matrix Date Time 0	Identifying Marks of Sample(s)	arks of San	hati fiqe	ğ ulda Du	A B A B	250 P/O	4		I at Comula ID (1 at 1 teo Onito)	teo Onko
d			a				+-+-+			
5 12/18/ 8/67	52-1					~~	×		5413000-0	
				-						
				+	+					
			-	-						
18mL	Q 25% Rush	CI 50% Rush	ush 🛛 100% Rush	Rush						
	Date: 12/1/1/	H H	Received by: (Signature)	Signature)	00 /	Date:	Time:	NOTES:		******
by (Signature)	7 F	Time:	Received by: (Signature)	Signature)	þ	Date:	-	Plan	~ Camiller Ruppelds	
Relinquished by (Signature)	Date:	Time:	Received by: (3	ed by: (Signature)		Date:	Time:		-	
									يولف	
Relinquished by (Signature)	Date:	Time:	Received by: (S	ed by: (Signature)		Date:	Пте:	Lance (seal	earl	
Matrix WW - Wastewater Container VOA - 40 ml viat	W - Water S - Soli SD - Sol A/G - Amber / Or Glass 1 Liter	S - Soli (Dr Glass 1 L	P	Liquid 0 ml - Glast	L - Liquid A - Air Bag 250 ml - Glass wide mouth		harcoal tube Plastic or other	C・Charcoal tube SL・sludge 0・Oil P/O・Plastic or other リーアー・パームション		
Houston Office 11555 Clay Road, Suite 100	Dallas Of	fice euter Freewa	Dallas Office 8901 Carpenter Freeway, Suite 100	12.29	urt Worth O	Fort Worth Office 2601 Gravel Drive		Austia Office 5307 Industrial Oaks Hivd. #	# 160 24 Smith Rd. # 261	
Houston, TEXAS 77043 (713) 690-8989 Fax (713) 690-8787	Dallas, Te (214) 630-	xat 75247 -1010 Pax (214) 630-7070	2.2	nt Worth, Te. 17) 268-860	xas 76118) Pax (817)2	68-8602	Austin, Texas 78735 (512) 442-1122 Fax (512) 442-1181		(432) 684-9608

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

lient:	Plains
ate/Time:	12/13/05 13:17
Order #:	5-13006
nitials:	(K

Sample Receipt Checklist

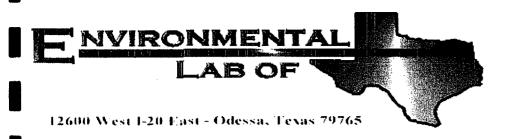
Temperature of container/cooler?	Yes	No	<u> </u>
Shipping container/cooler in good condition?	(C)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes,	No	Not present
Chain of custody present?	Xes	No	
Sample Instructions complete on Chain of Custody?	Ves	No	
Chain of Custody signed when relinquished and received?	¥@s	No	
Chain of custody agrees with sample label(s)	(B)	No	
Container labels legible and intact?	Xes	No	
Sample Matrix and properties same as on chain of custody?	Ves	No	1
Samples in proper container/bottle?	Yes	No	•
Samples properly preserved?	(Cas	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Kes	No	
Sufficient sample amount for indicated test?	Ves	No	
All samples received within sufficient hold time?	Xes	No	
VOC samples have zero headspace?	(GS	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: Regarding:	Date/Time:	Contacted by:	
Corrective Action Taken:			

.



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	Project: Littman Gathering 6"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00144	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	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 N	Project: Litt umber: 200 anager: Car	5-00144	-			Fax: (432) 66 Report e 12/20/05	:d:
		Or Environ	ganics b mental L	-	exas	****	<u></u>		
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EW-1B 5' (5L15017-01) Soil									
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		*	u	11	"		
Total Hydrocarbon C6-C35	ND	10.0	"	"			"	17	

70-130

70-130

"

...

"

....

93.6%

85.6 %

Environmental Lab of Texas

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

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.

*

...

"

..

