#### **Closure Compliance Report**

Shafter Lake 8" WTI UL-I, NE ¼ of the SE ¼ of Section 33, T25S, R37E Plains Leak Number 2003-00145 Lea County, New Mexico

**Terracon Project Number 94057171** 

October 14, 2005

**Prepared for:** 

Plains Pipeline, L.P. 3705 East Highway 158 P.O. Box 3119 Midland, Texas 79702

Prepared by:



Hans - 231735 Vacility - FPACO603452033 Incident - NPACO603452162 application - PPACO603452394



October 14, 2005

Plains Pipeline, L.P. 3705 East Highway 158 P.O. Box 3119 Midland, Texas 79702 Attn: Mr. Daniel Bryant

Telephone: (432) 682-5392 Fax: (432) 687-4914

Re: Closure Compliance Report Shafter Lake 8" WTI UL-I, NE ¼ of the SE ¼ of Section 33, T25S, R37E Plains Leak Number 2003-00145 Lea County, New Mexico Terracon Project No. 94057171

Dear Mr. Bryant:

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 Shafter Lake 8" WTI 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,

## lerracon

Prepared by:

harmen L Smith

Shanna L. Smith Project Manager

Reviewed by:

Barrett Bole, P.G. Project Manager



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# Terracon

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#### **Closure Compliance Report**

## Shafter Lake 8" WTI UL-I, NE ¼ of the SE ¼ of Section 33, T25S, R37E Plains Leak Number 2003-00145 Lea County, New Mexico

#### **Terracon Project Number 94057171**

#### 1.0 INTRODUCTION

This site is located in Lea County, New Mexico approximately 2.5 miles south of Jal, New Mexico approximately three-quarters of a mile east of State Road 18 on a lease road (Figure 1). The property is owned by George and Joyce Willis.

The leak occurred on June 5, 2003, on the Plains Pipeline Shafter Lake 8" WTI in Lea County, New Mexico. Approximately 250 barrels of crude oil were released and 190 barrels recovered. The cause of the spill was reported as internal corrosion. The crude oil flowed onto an oilfield caliche road from the release site covering an area approximately 18 feet wide and 400 feet long.

#### **1.1 Site Description**

Site Name	Shafter Lake 8" WTI					
Site Location/GPS	Lea County, New Mexico / 32° 05' 05" N, 103° 09' 33.7" W					
General Site Description	The release occurred in the immediate area surrounding the					
General Sile Description	pipeline and flowed west onto an oilfield caliche road.					

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 remediation 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.



#### 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 = 10
(As defined as vertical distai	nce from lowerr	nost contaminants to seasonal high water level)
Wellhead Protection Area	>1000' to wat	er source

	>200' to domestic well	Ranking Score = 0
Distance to Surface Water	>1000 horizontal feet	Ranking Score = 0

Total Ranking Score = 10

Based on total ranking criteria of 10, the remediation levels are as follows: Benzene = 10 ppm BTEX = 50 ppm TPH = 1,000 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

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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 response activities, Environmental Plus, Inc. (EPI) hauled approximately 130 cubic yards of oil saturated soil from the site. The soil was taken to the EPI land farm located in Eunice, New Mexico. Waste manifests are provided in Appendix C.

On August 8 and 9, 2005, Basin Environmental, working in conjunction with Terracon, commenced excavation of impacted soil from the source area and caliche road. The impacted soil excavated at the source area was approximately 22 feet wide, 34 feet long and 8 feet below ground surface (bgs). The western excavation was approximately 18 feet wide, 80 feet long and 10 feet bgs. The caliche road was excavated approximately 20 feet wide, 300 feet long and 2 feet bgs. Approximately 1,200 cubic yards of impacted soil was stockpiled onsite for remediation. A 30 feet wide, 250 feet long and 2 feet bgs temporary road was built, south of the excavations, to be utilized for blending material and to detour the lease road traffic. Approximately 555 cubic yards of ambient soil from the surrounding area was excavated and blended to assist in the remediation and aeration of the impacted soil (See Figure 2 Site Map).



On August 15 and 16, 2005, four stockpile samples, 8 caliche road samples, and 10 excavation confirmation samples were collected and analyzed for 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 1,000 mg/kg TPH had been achieved. Analytical results from two of the blended stockpile soil samples and one road sample indicated the TPH concentrations exceeded the NMOCD standard of 1,000 mg/kg TPH. The blended material was further aerated and three more soil samples from the stockpile and a road were collected on August 23, 2005, to evaluate the TPH concentrations. Laboratory results of the three samples were below the NMOCD standard of 1,000 mg/kg TPH analytical result indicated a TPH concentration of 1,230 mg/kg. The NMOCD gave authorization to backfill the site on August 24, 2005 based on this data.

The site excavation was backfilled with the blended soil and was restored, as near possible to the natural grade of the surrounding area on August 26 and 27, 2005.

#### 2.2 Soil Sampling

Terracon's soil sampling program included the collection of 19 confirmation soil samples from the impacted area and six confirmation soil samples of the blended material utilized for backfill on August 23, 2005. 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

Nineteen confirmation soil samples were collected from each side wall and floor in the east and west excavated areas and caliche road and six confirmation soil samples were collected from the stockpiled material. The laboratory results from the excavation confirmation samples and stockpiled soil samples subsequent to remediation and aeration 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 and stockpiled soil samples were below or near the NMOCD standard for the site 1,000 mg/kg. One stockpile sample indicated a TPH concentration of 1,230 mg/kg. The NMOCD granted authorization to backfill the excavation on August 24, 2005 based on this data. The laboratory results are presented in Appendix B, Table 1.

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#### 4.0 FINDINGS AND CONCLUSIONS

Terracon respectfully submits this closure compliance report on behalf of Plains Pipeline, L.P. documenting the site remediation and closure activities. Based on results of our field activities and laboratory analyses, the NMOCD approved backfilling and site restoration activities. If the New Mexico Oil Conservation Division is in agreement with this recommendation, Plains Pipeline, L.P. requests a "no further action" letter for this site.

Plains Pipeline, L.P. Shafter Lake 8" EMS #2003-00145 Terracon Project #94057171 October 14, 2005		Terracon
DISTRIBUTION LIST		
New Mexico Oil Conservation Division		
Larry Johnson – Env. Eng. Specialist 1	505-370-3184	Larry.Johnson@state.nm.us
Plains Pipeline, L.P.		
Daniel Bryant - Remediation Coordinator Jeff Dann – Senior Environmental Specialist	432-686-1769 713-646-4657	dmbryant@paalp.com jpdann@paalp.com
Terracon		
Clay McDonald – Environmental Manager Shanna Smith - Project Manager	432-684-9600 432-684-9600	<u>camcdonald@terracon.com</u> <u>slsmith@terracon.com</u>

## APPENDIX A

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





### **APPENDIX B**

Analytical Summary Tables Laboratory Data Sheets Laboratory Chain of Custody Documents

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#### Table 1

#### **CONCENTRATIONS OF TPH & BTEX IN SOIL**

Plains Pipeline, L.P. Shafter Lake 8" UL -I, NE 1/4 of SE 1/4 Sec 33, T25S, R37E 2.5 Miles South of Jal, Lea County, New Mexico Plains Pipeline Leak Number 2003-00145 Terracon Project Number 94057171

All concentrations are in mg/kg

		EPA 8015 modified			EPA Method 8021B							
SAMPLE DATE	SAMPLE LOCATION	ТРН С <sub>6</sub> -С <sub>12</sub>	TPH >C <sub>12</sub> -C <sub>35</sub>	ТРН С <sub>6</sub> -С <sub>35</sub>	BENZENE	TOLUENE	ETHYL- BENZENE	M,P- XYLENES	0- XYLENES	BTEX		
	D014(4.0)	457	00.40	40400								
03/21/05	DSW-1 2'	457	9940	10400	<b></b>			· · · · · ·				
	DSW-1 5'	<10.0	<10.0	<10.0								
	DM-1 5'	<10.0	<10.0	<10.0		· · · · · · · · · · · · · · · · · · ·						
	DM-1 10'	<10.0	<10.0	<10.0	L							
	DNW-1 5'	<10.0	<10.0	<10.0								
	DR-1 2'	<10.0	<10.0	<10.0								
	DR-1 4'	<10.0	<10.0	<10.0								
	DR-2 4'	9.8	26.8	26.8								
	DR-3 2'	<10.0	<10.0	<10.0								
	DR-4 3'	<10.0	<10.0	<10.0								
08/15/05	East NW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.02		
	East WW-1	<10.0	42.2	42.2	<0.025	<0.025	< 0.025	< 0.025	<0.025	< 0.02		
	East SW-1	<10.0	<10.0	<10.0	< 0.025	< 0.025	<0.025	< 0.025	< 0.025	< 0.02		
	East EW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	< 0.025	<0.025	< 0.02		
	East BH-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.02		
	R-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.02		
	R-2	89.1	407	496	<0.025	0.0303	0.0404	0.0775	0.0574	0.205		
·····	R-3	121	1160	1280	<0.025	<0.025	< 0.025	0.0236	< 0.026	0.023		
	R-4	126	399	525	0.0983	0.129	0.255	0.347	0.0669	0.896		
·····	R-5	12.3	212	224	<0.025	<0.025	<0.025	< 0.025	<0.0005	< 0.02		
	R-6	29.5	169	199	0.00993	0.0225	0.0362	0.0985	0.0227	0.189		
	R-0	<10.0	<10.0	<10.0	<0.025	<0.0225	< 0.0302	<0.0985	<0.0227	<0.02		
	R-8	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	0.048	<0.025	0.02		
	West WW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	< 0.045	<0.025	< 0.02		
	West NW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.02		
	West SW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.02		
	West BH-1	98	383	481	<0.025	0.0504	0.023		0.025			
	West BH-1	<10.0	<10.0	<10.0	<0.025		· · · · · · · · · · · · · · · · · · ·	0.111		0.283		
	VVest EVV-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.02		
08/16/05	SP-1	176	1090	1270	<0.025	0.0191	0.0373	0.0625	0.0379	0.156		
	SP-2	56.7	346	403	<0.025	0.0152	0.0274	0.552	0.0347	0.629		
	SP-3	61.5	444	505	< 0.025	<0.025	<0.025	0.0284	<0.025	0.028		
	SP-4	191	1120	1310	<0.025	0.0315	0.0464	0.0831	0.0866	0.247		
08/23/05	R-3A	28.7	252	281	<0.025	0.0292	0.0177	0.0558	0.0171	0.119		
	SP-1A	141	1090	1230	<0.025	0.0107	0.0215	0.0498	<0.025	0.08		
	SP-4A	111	890	1000	<0.025	< 0.025	0.0213	0.0458	0.0189	0.073		
	<u> </u>	<u> </u>		1000	1	-0.020	0.0102	0.0000	0.0103	0.070		

CONCENTRATIONS IN BOLD ARE ABOVE REGULATORY LIMITS



## Analytical Report

### **Prepared for:**

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

Project: Shafter Lake 8inch Project Number: 94057171 Location: None Given

Lab Order Number: 5C22001

Report Date: 03/29/05

Plains All American EH & S	Project:	Shafter Lake 8inch	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	94057171	Reported:
Midland TX, 79706-4476	Project Manager:	Daniel Bryant	03/29/05 15:35

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DSW-1 2'	5C22001-01	Soil	03/21/05 07:50	03/22/05 08:09
DSW-1 5'	5C22001-02	Soil	03/21/05 07:54	03/22/05 08:09
DM-1 5'	5C22001-03	Soil	03/21/05 08:02	03/22/05 08:09
DM-1 10'	5C22001-04	Soil	03/21/05 08:14	03/22/05 08:09
DNW-1 5'	5C22001-05	Soil	03/21/05 08:24	03/22/05 08:09
DR-1 2'	5C22001-06	Soil	03/21/05 10:21	03/22/05 08:09
DR-1 4'	5C22001-07	Soil	03/21/05 10:24	03/22/05 08:09
DR-2 4'	5C22001-08	Soil	03/21/05 10:39	03/22/05 08:09
DR-3 2'	5C22001-09	Soil	03/21/05 11:16	03/22/05 08:09
DR-4 3'	5C22001-10	Soil	03/21/05 11:26	03/22/05 08:09

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		l Project N Project M	Fax: (432) 687-4914 Reported: 03/29/05 15:35						
			ganics by		<u></u>	· · · · · · · · · · · · · · · · · · ·	· · · · ·		
		Environ	-		exas				
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DSW-1 2' (5C22001-01) Soil								- <u></u>	<u></u>
Gasoline Range Organics C6-C12	457	50.0	mg/kg dry	5	EC52310	03/23/05	03/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	9940	50.0	"	н	n	"	11	"	
Total Hydrocarbon C6-C35	10400	50.0	11	"	u	м	"	"	
Surrogate: 1-Chlorooctane		17.9 %	67.6-	140	17	**	"	"	S-0
Surrogate: 1-Chlorooctadecane		23.8 %	70-1	30	"	"	"	n	S-0
DSW-1 5' (5C22001-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	n			a	14		
Total Hydrocarbon C6-C35	ND	10.0	u	**		"		н	
Surrogate: 1-Chlorooctane		96.4 %	67.6-	140	"	"	"	"	
Surrogate: 1-Chlorooctadecane		103 %	70-1	30	<i>n</i> .	"	n	"	
DM-1 5' (5C22001-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	**		н		"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	#	"	
Surrogate: 1-Chlorooctane		113 %	67.6-	140	"	н	"	"	
Surrogate: 1-Chlorooctadecane		125 %	70-1	30	"	п	18	μ	
DM-1 10' (5C22001-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		0	N	"	H	**	
Total Hydrocarbon C6-C35	ND	10.0	11			n	"	II	
Surrogate: 1-Chlorooctane	····	104 %	67.6-	140	17	"	"	"	
Surrogate: 1-Chlorooctadecane		110 %	70-1	30	n	n	"	u	
DNW-1 5' (5C22001-05) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	μ		в	н	н	H	
Total Hydrocarbon C6-C35	ND	10.0	n	"	"	"		u	
Surrogate: 1-Chlorooctane		92.2 %	67.6-	140	"	"	"	"	
Surrogate: 1-Chlorooctadecane		101 %	70-1	20	"	"	"	<i>n</i> ·	

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

Page 2 of 7

Plains All American EH & S										
1301 S. County Road 1150	•									
Midland TX, 79706-4476		Project M	anager: Dan	iel Bryant				03/29/05	15:35	
		O	ganics by	y GC						
		Environ	mental L	ab of Te	exas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
DR-1 2' (5C22001-06) Soil										
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	n	n	n		
Total Hydrocarbon C6-C35	ND	10.0	"	•	u	n	"	"		
Surrogate: 1-Chlorooctane		93.0 %	67.6-	140	n	"	"	"		
Surrogate: 1-Chlorooctadecane		97.2 %	70-1	30	"	n	.,,	"		
DR-1 4' (5C22001-07) Soil										
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	u	"	n		*		
Total Hydrocarbon C6-C35	ND	10.0	u	"	n	u	n	u		
Surrogate: 1-Chlorooctane		107 %	67.6-	140	"	"	"	"		
Surrogate: 1-Chlorooctadecane		120 %	70-1	30	n	п	"	"		
DR-2 4' (5C22001-08) Soil										
Gasoline Range Organics C6-C12	J [9.80]	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M		
Diesel Range Organics >C12-C35	26.8	10.0	16	"	"	"	u	u		
Total Hydrocarbon C6-C35	26.8	10.0	"	"	17	n	"	н		
Surrogate: 1-Chlorooctane		111 %	67.6-	140	"	"	"	"		
Surrogate: 1-Chlorooctadecane		113 %	70-1	30	"	"	"	н		
DR-3 2' (5C22001-09) Soil										
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/25/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0			"	n	**	"		
Total Hydrocarbon C6-C35	ND	10.0		u	u	*1	. <b>u</b>	11		
Surrogate: 1-Chlorooctane		108 %	67.6-	140	"	"	"	n		
Surrogate: 1-Chlorooctadecane		124 %	70-1	30	"	"	"	IJ		
DR-4 3' (5C22001-10) Soil										
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52310	03/23/05	03/24/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	U		"	<b>†</b> 1	"			
Total Hydrocarbon C6-C35	ND	10.0	"	"	n	u	**	в		
Surrogate: 1-Chlorooctane		80.6 %	67.6-	140	"	"	"	"		
Surrogate: 1-Chlorooctadecane		88.0 %	70-1	30	n	"	"	"		

#### General Chemistry Parameters by EPA / Standard Methods

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
DSW-1 2' (5C22001-01) Soil									
% Moisture	0.9	0.1	%	ı	EC52305	03/22/05	03/23/05	% calculation	
DSW-1 5' (5C22001-02) Soil									
% Moisture	10.0	0.1	%	l	EC52305	03/22/05	03/23/05	% calculation	
DM-1 5' (5C22001-03) Soil									
% Moisture	6.1	0.1	%	I	EC52305	03/22/05	03/23/05	% calculation	
DM-1 10' (5C22001-04) Soil									
% Moisture	8.5	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DNW-1 5' (5C22001-05) Soil									
% Moisture	10.6	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DR-1 2' (5C22001-06) Soil									
% Moisture	3.8	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DR-1 4' (5C22001-07) Soil									
% Moisture	6.6	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DR-2 4' (5C22001-08) Soil									
% Moisture	11.7	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DR-3 2' (5C22001-09) Soil									
% Moisture	9.6	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	
DR-4 3' (5C22001-10) Soil									
% Moisture	1.2	0.1	%	1	EC52305	03/22/05	03/23/05	% calculation	

Plains All American EH & S		F	Project: Sha	ifter Lake 8i	nch				Fax: (432)	687-4914
1301 S. County Road 1150		Project N	umber: 940	57171					Repo	rted:
Midland TX, 79706-4476		Project Ma	anager: Dar	niel Bryant					03/29/0	5 15:35
	0	rganics by	GC - Q	uality Co	ontrol					_
		Environ	nental L	ab of Te	tas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52310 - Solvent Extraction (GC)										
Blank (EC52310-BLK1)				Prepared: (	)3/23/05 A	nalyzed: 03	3/24/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	37.3		mg/kg	50.0		74.6	67.6-140			
Surrogate: 1-Chlorooctadecane	36.5		»	50.0		73.0	70-130			
LCS (EC52310-BS1)				Prepared: (	)3/23/05 A	nalyzed: 0	3/24/05			
Gasoline Range Organics C6-C12	447	10.0	mg/kg wet	500		89.4	76.3-104			
Diesel Range Organics >C12-C35	503	10.0	*	500		101	76.1-118			
Total Hydrocarbon C6-C35	950	10.0	u	1000		95.0	81.8-105			
Surrogate: 1-Chlorooctane	42.1	<u> </u>	mg/kg	50.0		84.2	67.6-140			
Surrogate: 1-Chlorooctadecane	42.1		н	50.0		84.2	70-130			
Calibration Check (EC52310-CCV1)				Prepared: (	)3/23/05 A	nalyzed: 0.	3/24/05			
Gasoline Range Organics C6-C12	507		mg/kg	500		101	80-120			
Diesel Range Organics >C12-C35	511		u	500		102	80-120			
Total Hydrocarbon C6-C35	1020		"	1000		102	80-120			
Surrogate: 1-Chlorooctane	37.4		"	50.0		74.8	67.6-140			
Surrogate: 1-Chlorooctadecane	37.9		41	50.0		75.8	70-130			
Matrix Spike (EC52310-MS1)	Soi	arce: 5C21022	2-02	Prepared: (	)3/23/05 A	nalyzed: 0.	3/24/05			
Gasoline Range Organics C6-C12	512	10.0	mg/kg dry	526	ND	97.3	75.9-114			
Diesel Range Organics >C12-C35	556	10.0	н	526	ND	106	85.3-122			
Total Hydrocarbon C6-C35	1070	10.0	11	1050	ND	102	84.4-115			
Surrogate: 1-Chlorooctane	50.1		mg/kg	50.0		100	67.6-140			
Surrogate: 1-Chlorooctadecane	52.4		"	50.0		105	70-130			
Matrix Spike Dup (EC52310-MSD1)	Sou	irce: 5C21022	2-02	Prepared: (	)3/23/05 A	nalyzed: 0.	3/24/05			
Gasoline Range Organics C6-C12	520	10.0	mg/kg dry	526	ND	98.9	75.9-114	1.55	10.4	
Diesel Range Organics >C12-C35	571	10.0	"	526	ND	109	85.3-122	2.66	10.4	
Total Hydrocarbon C6-C35	1090	10.0	"	1050	ND	104	84.4-115	1.85	7.6	
Surrogate: 1-Chlorooctane	53.4		mg/kg	50.0		107	67.6-140			-
Surrogate: 1-Chlorooctadecane	53.5		"	50.0		107	70-130			

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	1301 S. County Road 1150     Project Number: 94057171									
<b>A</b>				<b>BR</b> 41	I. A		4			
General	-	neters by EPA Environmental			is - Quai	ity Con	troi			

#### Batch EC52305 - General Preparation (Prep)

Blank (EC52305-BLK1)				Prepared: 03/22/05 Analyzed: 03/23	3/05		
% Moisture	ND	0.1	%				
Duplicate (EC52305-DUP1)	Source:	5C21021-0	1	Prepared: 03/22/05 Analyzed: 03/23	3/05		
% Moisture	20,0	0.1	%	19.0	5.13	20	

Environmental Lab of Texas

Plains All	American EH & S	Project:	Shafter Lake 8inch	Fax: (432) 687-4914
1301 S. C	county Road 1150	Project Number:	94057171	Reported:
Midland 7	ГХ, 79706-4476	Project Manager:	Daniel Bryant	03/29/05 15:35
		Notes and De	finitions	
S-06	The recovery of this surrogate is outside con matrix interference's.	trol limits due to sample di	ution required from high analyte concentration and	d/or
J	Detected but below the Reporting Limit; the	refore, result is an estimated	l concentration (CLP J-Flag).	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the reporting	ng 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

Date:

3/29/2005

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

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

Environmental Lab of Texas

ENVIRON	<b>ENVERONMENTAL</b>	GLOILCHNCA		ONSTREE	I ION V	AND CONSTRUCTION MATERIALS SERVICES		CHAIN OF CUSTODY RECORD
				ł		ANALYSIS REQUESTED	STED	Lab use only Due Date:
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Consulting Engineers & Scientists	Scientists		a and series of stationary of the state of the					/ when received (C <sup>4</sup> ): 0.5 <sup>4</sup>
Office Location		Contact:	#	and the second second second second second				1 2 3 4 5
		Phone:				 į		Page
Project Manager Shurive Smith	Smith	PO/SO	PO/SO #: 2003-00145	5410				
Sampler's Name		Sampler	Sampler's Signature					
Shawia Sn	Sm. HL	V 4	Sharmer S	Run		<u>S</u> T <u></u>		
2	Project Name			No/Type	No/Type of Containers	28		
944057171 57	Shefter Lere	120	ing i ga			H <sub>e</sub>		
Matrix Date Time C	G I Identifying Marks of Sample(s)	Marks of Sa	mple(s)	VOA	a SS a SS F F F G F F F	12 X 21		Lab Sample ID (Lab Use Only)
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Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	nature)		Date: Tir	Time: Hez glass on ict	w/seeds
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	nature)		Date: Tir	Time:	
Matrix WW - Wastewater Container VOA - 40 ml viat	W - Water S - Soil SD - A/G - Amber / Or Glass 1 Liter	S - Soil Or Glass 1	Solid	L · Liquid A · Air Bag 250 ml - Glass wide mouth	tir Bag e mouth	C - Charcoal tube P/O - Plastic or other	oe SL - sludge O - Oil other	
Milice un Hou exas 7	Dathas O S901 Car Dathas, T	Milee spender Freew exas 75247	Datlas Office 8901 Carpenter Freeway, Suite 100 Datlas, Texus 75247	Fort Wo 2301 E. Fort Wo	rrth Office Loop 820 No rth. Texas 76	Fort Worth Office 2301 E. Leop 820 North Fort Worth, Texas 76118	Austin Office 3915 Todd Lane, Austin, Texas 78	Atlanta Office 662J Bay Circle, Suite 120 Norcross, Georgia 3007
22-0700 Fax (713) 122-0768	SQ (F12)	0-i010 Fax	(214) 630-7070	07 (1.18)	08-560Ui Fau	7009-997 (118)	(S12) +12-1122 Fax (S12) 442-1181	0012-007 (011 VAL +110-007 (011)