Р	Plains All American EH & S	Project:	Littman Gathering 6"	Fax: (432) 687-4914
1	301 S. County Road 1150	Project Number:	2005-00144	Reported:
N	Midland TX, 79706-4476	Project Manager:	Camille Reynolds	12/20/05 14:45

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EW-1B 5' (5L15017-01) Soil									
% Moisture	5.7	0.1	%	1	EL51609	12/15/05	12/16/05	% calculation	

Environmental Lab of Texas

Plains All American EH & S 1301 S. County Road 1150			roject: Littr umber: 200:		ng 6"				Fax: (432) Repor	
Midland TX, 79706-4476			nager: Can		ds				12/20/05	5 14:45
	Or	ganics by	GC - Q	uality Co	ontrol					
		Environn	nental La	ab of Tex	as					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL51508 - Solvent Extraction (GC)										
Blank (EL51508-BLK1)				Prepared: 1	2/15/05 A	nalyzed: 12	2/18/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet					· · · · · · · · · · · · · · · · · · ·		
Diesel Range Organics >C12-C35	ND	10.0	н							
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			
LCS (EL51508-BS1)				Prepared: 1	2/15/05 A	nalyzed: 12	2/18/05			
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			
Calibration Check (EL51508-CCV1)				Prepared:	12/15/05 A	nalyzed: 12	2/19/05			
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		n	50.0		115	70-130	<u> </u>	. <u></u>	
Surrogate: 1-Chlorooctadecane	62.4		"	50.0		125	70-130			
Matrix Spike (EL51508-MS1)	Sou	rce: 5L15006	5-01	Prepared:	12/15/05 A	nalyzed: 1	2/18/05			
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	11	529	ND	77.5	75-125			
Total Hydrocarbon C6-C35	906	10.0	н	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			
Matrix Spike Dup (EL51508-MSD1)	Sou	rce: 5L15000	5-01	Prepared:	12/15/05 A	nalvzed: 1	2/18/05			
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			

Environmental Lab of Texas

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project Nur	nber: 200	tman Gatheri 05-00144 mille Reynol					Fax: (432) Report 12/20/0	rted:
	Chemistry Para	-				ls - Qua	lity Cont	rol		
		Environm	ental I	ab of Te	Kas					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EL51609 - General Preparati	on (Prep)									
Blank (EL51609-BLK1)				Prepared: 1	12/15/05 A	nalyzed: 12	/16/05			
% Solids	100		%							
Duplicate (EL51609-DUP1)	Sour	·ce: 5L14008-(01	Prepared:	12/15/05 A	nalyzed: 12	/16/05			
% Solids	94.3		%		95.6			1.37	20	

%

%

Source: 5L15001-09

Source: 5L15014-01

90.7

98.0

Prepared: 12/15/05 Analyzed: 12/16/05

Prepared: 12/15/05 Analyzed: 12/16/05

0.330

0.509

20

20

91.0

98.5

Environmental Lab of Texas

Duplicate (EL51609-DUP2)

Duplicate (EL51609-DUP3)

% Solids

% Solids

Plains All	American EH & S	Project:	Littman Gathering 6"	Fax: (432) 687-4914
	ounty Road 1150 X, 79706-4476	Project Number: Project Manager:	2005-00144 Camille Reynolds	Reported: 12/20/05 14:45
		Notes and De	finitions	
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:

Ciliz D Kune

12/20/2005

Raland K. Tuttle, Lab Manager Celey 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.

Date:

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

- ENV		GEOREC	INICAL AND CONSTRUCTION MATERIALS SERVICES	CUION MMIT	RUAL S SER	VICIS CHAIN	IN OF CUSTODY RECORD
		Laborato Address:	Laboratory: <u>ELOT</u> Address:		ANALYSIS Requested		Due Date:
	Consulting Engineers & Scientists						or workes aceived (C*): 2,
	Office Location Arediand	Contact:	ct:				1 2 3 4 5
		Phone:					Pageof
- 31 5	Project Manager Jh Meet Jm K	- PO/SO #:-	D#: 2005-00144				
	i	Sample	Sampler's Signature		PUI		
6	Shawur Smith	63	S. B.		5		
	Project Name		No/Type	No/Type of Containers	RJ R		
	H man.	Githering 6	[r		- Re		
	C G m A dentifying b A dentifying	Identifying Marks of Sample(s)	Start Depth End Depth	AG 250 P/O	Z.		Lab Sample ID (Lab Use Only)
1	E.W- 1	R SI		>	7		10-112/72
	\$ 1						1
					-		
1							
1 499	Cromal 0 25% Rush	0 50% Rush	tush 🖸 100% Rush			المتعارضة والمستعدية والمستعدية والمستعد و	
	Date: 12/15/n 5-	Time: LAI 9	Received by: (Signature)	Date:	Time:		
	Date:	Time:	Received by: (Signature)	Date:	Time:	Marine Learneld Reymolds	y had 10
	Date:	Time:	Received by: (Signature)	Date:	Time:	402	
	Date:	Time:	Received by: (Signature)	Date: 105	1 Time:	[abol [<2 a.	
	W - Water A/G - Amber	W - Water S - Soli SD - A/G - Amber / Or Glass 1 Liter	Solid L - Liquid 250 ml - (]	C - Charcoal tube P/O - Plastic or other	SL - studge 0 - Oil	
1, Suite 100 7043	Dallas Office 8901 Carpente Dallas, Texas	Office appenter Freew Texas 75247	laite 100	Fort Worth Office 2601 Gravel Drive Port Worth, [Fras 76118		Austin Office 5307 Industrial Oaks Blvd. # 160 Austin, Texas 28735	Midiand Office 24 Smith Rd., # 261 Midand: Texas 79705
	0(117)	30-1010 Par		8-8600 Fax (817) 20	8-8602	(5(2) 442-1/22 Fax (512) 442-1181	

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

Client:	Plains
)ate/Time:	12/15/05 12:19
 	SL15017
Initials:	cle

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.5 CI
Shipping container/cooler in good condition?	Kes	No	5
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	X as	No	Not present
Chain of custody present?	YES	No	
Sample Instructions complete on Chain of Custody?	Ý	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	AS3	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yas	No	e
Samples properly preserved?	1 YES	No	
Sample bottles intact?	Y CS	No	
Preservations documented on Chain of Custody?	1 Xes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	YES	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	(B)	No	Not Apolicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	Contacted by:
Corrective Action Taken:		

APPENDIX C

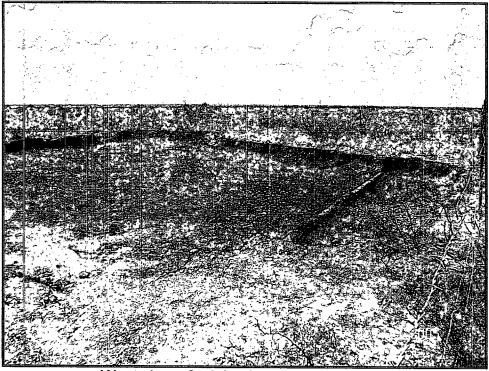
:

-

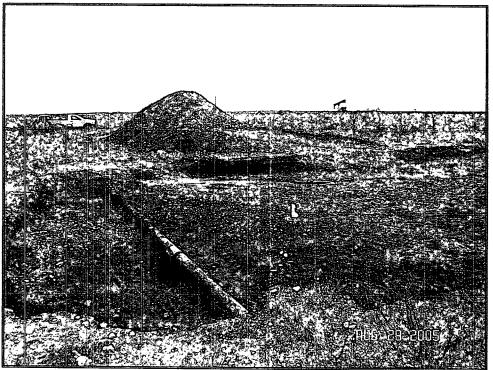
.

......