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

Client:	Plaing Pipeline
Date/Time:	alada pris
Order #:	5022001
Initials:	CR

#### Sample Receipt Checklist

Temcerature of container/cooler?	Yes	No	0.5	C
Shiccing container/cocler in gccd condition?	1000	No		
Custody Seals intact on shipping container/cooler?	Yes	No ;	Not present	
Custody Seals intact on sample cottles?	10	No	Not present	1
Chain of custody present?	10001	Na	-	-
Sample Instructions complete on Chain of Custody?	1000	No		
Chain of Custody signed when relinguished and received?	1785	No		
Chain of custody agrees with sample lacel(s)		No		i
Container labels legible and intact?	1 (tes)	Nc		
Sample Matrix and properties same as on chain of custody?	1000	Nc		
Samcies in proper container/bcttle?	1 (195)	Nc		
Samples properly preserved?	100	No		
Sample bottles intact?	100	Nc		
Preservations documented on Chain of Custody?	1000	No		
Containers documented on Chain of Custody?	1 yes	Ne		
Sufficient sample amount for indicated test?	125	Nc		
All samples received within sufficient hold time?	TO	МC		
VOC samples have zero headspace?	I fleg .	No	Not Applicatie	
	the second s			

Other observations:

·

## Variance Documentation:

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| Contact Person:<br>Regarding:         | Date/Time:                             | Contacted by:                                                                                                                                                    |
|---------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       |                                        |                                                                                                                                                                  |
|                                       |                                        |                                                                                                                                                                  |
| Corrective Action Taken:              |                                        |                                                                                                                                                                  |
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|                                       |                                        |                                                                                                                                                                  |



## **Analytical Report**

## Prepared for:

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

Project: Shafter Lake 8 inch Project Number: 2003-00145 Location: None Given

Lab Order Number: 5H16001

Report Date: 08/22/05

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 | e 8 inch                  |        | Fax: (432) 687-4914<br>Reported:<br>08/22/05 08:17 |                                   |
|----------------------------------------------------------------------------------|---------------------------|--------|----------------------------------------------------|-----------------------------------|
|                                                                                  | ANALYTICAL REPORT FOR SAM | PLES . |                                                    | , , , , , , , , , , , , , , , , , |
| Sample ID                                                                        | Laboratory ID             | Matrix | Date Sampled                                       | Date Receive                      |
| East NW-1                                                                        | 5H16001-01                | Soil   | 08/15/05 08:45                                     | 08/16/05 08::                     |
| East WW-1                                                                        | 5H16001-02                | Soil   | 08/15/05 08:50                                     | 08/16/05 08::                     |
| East SW-1                                                                        | 5H16001-03                | Soil   | 08/15/05 08:55                                     | 08/16/05 08::                     |
| East EW-1                                                                        | 5H16001-04                | Soil   | 08/15/05 09:00                                     | 08/16/05 08::                     |
| East BH-1                                                                        | 5H16001-05                | Soil   | 08/15/05 09:05                                     | 08/16/05 08:                      |
| R-1                                                                              | 5H16001-06                | Soil   | 08/15/05 09:41                                     | 08/16/05 08:                      |
| R-2                                                                              | 5H16001-07                | Soil   | 08/15/05 09:45                                     | 08/16/05 08                       |
| R-3                                                                              | 5H16001-08                | Soil   | 08/15/05 09:48                                     | 08/16/05 08                       |
| R-4                                                                              | 5H16001-09                | Soil   | 08/15/05 09:53                                     | 08/16/05 08                       |
| R-5                                                                              | 5H16001-10                | Soil   | 08/15/05 09:57                                     | 08/16/05 08                       |
| R-6                                                                              | 5H16001-11                | Soil   | 08/15/05 10:01                                     | 08/16/05 08:                      |
| R-7                                                                              | 5H16001-12                | Soil   | 08/15/05 10:04                                     | 08/16/05 08:                      |
| R-8                                                                              | 5H16001-13                | Soil   | 08/15/05 10:07                                     | 08/16/05 08                       |
| West WW-1                                                                        | 5H16001-14                | Soil   | 08/15/05 15:11                                     | 08/16/05 08                       |
| West NW-1                                                                        | 5H16001-15                | Soil   | 08/15/05 15:13                                     | 08/16/05 08                       |
| West SW-1                                                                        | 5H16001-16                | Soil   | 08/15/05 15:14                                     | 08/16/05 08:                      |
| West BH-1                                                                        | 5H16001-17                | Soil   | 08/15/05 15:16                                     | 08/16/05 08                       |
| West EW-1                                                                        | 5H16001-18                | Soil   | 08/15/05 15:17                                     | 08/16/05 08                       |

| Plains All American EH & S          |          |                    | Project: Shaf  |           | inch     |                                       |               | Fax: (432) 687-4914 |       |  |
|-------------------------------------|----------|--------------------|----------------|-----------|----------|---------------------------------------|---------------|---------------------|-------|--|
| 1301 S. County Road 1150            |          |                    | umber: 2003    |           |          |                                       |               | Report              |       |  |
| Midland TX, 79706-4476              |          | Project M          | anager: Dani   | el Bryant |          | · · · · · · · · · · · · · · · · · · · |               | 08/22/05            | 08:17 |  |
|                                     |          | O                  | ganics by      | GC        |          |                                       |               |                     |       |  |
|                                     |          | Environ            | mental La      | b of Te   | xas      |                                       |               |                     |       |  |
|                                     | David    | Reporting<br>Limit | []_its         |           |          |                                       |               |                     |       |  |
| Analyte                             | Result   |                    | Units          | Dilution  | Batch    | Prepared                              | Analyzed      | Method              | Not   |  |
| East NW-1 (5H16001-01) Soil         |          |                    |                |           |          | ····                                  |               |                     |       |  |
| Benzene                             | ND       |                    | mg/kg dry      | 25        | EH51802  | 08/17/05                              | 08/17/05      | EPA 8021B           |       |  |
| Toluene                             | ND       | 0.0250             | 17             | "         | 16       | "                                     | **            | и                   |       |  |
| Ethylbenzene                        | ND       | 0.0250             | n              |           | .,       | н                                     | 11            | n                   |       |  |
| Xylene (p/m)                        | ND       | 0.0250             | n              | n         | v        | ч                                     | u             | **                  |       |  |
| Xylene (o)                          | ND       | 0.0250             | "              | "         | u        | n<br>                                 | u<br>         | **                  |       |  |
| Surrogate: a,a,a-Trifluorotoluene   |          | 94.8 %             | 80-12          | 20        | u        | n                                     | "             | "                   |       |  |
| Surrogate: 4-Bromofluorobenzene     |          | 109 %              | 80-12          | 20        | "        | "                                     | "             | n                   |       |  |
| Gasoline Range Organics C6-C12      | ND       | 10.0               | mg/kg dry      | 1         | EH51606  | 08/16/05                              | 08/16/05      | EPA 8015M           |       |  |
| Diesel Range Organics >C12-C35      | ND       | 10.0               | "              | "         | н        | м                                     | н             |                     |       |  |
| Total Hydrocarbon C6-C35            | ND       | 10.0               | n              | n         | n        | "                                     |               |                     |       |  |
| Surrogate: 1-Chlorooctane           |          | 101 %              | 70-1.          | 80        | н        | #                                     | "             | "                   |       |  |
| Surrogate: 1-Chlorooctadecane       |          | 114 %              | 70-13          | 80        | a        | "                                     | "             | "                   |       |  |
| East WW-1 (5H16001-02) Soil         |          |                    |                |           |          |                                       |               |                     |       |  |
| Benzene                             | ND       | 0.0250             | mg/kg dry      | 25        | EH51802  | 08/17/05                              | 08/17/05      | EPA 8021B           |       |  |
| Toluene                             | ND       | 0.0250             | "              |           | "        | "                                     | "             | 17                  |       |  |
| Ethylbenzene                        | ND       | 0.0250             | 11             | R         | н        | μ                                     | *             | n                   |       |  |
| Xylene (p/m)                        | ND       | 0.0250             | "              | "         | "        |                                       |               |                     |       |  |
| Xylene (o)                          | ND       | 0.0250             | "              |           | н        | "                                     | u             | U                   |       |  |
| Surrogate: a,a,a-Trifluorotoluene   |          | 90.2 %             | 80-12          | 20        | "        | "                                     | ·····         | н                   |       |  |
| Surrogate: 4-Bromofluorobenzene     |          | 101 %              | 80-12          |           | "        | "                                     | "             | п                   |       |  |
| Gasoline Range Organics C6-C12      | ND       | 10.0               |                | 1         | EH51606  | 08/16/05                              | 08/16/05      | EPA 8015M           |       |  |
| Diesel Range Organics >C12-C35      | 42.2     | 10.0               | "<br>"         |           | EU11000  | "                                     | 00/10/05<br># | n 1001544           |       |  |
| Total Hydrocarbon C6-C35            | 42.2     | 10.0               |                |           | "        |                                       |               | **                  |       |  |
| Surrogate: 1-Chlorooctane           |          | 103 %              | 70-13          | 20        |          | "                                     | "             | "                   |       |  |
| Surrogate: 1-Chlorooctadecane       |          | 105 %              | 70-13          |           |          | "                                     | ,,            | "                   |       |  |
| -                                   |          | 115 70             | /0-1_          |           |          |                                       |               |                     |       |  |
| East SW-1 (5H16001-03) Soil Benzene | <b></b>  | 0.0250             | malka d        |           | EH51802  | Δ <b>9</b> /17/05                     | 00/17/02      | EDA 0021B           |       |  |
| Toluene                             | ND       | 0.0250             | mg/kg dry<br>" | 25        | ETI3[602 | 08/17/05                              | 08/17/05      | EPA 8021B           |       |  |
| Ethylbenzene                        | ND       | 0.0250             | ••             |           | u        |                                       |               |                     |       |  |
| Xylene (p/m)                        | ND<br>ND | 0.0250             | 11             |           | **       | "                                     | u .           | 9                   |       |  |
| Xylene (0)                          | ND       | 0.0230             | н              | "         |          | *                                     |               | n                   |       |  |
|                                     |          |                    | 00.10          |           |          | "                                     |               |                     |       |  |
| Surrogate: a,a,a-Trifluorotoluene   |          | 91.6%              | 80-12          |           | n        |                                       | ,,            | "                   |       |  |
| Surrogate: 4-Bromofluorobenzene     |          | <i>98.5 %</i>      | 80-12          |           |          | 00/16/07                              |               |                     |       |  |
| Gasoline Range Organics C6-C12      | ND       | 10.0               | mg/kg dry<br>" | 1         | EH51606  | 08/16/05                              | 08/16/05      | EPA 8015M<br>"      |       |  |
| Diesel Range Organics >C12-C35      | ND       | 10.0               | n              |           |          |                                       |               | "                   |       |  |
| Total Hydrocarbon C6-C35            | ND       | 10.0               |                | "         | "        | "                                     |               |                     |       |  |