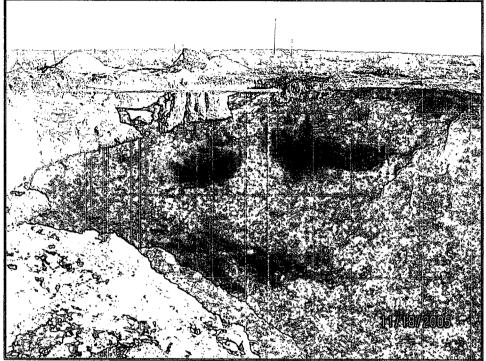
Photographs



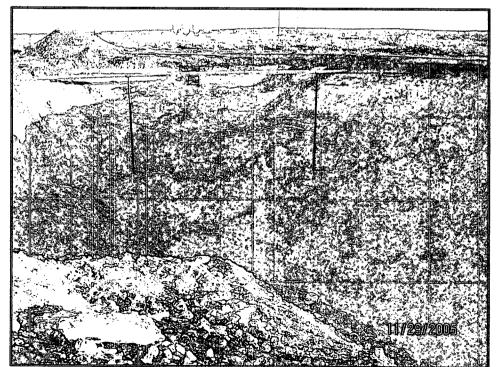
West view of origination point of release.



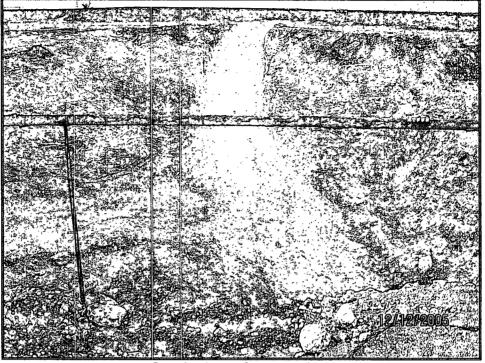
East view of origination point of release.



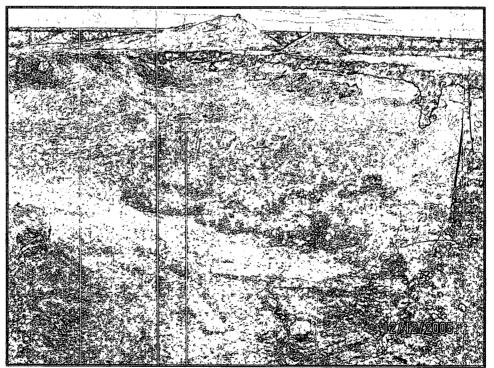
North view of excavation.



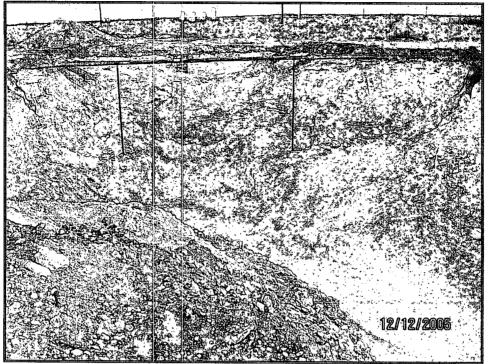
North view of excavation.



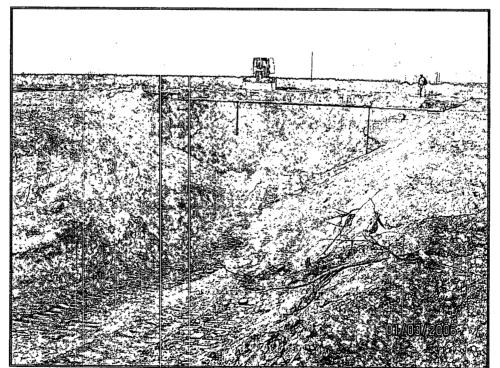
South view of excavation.



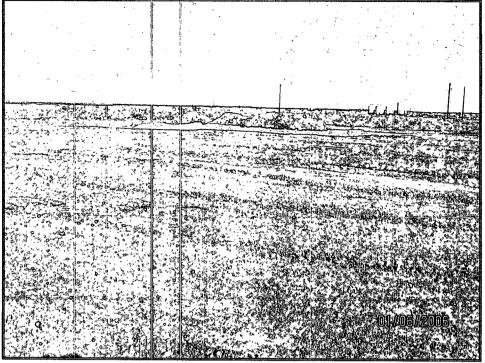
West view of excavation.