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received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

| Plains All American EH & S        |        | ]                  | Project: Sha  | ifter Lake 8 | inch         |               |               | Fax: (432) 6   | 587-4914 |
|-----------------------------------|--------|--------------------|---------------|--------------|--------------|---------------|---------------|----------------|----------|
| 1301 S. County Road 1150          |        |                    | umber: 200    |              |              |               |               | Repor          | ted:     |
| Midland TX, 79706-4476            |        | Project M          | anager: Dai   | niel Bryant  |              |               |               | 08/22/05       | 08:17    |
|                                   |        | Oı                 | ganics b      | y GC         |              |               |               |                |          |
|                                   |        | Environ            | mental L      | ab of Te     | exas         |               |               |                |          |
| Analyte                           | Result | Reporting<br>Limit | Units         |              |              |               |               |                | N        |
| East SW-1 (5H16001-03) Soil       |        |                    |               | Dilution     | Batch        | Prepared      | Analyzed      | Method         | No       |
|                                   |        | 83.0 %             | 70-1          | 20           | FURICAC      | 09/16/05      | 09/16/05      | ED 4 901514    |          |
| Surrogate: 1-Chlorooctane         |        | 113 %              |               |              | EH51606<br>" | 08/16/05<br>" | 08/16/05<br>" | EPA 8015M<br>" |          |
| Surrogate: 1-Chlorooctadecane     |        | 113 %              | 70-1          | 30           | "            |               |               | u              |          |
| East EW-1 (5H16001-04) Soil       |        |                    |               |              |              |               |               |                |          |
| Benzene                           | ND     | 0.0250             | mg/kg dry     | 25           | EH51802      | 08/17/05      | 08/17/05      | EPA 8021B      |          |
| Toluene                           | ND     | 0.0250             |               | u            |              | "             |               | *              |          |
| Ethylbenzene                      | ND     | 0.0250             | "             | н            | "            | n             | u             | n              |          |
| Xylene (p/m)                      | ND     | 0.0250             | 11            | н            | "            | n             | "             | b              |          |
| Xylene (o)                        | ND     | 0.0250             | u             | "            | "            | **            | u             | 10             |          |
| Surrogate: a,a,a-Trifluorotoluene |        | 91.9 %             | 80-1          | 20           | "            | "             | "             | "              |          |
| Surrogate: 4-Bromofluorobenzene   |        | 105 %              | 80-1          | 20           | "            | n             | n             | 'n             |          |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry     | I            | EH51606      | 08/16/05      | 08/16/05      | EPA 8015M      |          |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | "             | **           | n            | и             | н             | н              |          |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | "             | **           | u            | u             | "             | н              |          |
| Surrogate: 1-Chlorooctane         |        | 97.2 %             | 70-           | 30           | *            | "             | 13            | *              |          |
| Surrogate: 1-Chlorooctadecane     |        | 110 %              | 7 <b>0</b> -1 | 30           | "            | "             | "             | "              |          |
| East BH-1 (5H16001-05) Soil       |        |                    |               |              |              |               |               |                |          |
| Benzene                           | ND     | 0.0250             | mg/kg dry     | 25           | EH51802      | 08/17/05      | 08/18/05      | EPA 8021B      |          |
| Toluene                           | ND     | 0.0250             | 11            | *            | "            | *             | 11            | **             |          |
| Ethylbenzene                      | ND     | 0.0250             | "             | U.           | n            | "             |               | "              |          |
| Xylene (p/m)                      | ND     | 0.0250             | "             | *            |              | "             | п             | "              |          |
| Xylene (o)                        | ND     | 0.0250             | н             | "            | н            | ••            |               | 11             |          |
| Surrogate: a,a,a-Trifluorotoluene |        | 104 %              | 80-1          | 20           | "            | n             | "             | "              |          |
| Surrogate: 4-Bromofluorobenzene   |        | 102 %              | 80-1          | 20           | "            | "             | "             | "              |          |
| Gasoline Range Organics C6-C12    | ND     | 10.0               | mg/kg dry     | 1            | EH51606      | 08/16/05      | 08/16/05      | EPA 8015M      |          |
| Diesel Range Organics >C12-C35    | ND     | 10.0               | "             | *            | *1           | "             | u             | **             |          |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | "             |              |              | "             | N             |                |          |
| Surrogate: 1-Chlorooctane         |        | 93.8 %             | 70-1          | 30           | "            | "             | "             | "              |          |
| Surrogate: 1-Chlorooctadecane     |        | 106 %              | 70-1          |              | "            | "             | "             | "              |          |

| Plains All American EH & S        |            |                    | Project: Shaft  |          | inch     |          |             | Fax: (432) 6                | 87-4914  |
|-----------------------------------|------------|--------------------|-----------------|----------|----------|----------|-------------|-----------------------------|----------|
| 1301 S. County Road 1150          |            |                    | umber: 2003-    |          |          |          |             | <b>Report</b><br>08/22/05   |          |
| Midland TX, 79706-4476            |            | · · · · · ·        | anager: Danie   |          |          |          |             |                             |          |
|                                   |            | Oı                 | ganics by       | GC       |          |          | •           |                             |          |
|                                   |            | Environ            | mental La       | b of Te  | xas      |          |             |                             |          |
| Auchota                           | Result     | Reporting<br>Limit | Units           |          |          |          |             |                             | N        |
| Analyte<br>R-1 (5H16001-06) Soil  |            |                    |                 | Dilution | Batch    | Prepared | Analyzed    | Method                      | Not      |
| K-1 (51116001-06) 5011            |            |                    |                 |          |          |          |             |                             | <u> </u> |
| Benzene                           | ND         | 0.0250             | mg/kg dry       | 25       | EH51802  | 08/17/05 | 08/17/05    | EPA 8021B                   |          |
| Toluene                           | ND         | 0.0250             | и               | n        | н        | **       | н           | **                          |          |
| Ethylbenzene                      | ND         | 0.0250             | u               | "        | п        |          | "           | м                           |          |
| Xylene (p/m)                      | ND         | 0.0250             | "               | "        | "        | 11       | "           | "                           |          |
| Xylene (o)                        | ND         | 0.0250             |                 | "        | "        | »        | "           | H <u></u> .                 |          |
| Surrogate: a,a,a-Trifluorotoluene |            | 85.6%              | 80-12           | 0        | "        | "        | n           | n                           |          |
| Surrogate: 4-Bromofluorobenzene   |            | 98.7 %             | 80-12           | 0        | "        | "        | "           | "                           |          |
| Gasoline Range Organics C6-C12    | ND         | 10.0               | mg/kg dry       | 1        | EH51606  | 08/16/05 | 08/16/05    | EPA 8015M                   |          |
| Diesel Range Organics >C12-C35    | ND         | 10.0               |                 | н        | u        |          | "           | u                           |          |
| Total Hydrocarbon C6-C35          | ND         | 10.0               |                 |          |          | "        | "           |                             |          |
| Surrogate: 1-Chlorooctane         |            | 105 %              | 70-13           | 0        | "        | "        | "           | "                           |          |
| Surrogate: 1-Chlorooctadecane     |            | 115 %              | 70-13           | 0        | "        | "        | "           | "                           |          |
|                                   |            |                    |                 |          |          |          |             |                             |          |
| R-2 (5H16001-07) Soil             |            |                    |                 |          | ·        |          |             |                             |          |
| Benzene                           | ND         | 0.0250             | mg/kg dry       | 25       | EH51802  | 08/17/05 | 08/18/05    | EPA 8021B                   |          |
| Toluene                           | 0.0303     | 0.0250             | н               | "        | u        | U        | Ħ           | "                           |          |
| Ethylbenzene                      | 0.0404     | 0.0250             | *               | "        | u        | *        | u           | 5 <del>9</del> <sup>6</sup> |          |
| Xylene (p/m)                      | 0.0775     | 0.0250             | "               | *        |          | 11       | u           | 5 B                         |          |
| Xylene (0)                        | 0.0574     | 0.0250             | te              | n        | n        | "        | "           | н                           |          |
| Surrogate: a,a,a-Trifluorotoluene |            | 84.8 %             | 80-12           | 0        | "        | "        | "           | "                           |          |
| Surrogate: 4-Bromofluorobenzene   |            | 92.1 %             | 80-12           | 0        | "        | "        | п           | "                           |          |
| Gasoline Range Organics C6-C12    | 89.1       | 10.0               | mg/kg dry       | 1        | EH51606  | 08/16/05 | 08/16/05    | EPA 8015M                   |          |
| Diesel Range Organics >C12-C35    | 407        | 10.0               |                 | n        |          | n        | "           | n                           |          |
| Total Hydrocarbon C6-C35          | 496        | 10.0               | "               | n        | u        | H        | u           | *                           |          |
| Surrogate: 1-Chlorooctane         |            | 101 %              | 70-13           | 0        | **       | "        | R           | tr                          |          |
| Surrogate: 1-Chlorooctadecane     |            | 128 %              | 70-13           | 0        | "        | "        | "           | n                           |          |
| R-3 (5H16001-08) Soil             |            |                    |                 |          |          |          |             |                             |          |
| Benzene                           | ND         | 0.0250             | mg/kg dry       | 25       | EH51802  | 08/17/05 | 08/18/05    | EPA 8021B                   |          |
| Toluene                           | ND         | 0.0250             |                 | "        | u        |          | "           | 17                          |          |
| Ethylbenzene                      | ND         | 0.0250             | *               | 11       | н        | 47       | u           | и                           |          |
| Xylene (p/m)                      | J [0.0236] | 0.0250             | "               | "        |          | "        | "           |                             |          |
| Xylene (o)                        | ND         | 0.0250             |                 |          | "        |          | "           | н                           |          |
| Surrogate: a,a,a-Trifluorotoluene |            | 90.2 %             | 80-12           | 0        | "        |          |             | "                           |          |
| Surrogate: 4-Bromofluorobenzene   |            | 90.2 %<br>93.4 %   | 80-12           |          | "        | "        | "           | "                           |          |
| Gasoline Range Organics C6-C12    | 121        | 10.0               | mg/kg dry       | 1        | EH51606  | 08/16/05 | 08/16/05    | EPA 8015M                   |          |
| Diesel Range Organics >C12-C35    | 121        | 10.0               | "<br>"", "E uty | 1<br>"   | E1131000 | vo/10/00 | vo/10/03    | "                           |          |
| Total Hydrocarbon C6-C35          | 1280       | 10.0               | 11              |          |          |          | **          | 11                          |          |
|                                   | 1400       | 10.0               |                 |          |          |          | · · · · · · |                             |          |

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| Plains All American EH & S        | ains All American EH & S Project: Shafter Lake 8 inch |                            |             |             |         |            |          | Fax: (432) 687-4914 |       |  |
|-----------------------------------|-------------------------------------------------------|----------------------------|-------------|-------------|---------|------------|----------|---------------------|-------|--|
| 1301 S. County Road 1150          |                                                       | Project Number: 2003-00145 |             |             |         |            |          |                     |       |  |
| Midland TX, 79706-4476            |                                                       | Project M                  | anager: Dai | niel Bryant |         |            |          | 08/22/05            | 08:17 |  |
|                                   |                                                       | Oı                         | ganics b    | y GC        |         |            |          |                     |       |  |
|                                   |                                                       | Environ                    | mental L    | ab of Te    | exas    |            |          |                     |       |  |
| Analyte                           | Result                                                | Reporting<br>Limit         | Units       |             |         | <b>D</b>   |          |                     |       |  |
| R-3 (5H16001-08) Soil             | Kesuit                                                |                            |             | Dilution    | Batch   | Prepared   | Analyzed | Method              | Not   |  |
| <u> </u>                          |                                                       |                            |             |             |         |            |          | <u></u>             |       |  |
| Surrogate: 1-Chlorooctane         |                                                       | 104 %                      | 70-1        |             | EH51606 | 08/16/05   | 08/16/05 | EPA 8015M           |       |  |
| Surrogate: 1-Chlorooctadecane     |                                                       | 129 %                      | 70-1        | 30          | "       | "          | "        | n                   |       |  |
| R-4 (5H16001-09) Soil             |                                                       |                            |             |             |         |            |          |                     |       |  |
| Benzene                           | 0.0983                                                | 0.0250                     | mg/kg dry   | 25          | EH51802 | 08/17/05   | 08/18/05 | EPA 8021B           |       |  |
| Toluene                           | 0.129                                                 | 0.0250                     | n           | "           | "       | n          |          | w                   |       |  |
| Ethylbenzene                      | 0.255                                                 | 0.0250                     | Ħ           | "           | н       | "          |          | "                   |       |  |
| Xylene (p/m)                      | 0.347                                                 | 0.0250                     | u           | "           |         | <b>*</b> 2 |          | и                   |       |  |
| Xylene (0)                        | 0.0669                                                | 0.0250                     | u           | u           | "       | 17         | **       |                     |       |  |
| Surrogate: a,a,a-Trifluorotoluene |                                                       | 85.1 %                     | 80-1        | 20          | n       | "          | "        | "                   |       |  |
| Surrogate: 4-Bromofluorobenzene   |                                                       | 102 %                      | 80-1        | 20          | "       | "          | "        | v                   |       |  |
| Gasoline Range Organics C6-C12    | 126                                                   | 10.0                       | mg/kg dry   | 1           | EH51606 | 08/16/05   | 08/16/05 | EPA 8015M           |       |  |
| Diesel Range Organics >C12-C35    | 399                                                   | 10.0                       | u           | "           |         | **         | 84       | "                   |       |  |
| Total Hydrocarbon C6-C35          | 525                                                   | 10.0                       | "           | •           | "       | n          | n        | н                   |       |  |
| Surrogate: 1-Chlorooctane         |                                                       | 110 %                      | 70-1        | 30          | "       | "          | "        | "                   |       |  |
| Surrogate: 1-Chlorooctadecane     |                                                       | 130 %                      | 70-1        | 30          | n       | n          | "        | н                   |       |  |
| R-5 (5H16001-10) Soil             |                                                       |                            |             |             |         |            |          |                     |       |  |
| Benzene                           | ND                                                    | 0.0250                     | mg/kg dry   | 25          | EH51802 | 08/17/05   | 08/18/05 | EPA 8021B           |       |  |
| Toluene                           | ND                                                    | 0.0250                     | *           | "           |         | 10         | "        |                     |       |  |
| Ethylbenzene                      | ND                                                    | 0.0250                     |             | "           | v       | *          | u        | u                   |       |  |
| Xylene (p/m)                      | ND                                                    | 0.0250                     | u           | "           | n       | "          |          | н                   |       |  |
| Xylene (o)                        | ND                                                    | 0.0250                     | "           | "           | **      | "          |          | 14                  |       |  |
| Surrogate: a,a,a-Trifluorotoluene |                                                       | 99,1 %                     | 80-1        | 20          | "       | "          | "        | "                   |       |  |
| Surrogate: 4-Bromofluorobenzene   |                                                       | 98.9 %                     | 80-1        | 20          | n       | **         |          | "                   |       |  |
| Gasoline Range Organics C6-C12    | 12.3                                                  | 10.0                       | mg/kg dry   | 1           | EH51606 | 08/16/05   | 08/16/05 | EPA 8015M           |       |  |
| Diesel Range Organics >C12-C35    | 212                                                   | 10.0                       | "           | "           | n       |            | п        | H                   |       |  |
| Total Hydrocarbon C6-C35          | 224                                                   | 10.0                       | "           | "           | "       | "          | п        | 11                  |       |  |
| Surrogate: 1-Chlorooctane         |                                                       | 101 %                      | 70-1        | 30          | "       | "          | "        | "                   |       |  |
| Surrogate: 1-Chlorooctadecane     |                                                       | 127 %                      | 70-1        | 30          | "       | "          | "        | "                   |       |  |