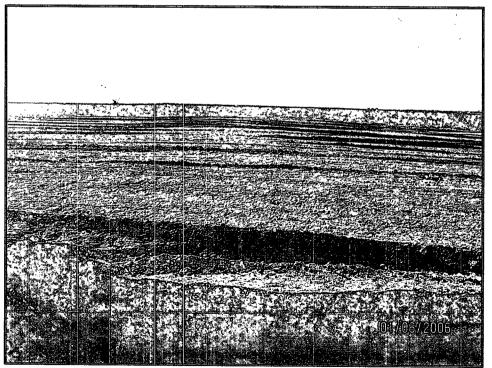
North view of excavation.



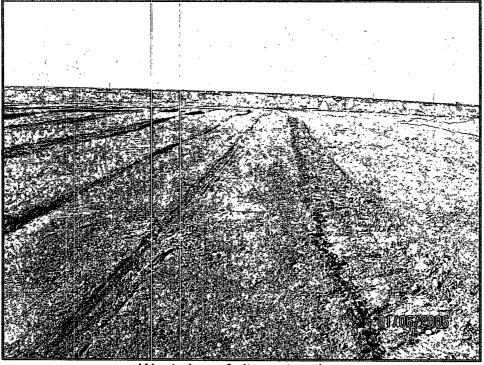
North view of backfilling activities.



North view of site restoration.



South view of site restoration.



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

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

Form C-141 Revised October 10, 2003

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

Release Notificatio	n and Co	rrective A	ction			
	OPERA			al Report 🔲 Final Report		
Name of Company Plains Marketing, LP	Contact Can	ille 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.					
	NOFDE	TACIE		·····		
Unit Letter Section Township Range Feet from the North	NOF REI	Feet from the	East/West Line	County		
Unit LetterSectionTownshipRangeFeet from theNorthN1221S37E37E	Moodul Line	Feet nom me	Last west Line	County Lea		
لو ⁹ ¹ Latitude_ <u>32° 29'20.0"</u>		<u>103° 07' 12.9'</u>	,	-		
	E OF REL		· · · · · · · · ·			
Type of Release Crude Oil Source of Release 6" Steel Pipeline		Release 15 barre lour of Occurrence		Recovered 0 barrels Hour of Discovery		
Source of Release of Steel Pipelline	06-17-05 (06-17-05	a 7:00		
Was Immediate Notice Given?	If YES, To					
x Yes 🔲 No 🗌 Not Required	Larry John	son		181920212222		
By Whom? Camille Reynolds		Iour 06-17-05@1	1:11	ci' Fra		
Was a Watercourse Reached?	If YES, Vo	olume Impacting	the Watercourse.	412. 2904		
Source of Release 6" Steel Pipeline Date and Hour of Occurrence 06-17-05 @06:00 Date and Hour of Discovery 06-17-05 @06:00 Was Immediate Notice Given? If YES, To Whom? Larry Johnson 18 19 20 21 22 23 By Whom? Camille Reynolds Date and Hour 06-17-05@11:11 Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. If a Watercourse was Impacted, Describe Fully.* If YES, Volume Impacting the release of Crock 96 # clark Describe Cause of Problem and Remedial Action Taken.* External corrosion of the 6 inch steel pipeline caused the release of crock 96 # clark 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 ₂ 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 NM regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the op should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface v or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance federal, state, or local laws and/or regulations.						
signature: amille Kecmolds	OIL CONSERVATION DIVISION					
Printed Name: Camille Reynolds	Approved by	District Supervi	sor:			
Title: Remediation Coordinator	Approval Da	te:	Expiration	Date:		
E-mail Address: cjreynolds@paalp.com	Conditions o	f Approval:		Attached		
Date: 6-20-05 Phone:505-441-0965	<u> </u>					
* Attach Additional Sheets If Necessary				····		

4