| Plains All American EH & S Project: Shafter Lake 8 inch |             |                    |             |             |         |                |             |           | Fax: (432) 687-4914 |  |  |
|---------------------------------------------------------|-------------|--------------------|-------------|-------------|---------|----------------|-------------|-----------|---------------------|--|--|
| 1301 S. County Road 1150                                |             |                    | Reported:   |             |         |                |             |           |                     |  |  |
| Midland TX, 79706-4476                                  |             | Project M          | anager: Dar | niel Bryant |         |                |             | 08/22/05  | 08:17               |  |  |
|                                                         |             | O                  | rganics b   | y GC        |         |                |             |           |                     |  |  |
|                                                         |             | Environ            | mental L    | ab of Te    | xas     |                |             |           |                     |  |  |
| Analyte                                                 | Result      | Reporting<br>Limit | Units       | Dilution    | Batch   | Prepared       | Analyzed    | Method    | No                  |  |  |
| R-6 (5H16001-11) Soil                                   |             |                    |             |             |         | Toplaca        | 7 mary 2001 |           |                     |  |  |
| Benzene                                                 | J [0.00993] | 0.0250             | mg/kg dry   | 25          | EH51802 | 08/17/05       | 08/18/05    | EPA 8021B |                     |  |  |
| loluene                                                 | J [0.0225]  | 0.0250             | 14          |             | 11      | н              |             | **        |                     |  |  |
| Ethylbenzene                                            | 0.0362      | 0.0250             | "           |             | "       | u              | 14          | "         |                     |  |  |
| (ylene (p/m)                                            | 0.0985      | 0.0250             | *1          |             | "       |                | 11          | 11        |                     |  |  |
| (ylene (o)                                              | J [0.0227]  | 0.0250             | ч           |             |         | "              | 11          | H.        |                     |  |  |
| Surrogate: a,a,a-Trifluorotoluene                       |             | 82.6%              | 80-1        | 20          | "       | "              | "<br>"      | <i>"</i>  |                     |  |  |
| Surrogate: 4-Bromofluorobenzene                         |             | 93.3 %             | 80-1        |             | "       |                | "           | n         |                     |  |  |
| Gasoline Range Organics C6-C12                          | 29.5        | 10.0               | mg/kg dry   | 1           | EH51606 | 08/16/05       | 08/16/05    | EPA 8015M |                     |  |  |
| Diesel Range Organics >C12-C35                          | 169         | 10.0               | "           | t<br>11     | EH31600 | vo/10/03<br>** | U8/10/U5    | "         |                     |  |  |
| Fotal Hydrocarbon C6-C35                                | 109         | 10.0               |             |             |         | "              |             | H         |                     |  |  |
| Surrogate: 1-Chlorooctane                               | 177         | 112 %              | 70-1        |             |         | "              | "           |           | _                   |  |  |
| Surrogate: 1-Chlorooctadecane                           |             | 112 %              | 70-1        |             | "       | "              | "           | "         |                     |  |  |
| nir oguno. 1 chilor bochuaccuno                         |             | 12770              |             | 20          |         |                |             |           |                     |  |  |
| R-7 (5H16001-12) Soil                                   |             |                    |             |             |         |                |             |           |                     |  |  |
| Benzene                                                 | ND          | 0.0250             | mg/kg dry   | 25          | EH51802 | 08/17/05       | 08/18/05    | EPA 8021B |                     |  |  |
| Toluene                                                 | ND          | 0.0250             | II          | "           | 11      | и              | **          | n         |                     |  |  |
| Ethylbenzene                                            | ND          | 0.0250             |             | "           | "       | н              | "           | *         |                     |  |  |
| Kylene (p/m)                                            | ND          | 0.0250             | "           | n           |         | "              | u           | *         |                     |  |  |
| Kylene (o)                                              | ND          | 0.0250             | н           | n           | u       | "              | u           | 11        |                     |  |  |
| Surrogate: a,a,a-Trifluorotoluene                       |             | 103 %              | 80-1        | 20          | "       | "              | n           | "         |                     |  |  |
| Surrogate: 4-Bromofluorobenzene                         |             | 107 %              | 80-1        | 20          | "       | "              | "           | n         |                     |  |  |
| Gasoline Range Organics C6-C12                          | ND          | 10.0               | mg/kg dry   | 1           | EH51606 | 08/16/05       | 08/16/05    | EPA 8015M |                     |  |  |
| Diesel Range Organics >C12-C35                          | ND          | 10.0               | n           | и           | u       | **             | "           | **        |                     |  |  |
| Total Hydrocarbon C6-C35                                | ND          | 10.0               | *           |             | н       | "              | "           | n         |                     |  |  |
| Surrogate: 1-Chlorooctane                               |             | 98.8 %             | 70-1        | 30          | "       | "              | "           | "         |                     |  |  |
| Surrogate: 1-Chlorooctadecane                           |             | 125 %              | 70-1        | 30          | "       | "              | "           | n         |                     |  |  |
| R-8 (5H16001-13) Soil                                   |             |                    |             |             |         |                |             |           |                     |  |  |
| Benzene                                                 | ND          | 0.0250             | mg/kg dry   | 25          | EH51802 | 08/17/05       | 08/18/05    | EPA 8021B |                     |  |  |
| oluene                                                  | ND          | 0.0250             | "           |             | n       | "              | u           | **        |                     |  |  |
| Ethylbenzene                                            | ND          | 0.0250             | u           |             | •       | **             | "           | **        |                     |  |  |
| (ylene (p/m)                                            | 0.0480      | 0.0250             | u.          |             | н       | "              |             | 'n        |                     |  |  |
| (ylene (o)                                              | ND          | 0.0250             | v           | 19          |         | 29             |             | u         |                     |  |  |
| Surrogate: a,a,a-Trifluorotoluene                       |             | 89.5 %             | 80-1        | 20          | "       | "              | "           | "         |                     |  |  |
| Surrogate: 4-Bromofluorobenzene                         |             | 99.2 %             | 80-1        |             | "       | "              | "           | и         |                     |  |  |
| Gasoline Range Organics C6-C12                          | ND          | 10.0               |             | 1           | EH51606 | 08/16/05       | 08/16/05    | EPA 8015M |                     |  |  |
| Diesel Range Organics >C12-C35                          | ND          | 10.0               |             |             | "       | "              | "           | 11        |                     |  |  |
| Total Hydrocarbon C6-C35                                | ND          | 10.0               |             |             |         |                | u           |           |                     |  |  |

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

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| Plains All American EH & S        |        | Fax: (432) 687-4914                                        |               |          |         |          |          |           |       |
|-----------------------------------|--------|------------------------------------------------------------|---------------|----------|---------|----------|----------|-----------|-------|
| 1301 S. County Road 1150          |        | Project: Shafter Lake 8 inch<br>Project Number: 2003-00145 |               |          |         |          |          |           |       |
| Midland TX, 79706-4476            |        |                                                            | anager: Danie |          |         |          |          | 08/22/05  | 08:17 |
|                                   |        | Oı                                                         | ganics by     | GC       |         |          | -        |           |       |
|                                   |        |                                                            | mental Lal    |          | xas     |          |          |           |       |
|                                   |        | Reporting                                                  |               |          |         |          |          |           |       |
| Analyte                           | Result | Limit                                                      | Units         | Dilution | Batch   | Prepared | Analyzed | Method    | Not   |
| R-8 (5H16001-13) Soil             |        |                                                            |               |          |         |          |          |           |       |
| Surrogate: 1-Chlorooctane         |        | 104 %                                                      | 70-130        | )        | EH51606 | 08/16/05 | 08/16/05 | EPA 8015M |       |
| Surrogate: 1-Chlorooctadecane     |        | 128 %                                                      | 70-130        | 1        | n       | "        | "        | "         |       |
| West WW-1 (5H16001-14) Soil       |        |                                                            |               |          |         |          |          |           |       |
| Benzene                           | ND     | 0.0250                                                     | mg/kg dry     | 25       | EH51802 | 08/17/05 | 08/18/05 | EPA 8021B |       |
| Toluene                           | ND     | 0.0250                                                     | "             |          | n       | н        | u        |           |       |
| Ethylbenzene                      | ND     | 0.0250                                                     | "             | "        | "       | n        | "        | **        |       |
| Xylene (p/m)                      | ND     | 0.0250                                                     | "             |          | "       | u –      | n        |           |       |
| Xylene (o)                        | ND     | 0.0250                                                     | "             | "        | "       | 11       | "        | 19        |       |
| Surrogate: a,a,a-Trifluorotoluene |        | 88.2 %                                                     | 80-120        | )        | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |        | 93.8 %                                                     | 80-120        | )        | "       | Π        | "        | 17        |       |
| Gasoline Range Organics C6-C12    | ND     | 10.0                                                       | mg/kg dry     | 1        | EH51606 | 08/16/05 | 08/16/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND     | 10.0                                                       | н             | u        | II.     | n        | н        | н         |       |
| Total Hydrocarbon C6-C35          | ND     | 10.0                                                       | "             | u        | "       | н        | и        | n         |       |
| Surrogate: 1-Chlorooctane         |        | 94.6 %                                                     | 70-130        | )        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |        | 129 %                                                      | 70-130        | )        | "       | "        | "        | "         |       |
| West NW-1 (5H16001-15) Soil       |        |                                                            |               |          |         |          |          |           |       |
| Benzene                           | ND     | 0.0250                                                     | mg/kg dry     | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |       |
| Toluene                           | ND     | 0.0250                                                     | **            | "        |         | "        | н        |           |       |
| Ethylbenzene                      | ND     | 0.0250                                                     | n             | "        | 11      | "        |          |           |       |
| Xylene (p/m)                      | ND     | 0.0250                                                     | и             | н        | 9       | н        | n        | "         |       |
| Xylene (o)                        | ND     | 0.0250                                                     | u             | n        | H       | n<br>    | u        | H         |       |
| Surrogate: a,a,a-Trifluorotoluene |        | 106 %                                                      | 80-120        |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |        | 94.0 %                                                     | 80-120        | )        | "       | "        | r        | n         |       |
| Gasoline Range Organics C6-C12    | ND     | 10.0                                                       | mg/kg dry     | 1        | EH51606 | 08/16/05 | 08/16/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | ND     | 10.0                                                       | "             | п        |         | 11       | 0        | 0         |       |
| Total Hydrocarbon C6-C35          | ND     | 10.0                                                       | "             | и        | н       |          | "        | n         |       |
| Surrogate: 1-Chlorooctane         |        | 91.8 %                                                     | 70-130        | }        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |        | 124 %                                                      | 70-130        | I        | n       | "        | "        | "         |       |

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 | l<br>Project N<br>Project M | Fax: (432) 687-4914<br>Reported:<br>08/22/05 08:17 |                        |          |         |          |          |           |    |
|----------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------|------------------------|----------|---------|----------|----------|-----------|----|
|                                                                                  |                             |                                                    | ganics by<br>mental La |          | VAS     |          |          |           |    |
|                                                                                  |                             | Reporting                                          |                        |          |         |          |          |           |    |
| Analyte                                                                          | Result                      | Limit                                              | Units                  | Dilution | Batch   | Prepared | Analyzed | Method    | No |
| West SW-1 (5H16001-16) Soil                                                      |                             |                                                    |                        |          |         |          |          |           | _  |
| Benzene                                                                          | ND                          | 0.0250                                             | mg/kg dry              | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |    |
| Toluene                                                                          | ND                          | 0.0250                                             | "                      |          | "       | "        | "        | 91        |    |
| Ethylbenzene                                                                     | ND                          | 0.0250                                             |                        |          | *       | и        | "        |           |    |
| Xylene (p/m)                                                                     | ND                          | 0.0250                                             | u                      | 11       | •       | "        | "        | u         |    |
| Xylene (o)                                                                       | ND                          | 0.0250                                             | n                      | n        | "       | н        | "        | "         |    |
| Surrogate: a,a,a-Trifluorotoluene                                                |                             | 100 %                                              | 80-1.                  | 20       | "       | "        | "        | "         |    |
| Surrogate: 4-Bromofluorobenzene                                                  |                             | 93.4 %                                             | 80-1.                  | 20       | 14      | "        | "        | "         |    |
| Gasoline Range Organics C6-C12                                                   | ND                          | 10.0                                               | mg/kg dry              | 1        | EH51606 | 08/16/05 | 08/16/05 | EPA 8015M |    |
| Diesel Range Organics >C12-C35                                                   | ND                          | 10.0                                               | n                      | 11       | "       |          | "        | "         |    |
| Total Hydrocarbon C6-C35                                                         | ND                          | 10.0                                               | "                      | н        | "       | *        | "        | и         |    |
| Surrogate: 1-Chlorooctane                                                        |                             | 90.6 %                                             | 70-1.                  | 30       | 0       | "        | "        | "         |    |
| Surrogate: 1-Chlorooctadecane                                                    |                             | 125 %                                              | 70-1.                  | 30       | ,       | n        | "        | "         |    |
| West BH-1 (5H16001-17) Soil                                                      |                             |                                                    |                        |          |         |          |          |           |    |
| Benzene                                                                          | ND                          | 0.0250                                             | mg/kg dry              | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |    |
| Toluene                                                                          | 0.0504                      | 0.0250                                             | u                      |          |         | "        |          | "         |    |
| Ethylbenzene                                                                     | 0.0547                      | 0.0250                                             | *                      | "        | "       | "        | u        | "         |    |
| Xylene (p/m)                                                                     | 0.111                       | 0.0250                                             | u                      |          |         | н        | u        | "         |    |
| Xylene (0)                                                                       | 0.0677                      | 0.0250                                             | n                      |          |         |          | "        |           |    |
| Surrogate: a,a,a-Trifluorotoluene                                                |                             | 94.1 %                                             | 80-1.                  | 20       | "       | "        | n        | н         |    |
| Surrogate: 4-Bromofluorobenzene                                                  |                             | 90.6 %                                             | 80-1.                  | 20       | "       | "        | "        | ıı        |    |
| Gasoline Range Organics C6-C12                                                   | 98.0                        | 10.0                                               | mg/kg dry              | 1        | EH51606 | 08/16/05 | 08/16/05 | EPA 8015M |    |
| Diesel Range Organics >C12-C35                                                   | 383                         | 10.0                                               |                        | *        |         | "        | **       | ч         |    |
| Total Hydrocarbon C6-C35                                                         | 481                         | 10.0                                               | n                      |          | "       | 14       |          | "         |    |
| Surrogate: 1-Chlorooctane                                                        |                             | 107 %                                              | 70-1.                  | 30       | "       | "        | "        | "         |    |
| Surrogate: 1-Chlorooctadecane                                                    |                             | 126 %                                              | 70-1.                  | 30       | "       | "        | "        | "         |    |
| West EW-1 (5H16001-18) Soil                                                      |                             |                                                    |                        |          |         |          |          |           |    |
| Benzene                                                                          | ND                          | 0.0250                                             | mg/kg dry              | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |    |
| Toluene                                                                          | ND                          | 0.0250                                             | "                      | n        | "       | 11       | 11       |           |    |
| Ethylbenzene                                                                     | ND                          | 0.0250                                             | *                      | 11       |         | "        | u        | м         |    |
| Xylene (p/m)                                                                     | ND                          | 0.0250                                             | "                      |          |         |          | н        | u         |    |
| Xylene (o)                                                                       | ND                          | 0.0250                                             | "                      | tt       |         | 4        | 18       |           |    |
| Surrogate: a,a,a-Trifluorotoluene                                                |                             | 89.2 %                                             | 80-1.                  | 20       | n       | "        | н        | "         |    |
| Surrogate: 4-Bromofluorobenzene                                                  |                             | 92.5 %                                             | 80-12                  | 20       | "       | "        | "        | "         |    |
| Gasoline Range Organics C6-C12                                                   | ND                          | 10.0                                               | mg/kg dry              | 1        | EH51607 | 08/16/05 | 08/17/05 | EPA 8015M |    |
| Diesel Range Organics >C12-C35                                                   | ND                          | 10.0                                               | "                      |          | и       | п        | n        | "         |    |
| Total Hydrocarbon C6-C35                                                         | ND                          | 10.0                                               | n                      | *        |         | u        | n        | n         |    |
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|----------------------------------------------------------------------------------|--------|-------------------------------------|------------------|----------|---------|----------|----------|------------------------------------|----------|
|                                                                                  |        | Orga<br>Environme                   | nics b<br>ntal L | •        | exas    |          |          | <u></u>                            |          |
| Analyte                                                                          | Result | Reporting<br>Limit                  | Units            | Dilution | Batch   | Prepared | Analyzed | Method                             | Notes    |
| West EW-1 (5H16001-18) Soil                                                      |        |                                     |                  |          | ·       |          |          |                                    | <u>.</u> |
| Surrogate: 1-Chlorooctane                                                        |        | 101 %                               | 70-1             | 30       | EH51607 | 08/16/05 | 08/17/05 | EPA 8015M                          |          |
| Surrogate: 1-Chlorooctadecane                                                    |        | 112 %                               | 70-1             | 30       | "       | "        | "        | "                                  |          |

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|-----------------------------|--------------|--------------------------|-----------|-------------|---------|----------|----------|---------------|-------|
|                             | General Cher | nistry Paraı<br>Environn |           | -           |         | d Method | S        |               |       |
| Analyte                     | Result       | Reporting<br>Limit       | Units     | Dilution    | Batch   | Prepared | Analyzed | Method        | No    |
| East NW-1 (5H16001-01) Soil |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 13.3         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| East WW-1 (5H16001-02) Soil |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 15.8         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| East SW-1 (5H16001-03) Soil |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 17.5         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| East EW-1 (5H16001-04) Soil |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 22.0         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| East BH-1 (5H16001-05) Soil |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 11.6         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-1 (5H16001-06) Soil       |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 13.5         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-2 (5H16001-07) Soil       |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 10.8         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-3 (5H16001-08) Soil       |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 14.7         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-4 (5H16001-09) Soil       |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 9.8          | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-5 (5H16001-10) Soil       |              |                          |           |             |         |          |          |               |       |
| % Moisture                  | 12.4         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |
| R-6 (5H16001-11) Soil       | ·            |                          |           |             |         |          |          |               |       |
| % Moisture                  | 10.8         | 0.1                      | %         | 1           | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |

Project: Shafter Lake 8 inch

Project Number: 2003-00145

Plains All American EH & S

1301 S. County Road 1150

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Reported:

| Plains All American EH & S | Project: Shafter Lake 8 inch   | Fax: (432) 687-4914 |
|----------------------------|--------------------------------|---------------------|
| 1301 S. County Road 1150   | Project Number: 2003-00145     | Reported:           |
| Midland TX, 79706-4476     | Project Manager: Daniel Bryant | 08/22/05 08:17      |

#### General Chemistry Parameters by EPA / Standard Methods

|                             | Environmental Lab of Texas |                    |       |          |         |          |          |               |       |  |
|-----------------------------|----------------------------|--------------------|-------|----------|---------|----------|----------|---------------|-------|--|
| Analyte                     | Result                     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |  |
| R-7 (5H16001-12) Soil       |                            | ······             |       |          |         | ,        |          |               |       |  |
| % Moisture                  | 18.2                       | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |
| R-8 (5H16001-13) Soil       |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 16.1                       | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |
| West WW-1 (5H16001-14) Soil |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 6.7                        | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |
| West NW-1 (5H16001-15) Soil |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 9.2                        | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation | -     |  |
| West SW-1 (5H16001-16) Soil |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 5.7                        | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |
| West BH-1 (5H16001-17) Soil |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 7.2                        | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |
| West EW-1 (5H16001-18) Soil |                            |                    |       |          |         |          |          |               |       |  |
| % Moisture                  | 6.6                        | 0.1                | %     | 1        | EH51703 | 08/16/05 | 08/17/05 | % calculation |       |  |

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|----------------------------------------------------|--------|------------------------|---------------------------|----------------|------------------|-------------|----------------|------|-----------------|------|
|                                                    | 0      | rganics by<br>Environi | -                         | •              |                  |             |                |      |                 |      |
| Analyte                                            | Result | Reporting<br>Limit     | Units                     | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD  | RPD<br>Limit    | Note |
| Batch EH51606 - Solvent Extraction (GC)            |        |                        |                           |                |                  |             |                |      |                 |      |
| Blank (EH51606-BLK1)                               |        |                        |                           | Prepared &     | Analyzed:        | 08/16/05    |                |      |                 |      |
| 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                          | 49.3   |                        | mg/kg                     | 50.0           |                  | 98.6        | 70-130         |      |                 |      |
| Surrogate: 1-Chlorooctadecane                      | 57.8   |                        | "                         | 50.0           |                  | 116         | 70-130         |      |                 |      |
| LCS (EH51606-BS1)                                  |        |                        |                           | Prepared &     | k Analyzed:      | 08/16/05    |                |      |                 |      |
| Gasoline Range Organics C6-C12                     | 435    | 10.0                   | mg/kg wet                 | 500            |                  | 87.0        | 75-125         |      |                 | _    |
| Diesel Range Organics >C12-C35                     | 448    | 10.0                   | 0                         | 500            |                  | 89.6        | 75-125         |      |                 |      |
| Total Hydrocarbon C6-C35                           | 883    | 10.0                   | 0                         | 1000           |                  | 88.3        | 75-125         |      |                 |      |
| Surrogate: 1-Chlorooctane                          | 51.0   |                        | mg/kg                     | 50.0           |                  | 102         | 70-130         |      |                 |      |
| Surrogate: 1-Chlorooctadecane                      | 55.8   |                        | n                         | 50.0           |                  | 112         | 70-130         |      |                 |      |
| Calibration Check (EH51606-CCV1)                   |        |                        |                           | Prepared: (    | )8/16/05 A       | nalyzed: 08 | /17/05         |      |                 |      |
| Gasoline Range Organics C6-C12                     | 414    |                        | mg/kg                     | 500            |                  | 82.8        | 80-120         |      |                 |      |
| Diesel Range Organics >C12-C35                     | 487    |                        | "                         | 500            |                  | 97.4        | 80-120         |      |                 |      |
| Fotal Hydrocarbon C6-C35                           | 901    |                        | 11                        | 1000           |                  | 90.1        | 80-120         |      |                 |      |
| Surrogate: 1-Chlorooctane                          | 49.6   |                        | "                         | 50.0           |                  | 99.2        | 0-200          |      |                 |      |
| Surrogate: 1-Chlorooctadecane                      | 57.4   |                        | "                         | 50.0           |                  | 115         | 0-200          |      |                 |      |
| Matrix Spike (EH51606-MS1)                         | Sou    | rce: 5H1600            | l-01                      | Prepared &     | z Analyzed:      | 08/16/05    |                |      |                 |      |
| Gasoline Range Organics C6-C12                     | 476    | 10,0                   | mg/kg dry                 | 577            | ND               | 82.5        | 75-125         |      |                 |      |
| Diesel Range Organics >C12-C35                     | 516    | 10.0                   | "                         | 577            | ND               | 89.4        | 75-125         |      |                 |      |
| Fotal Hydrocarbon C6-C35                           | 992    | 10.0                   | "                         | 1150           | ND               | 86.3        | 75-125         |      |                 |      |
| Surrogate: 1-Chlorooctane                          | 54.1   |                        | mg/kg                     | 50.0           |                  | 108         | 70-130         |      |                 |      |
| Surrogate: 1-Chlorooctadecane                      | 60.4   |                        | "                         | 50.0           |                  | 121         | 70-130         |      |                 |      |
| Matrix Spike Dup (EH51606-MSD1)                    | Sou    | irce: 5H1600           | L-01                      | Prepared &     | Analyzed:        | 08/16/05    |                |      |                 |      |
| Gasoline Range Organics C6-C12                     | 486    | 10.0                   | mg/kg dry                 | 577            | ND               | 84.2        | 75-125         | 2.08 | 20              |      |
| Diesel Range Organics >C12-C35                     | 537    | 10.0                   | "                         | 577 ·          | ND               | 93.1        | 75-125         | 3.99 | 20              |      |
| Total Hydrocarbon C6-C35                           | 1020   | 10.0                   | "                         | 1150           | ND               | 88.7        | 75-125         | 2.78 | 20              |      |
| Surrogate: 1-Chlorooctane                          | 54.9   |                        | mg/kg                     | 50.0           |                  | 110         | 70-130         |      |                 |      |
| Surrogate: 1-Chlorooctadecane                      | 59.8   |                        | "                         | 50.0           |                  | 120         | 70-130         |      |                 |      |

Project: Shafter Lake 8 inch

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|                                         |        |            | Toject. one |             |             |              |         |      |         |         |
|-----------------------------------------|--------|------------|-------------|-------------|-------------|--------------|---------|------|---------|---------|
| 1301 S. County Road 1150                |        |            | umber: 200  |             |             |              |         |      | Repo    |         |
| Midland TX, 79706-4476                  |        | Project Ma | anager: Dai | niel Bryant |             |              |         |      | 08/22/0 | 5 08:17 |
|                                         | Or     | ganics by  | / GC - Q    | uality Co   | ontrol      |              |         |      |         |         |
|                                         | ]      | Environ    | nental L    | ab of Te    | kas         |              |         |      |         |         |
|                                         |        | Reporting  |             | Spike       | Source      |              | %REC    |      | RPD     |         |
| Analyte                                 | Result | Limit      | Units       | Level       | Result      | %REC         | Limits  | RPD  | Limit   | Note    |
| Batch EH51607 - Solvent Extraction (GC) |        |            |             |             |             |              |         |      |         |         |
| Blank (EH51607-BLK1)                    |        |            |             | Prepared: ( | )8/16/05 Ar | alyzed: 08   | 8/17/05 |      |         |         |
| Gasoline Range Organics C6-C12          | ND     | 10.0       | mg/kg wet   |             |             |              |         |      |         |         |
| Diesel Range Organics >C12-C35          | ND     | 10.0       | n           |             |             |              |         |      |         |         |
| Total Hydrocarbon C6-C35                | ND     | 10.0       | *           |             |             |              |         |      |         |         |
| Surrogate: 1-Chlorooctane               | 46.6   |            | mg/kg       | 50.0        |             | 93.2         | 70-130  |      |         |         |
| Surrogate: 1-Chlorooctadecane           | 60.0   |            | "           | 50.0        |             | 120          | 70-130  |      |         |         |
| LCS (EH51607-BS1)                       |        |            |             | Prepared: ( | )8/16/05 Ar | nalyzed: 08  | 8/17/05 |      |         |         |
| Gasoline Range Organics C6-C12          | 441    | 10.0       | mg/kg wet   | 500         |             | 88.2         | 75-125  |      |         |         |
| Diesel Range Organics >C12-C35          | 490    | 10.0       | n           | 500         |             | <b>98</b> .0 | 75-125  |      |         |         |
| Total Hydrocarbon C6-C35                | 931    | 10.0       | 11          | 1000        |             | 93.1         | 75-125  |      |         |         |
| Surrogate: 1-Chlorooctane               | 52.3   |            | mg/kg       | 50.0        |             | 105          | 70-130  |      |         |         |
| Surrogate: 1-Chlorooctadecane           | 60.9   |            | "           | 50.0        |             | 122          | 70-130  |      |         |         |
| Calibration Check (EH51607-CCV1)        |        |            |             | Prepared: ( | 08/16/05 Ar | nalyzed: 08  | 8/17/05 |      |         |         |
| Gasoline Range Organics C6-C12          | 414    |            | mg/kg       | 500         |             | 82.8         | 80-120  | _    |         |         |
| Diesel Range Organics >C12-C35          | 484    |            | н           | 500         |             | 96.8         | 80-120  |      |         |         |
| Total Hydrocarbon C6-C35                | 898    |            | "           | 1000        |             | 89.8         | 80-120  |      |         |         |
| Surrogate: 1-Chlorooctane               | 51.7   |            | n           | 50.0        |             | 103          | 0-200   |      |         |         |
| Surrogate: 1-Chlorooctadecane           | 57.5   |            | "           | 50.0        |             | 115          | 0-200   |      |         |         |
| Matrix Spike (EH51607-MS1)              | Sour   | ce: 5H1600 | 1-18        | Prepared: ( | )8/16/05 At | nalyzed: 08  | 8/17/05 |      |         |         |
| Gasoline Range Organics C6-C12          | 477    | 10.0       | mg/kg dry   | 535         | ND          | 89.2         | 75-125  |      |         |         |
| Diesel Range Organics >C12-C35          | 475    | 10.0       | "           | 535         | ND          | 88.8         | 75-125  |      |         |         |
| Total Hydrocarbon C6-C35                | 952    | 10.0       | n           | 1070        | ND          | 89.0         | 75-125  |      |         |         |
| Surrogate: 1-Chlorooctane               | 55.1   |            | mg/kg       | 50.0        |             | 110          | 70-130  |      |         |         |
| Surrogate: 1-Chlorooctadecane           | 61.4   |            | "           | 50.0        |             | 123          | 70-130  |      |         |         |
| Matrix Spike Dup (EH51607-MSD1)         | Sour   | ce: 5H1600 | l-18        | Prepared: ( | )8/16/05 Ar | nalyzed: 08  | 8/17/05 |      |         |         |
| Gasoline Range Organics C6-C12          | 425    | 10.0       | mg/kg dry   | 535         | ND          | 79.4         | 75-125  | 11.5 | 20      |         |
| Diesel Range Organics >C12-C35          | 460    | 10.0       | "           | 535         | ND          | 86.0         | 75-125  | 3.21 | 20      |         |
| Total Hydrocarbon C6-C35                | 885    | 10.0       | "           | 1070        | ND          | 82.7         | 75-125  | 7.29 | 20      |         |
| Surrogate: 1-Chlorooctane               | 54.0   |            | mg/kg       | 50.0        |             | 108          | 70-130  |      |         |         |
| Surrogate: 1-Chlorooctadecane           | 57.5   |            | "           | 50.0        |             | 115          | 70-130  |      |         |         |

Project: Shafter Lake 8 inch

Plains All American EH & S

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| Midland TX, 79706-4476            |        | Project Ma         |           |                |                  |             |                |                                       | 08/22/0      | 5 00.17 |
|-----------------------------------|--------|--------------------|-----------|----------------|------------------|-------------|----------------|---------------------------------------|--------------|---------|
|                                   |        | ganics by          |           | - •            |                  |             |                |                                       |              |         |
|                                   |        | Environn           | nental I  | ab of Ter      | kas              |             |                |                                       |              |         |
| Analyte                           | Result | Reporting<br>Limit | Units     | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD                                   | RPD<br>Limit | Note    |
| Batch EH51802 - EPA 5030C (GC)    |        |                    |           |                |                  |             |                |                                       |              |         |
| Blank (EH51802-BLK1)              |        |                    |           | Prepared: 0    | )8/17/05 A       | nalvzed: 08 | /18/05         |                                       |              |         |
| Benzene                           | ND     | 0.0250             | mg/kg wet | ·····          |                  |             |                | · · · · · · · · · · · · · · · · · · · |              |         |
| Toluene                           | ND     | 0.0250             | "         |                |                  |             |                |                                       |              |         |
| Ethylbenzene                      | ND     | 0.0250             | "         |                |                  |             |                |                                       |              |         |
| Xylene (p/m)                      | ND     | 0.0250             | *1        |                |                  |             |                |                                       |              | •       |
| Xylene (o)                        | ND     | 0.0250             | **        |                |                  |             |                |                                       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 105    |                    | ug/kg     | 100            |                  | 105         | 80-120         |                                       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 98.1   |                    | "         | 100            |                  | 98. I       | 80-120         |                                       |              |         |
| LCS (EH51802-BS1)                 |        |                    |           | Prepared &     | Analyzed:        | 08/17/05    |                |                                       |              |         |
| Benzene                           | 100    |                    | ug/kg     | 100            |                  | 100         | 80-120         |                                       |              |         |
| Toluene                           | 102    |                    | н         | 100            |                  | 102         | 80-120         |                                       |              |         |
| Ethylbenzene                      | 119    |                    | н         | 100            |                  | 119         | 80-120         |                                       |              |         |
| Xylene (p/m)                      | 230    |                    | 11        | 200            |                  | 115         | 80-120         |                                       |              |         |
| Xylene (0)                        | 118    |                    | "         | 100            |                  | 118         | 80-120         |                                       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 101    |                    | n         | 100            |                  | 101         | 80-120         |                                       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 117    |                    | "         | 100            |                  | 117         | 80-120         |                                       |              |         |
| Calibration Check (EH51802-CCV1)  |        |                    |           | Prepared: (    | 08/17/05 A       | nalyzed: 08 | /18/05         |                                       |              |         |
| Benzene                           | 90.0   |                    | ug/kg     | 100            |                  | 90.0        | 80-120         |                                       |              |         |
| Toluene                           | 88.8   |                    | 0         | 100            |                  | 88.8        | 80-120         |                                       |              |         |
| Ethylbenzene                      | 97.7   |                    | 11        | 100            |                  | 97.7        | 80-120         |                                       |              |         |
| Xylene (p/m)                      | 188    |                    | "         | 200            |                  | 94.0        | 80-120         |                                       |              |         |
| Xylene (o)                        | 100    |                    | и         | 100            |                  | 100         | 80-120         |                                       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 86.2   | <u></u>            | "         | 100            |                  | 86.2        | 0-200          |                                       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 92.1   |                    | "         | 100            |                  | 92.1        | 0-200          |                                       |              |         |
| Matrix Spike (EH51802-MS1)        | Sour   | ce: 5H16001        | -14       | Prepared: 0    | 8/17/05 A        | nalyzed: 08 | /18/05         |                                       |              |         |
| Benzene                           | 100    |                    | ug/kg     | 100            | ND               | 100         | 80-120         |                                       |              |         |
| Toluene                           | 100    |                    | 11        | 100            | ND               | 100         | 80-120         |                                       |              |         |
| Ethylbenzene                      | 115    |                    | "         | 100            | ND               | 115         | 80-120         |                                       |              |         |
| Xylene (p/m)                      | 221    |                    | u         | 200            | ND               | 110         | 80-120         |                                       |              |         |
| Xylene (o)                        | 116    |                    |           | 100            | ND               | 116         | 80-120         |                                       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 91.7   |                    | "         | 100            |                  | 91.7        | 80-120         |                                       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 114    |                    | "         | 100            |                  | 114         | 80-120         |                                       |              |         |

Project: Shafter Lake 8 inch

Project Number: 2003-00145

Plains All American EH & S 1301 S. County Road 1150

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Reported:

| Plains All American EH & S | Project: Shafter Lake 8 inch   | Fax: (432) 687-4914 |
|----------------------------|--------------------------------|---------------------|
| 1301 S. County Road 1150   | Project Number: 2003-00145     | Reported:           |
| Midland TX, 79706-4476     | Project Manager: Daniel Bryant | 08/22/05 08:17      |

## Organics by GC - Quality Control

## **Environmental Lab of Texas**

| Analyte                           | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD  | RPD<br>Limit | Notes |
|-----------------------------------|--------|--------------------|-------|----------------|------------------|-------------|----------------|------|--------------|-------|
| Batch EH51802 - EPA 5030C (GC)    |        |                    |       |                |                  |             |                |      |              |       |
| Matrix Spike Dup (EH51802-MSD1)   | Sou    | rce: 5H16001-14    | 4     | Prepared: 0    | 8/17/05 Ai       | nalyzed: 08 | /18/05         |      |              |       |
| Benzene                           | 93.5   |                    | ug/kg | 100            | ND               | 93.5        | 80-120         | 6.72 | 20           |       |
| Toluene                           | 93.6   |                    |       | 100            | ND               | 93.6        | 80-120         | 6.61 | 20           |       |
| Ethylbenzene                      | 102    |                    | н     | 100            | ND               | 102         | 80-120         | 12.0 | 20           |       |
| Xylene (p/m)                      | 196    |                    | ч     | 200            | ND               | 98.0        | 80-120         | 11.5 | 20           |       |
| Xylene (o)                        | 101    |                    | n     | 100            | ND               | 101         | 80-120         | 13.8 | 20           |       |
| Surrogate: a,a,a-Trifluorotoluene | 84.4   |                    | "     | 100            |                  | 84.4        | 80-120         |      |              |       |
| Surrogate: 4-Bromofluorobenzene   | 96.0   |                    | "     | 100            |                  | 96.0        | 80-120         |      |              |       |

## Batch EH51803 - EPA 5030C (GC)

| Blank (EH51803-BLK1)              |      |        |           | Prepared & Ana | lyzed: 08/18/05 |        |
|-----------------------------------|------|--------|-----------|----------------|-----------------|--------|
| Benzene                           | ND   | 0.0250 | mg/kg wet |                |                 |        |
| Toluene                           | ND   | 0.0250 | n         |                |                 |        |
| Ethylbenzene                      | ND   | 0.0250 |           |                |                 |        |
| Xylene (p/m)                      | ND   | 0.0250 | н         |                |                 |        |
| Xylene (o)                        | ND   | 0.0250 | "         |                |                 |        |
| Surrogate: a,a,a-Trifluorotoluene | 94.9 |        | ug/kg     | 100            | 94.9            | 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 85.7 |        | "         | 100            | <b>85</b> .7    | 80-120 |
| LCS (EH51803-BS1)                 |      |        |           | Prepared & Ana | lyzed: 08/18/05 |        |
| Benzene                           | 107  |        | ug/kg     | 100            | 107             | 80-120 |
| Toluene                           | 108  |        | и         | 100            | 108             | 80-120 |
| Ethylbenzene                      | 120  |        | u         | 100            | 120             | 80-120 |
| Xylene (p/m)                      | 240  |        | 11        | 200            | 120             | 80-120 |
| Xyiene (o)                        | 119  |        | "         | 100            | 119             | 80-120 |
| Surrogate: a,a,a-Trifluorotoluene | 100  |        | "         | 100            | 100             | 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 112  |        | "         | 100            | 112             | 80-120 |

Environmental Lab of Texas

| Midland 1X, 79706-4476 Project Manager: Daniel Bryant 08/22/05 08:17 | 1301 S. County Road 1150 | Project Number: 2003-00145     | <b>Reported:</b> |
|----------------------------------------------------------------------|--------------------------|--------------------------------|------------------|
|                                                                      | Midland TX, 79706-4476   | Project Manager: Daniel Bryant | 08/22/05 08:17   |

#### Environmental Lab of Texas

| Analyte                           | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC     | %REC<br>Limits | RPD   | RPD<br>Limit | Notes   |
|-----------------------------------|--------|--------------------|-------|----------------|------------------|----------|----------------|-------|--------------|---------|
| Batch EH51803 - EPA 5030C (GC)    |        |                    |       |                |                  |          |                |       |              | <u></u> |
| Calibration Check (EH51803-CCV1)  |        |                    |       | Prepared &     | k Analyzed:      | 08/18/05 |                |       |              |         |
| Benzene                           | 85.1   | ••••••             | ug/kg | 100            |                  | 85.1     | 80-120         |       |              |         |
| Toluene                           | 83.8   |                    | н     | 100            |                  | 83.8     | 80-120         |       |              |         |
| Ethylbenzene                      | 90.3   |                    | "     | 100            |                  | 90.3     | 80-120         |       |              |         |
| Xylene (p/m)                      | 174    |                    | "     | 200            |                  | 87.0     | 80-120         |       |              |         |
| Xylene (o)                        | 90.1   |                    | н     | 100            |                  | 90.1     | 80-120         |       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 83.8   |                    | "     | 100            |                  | 83.8     | 0-200          |       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 84.5   |                    | "     | 100            |                  | 84.5     | 0-200          |       |              |         |
| Matrix Spike (EH51803-MS1)        | Sour   | -ce: 5H16001-      | -15   | Prepared &     | k Analyzed:      | 08/18/05 |                |       |              |         |
| Benzene                           | 91.7   |                    | ug/kg | 100            | ND               | 91.7     | 80-120         |       |              |         |
| Toluene                           | 93.6   |                    |       | 100            | ND               | 93.6     | 80-120         |       |              |         |
| Ethylbenzene                      | 104    |                    | "     | 100            | ND               | 104      | 80-120         |       |              |         |
| Xylene (p/m)                      | 202    |                    | "     | 200            | ND               | 101      | 80-120         |       |              |         |
| Xylene (0)                        | 101    |                    | 11    | 100            | ND               | 101      | 80-120         |       |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 92.8   |                    | "     | 100            | ····             | 92.8     | 80-120         |       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 98.8   |                    | "     | 100            | •                | 98.8     | 80-120         |       |              |         |
| Matrix Spike Dup (EH51803-MSD1)   | Sour   | -ce: 5H16001-      | -15   | Prepared &     | k Analyzed:      | 08/18/05 |                |       |              |         |
| Benzene                           | 90.1   |                    | ug/kg | 100            | ND               | 90.1     | 80-120         | 1.76  | 20           |         |
| Tohuene                           | 90.9   |                    | "     | 100            | ND               | 90.9     | 80-120         | 2.93  | 20           |         |
| Ethylbenzene                      | 102    |                    |       | 100            | ND               | 102      | 80-120         | 1.94  | 20           |         |
| Xylene (p/m)                      | 199    |                    | "     | 200            | ND               | 99.5     | 80-120         | 1.50  | 20           |         |
| Xylene (o)                        | 100    |                    |       | 100            | ND               | 100      | 80-120         | 0.995 | 20           |         |
| Surrogate: a,a,a-Trifluorotoluene | 88.0   |                    | "     | 100            |                  | 88.0     | 80-120         |       |              |         |
| Surrogate: 4-Bromofluorobenzene   | 95.8   |                    | "     | 100            |                  | 95.8     | 80-120         |       |              |         |

Environmental Lab of Texas

| Plains All American EH & S | Project: Shafter Lake 8 inch   |   | Fax: (432) 687-4914 |
|----------------------------|--------------------------------|---|---------------------|
| 1301 S. County Road 1150   | Project Number: 2003-00145     | 、 | Reported:           |
| Midland TX, 79706-4476     | Project Manager: Daniel Bryant |   | 08/22/05 08:17      |
|                            |                                |   |                     |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## **Environmental Lab of Texas**

| Analyte                                | Result | Reporting<br>Límit | Units | Spike<br>Level | Source<br>Result    | %REC         | %REC<br>Limits | RPD  | RPD<br>Limit | Notes |
|----------------------------------------|--------|--------------------|-------|----------------|---------------------|--------------|----------------|------|--------------|-------|
| Batch EH51703 - General Preparation (P | rep)   |                    |       |                |                     |              |                |      |              |       |
| Blank (EH51703-BLK1)                   |        |                    |       | Prepared: (    | )8/16/05 <i>A</i>   | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                               | 100    |                    | %     | · · · · · ·    |                     |              | ····           |      |              |       |
| Duplicate (EH51703-DUP1)               | Sou    | rce: 5H16001-      | 01    | Prepared: (    | ) <b>8</b> /16/05 A | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                               | 85.3   |                    | %     |                | 86.7                |              |                | 1.63 | 20           |       |
| Duplicate (EH51703-DUP2)               | Sou    | rce: 5H16002-      | 03    | Prepared: (    | )8/16/05 A          | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                               | 91.3   |                    | %     |                | 87.6                |              |                | 4.14 | 20           |       |

Environmental Lab of Texas

| 1301 S. C | l American EH & S<br>County Road 1150<br>TX, 79706-4476 | Project:<br>Project Number:<br>Project Manager: |                               | Fax: (432) 687-4914<br><b>Reported:</b><br>08/22/05 08:17 |
|-----------|---------------------------------------------------------|-------------------------------------------------|-------------------------------|-----------------------------------------------------------|
|           |                                                         | Notes and De                                    |                               |                                                           |
| J         | Detected but below the Reporting L                      | imit; therefore, result is an estimated         | d concentration (CLP J-Flag). |                                                           |
| DET       | Analyte DETECTED                                        |                                                 |                               |                                                           |
| ND        | Analyte NOT DETECTED at or above t                      | he reporting limit                              |                               |                                                           |
| NR        | Not Reported                                            |                                                 |                               |                                                           |
| lry       | 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 8/22/2005 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.

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Environmental Lab of Texas

|                                                                                                           | EN                                  | VIRO.   | CURINN             | ENVIRONMENTAL GEOTECHINICA                                                                                                                    | HNICAL                       | and a second             | 0.0N         | STRU C                                              | TION                              | NV11                                                                                                 | AND CONSTRUCTION MATERIALS SERVICES         | ICES                                                                                                          | CHAIN OF CUSTODY RECORD                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------|-------------------------------------|---------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------|--------------|-----------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                           | E                                   | $ \cup$ |                    | labor                                                                                                                                         | aboratory                    | E'LAT                    | <u>ト</u>     |                                                     |                                   |                                                                                                      | Analysis<br>Requested                       |                                                                                                               | Lab use only<br>Due Date:                                                                                                                                       |
| Consultin                                                                                                 | Consulting Engineers & Scientists   | ers &   |                    |                                                                                                                                               | SSS:                         |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | Temp. of coolens<br>when received (C*); Q <                                                                                                                     |
| Office Location Midlend                                                                                   | n. Mid                              | lend.   |                    | Contact:                                                                                                                                      | ij                           |                          |              | -                                                   |                                   |                                                                                                      | ****                                        |                                                                                                               | <u></u>                                                                                                                                                         |
| Project Manager Shewy & Smith                                                                             | ad She                              | ALM     | Smith              | PO/SO #:                                                                                                                                      |                              | 2003-00145               | 2014         | L                                                   |                                   |                                                                                                      |                                             |                                                                                                               | Page 01 01                                                                                                                                                      |
| Sampler's Name                                                                                            |                                     |         |                    | Sample                                                                                                                                        | ğ                            | ture                     |              |                                                     |                                   |                                                                                                      | P                                           |                                                                                                               |                                                                                                                                                                 |
|                                                                                                           | Sherring                            | Smith   | ¥                  | TA                                                                                                                                            | Shenn                        | And                      | ھ            |                                                     |                                   |                                                                                                      | 872                                         |                                                                                                               |                                                                                                                                                                 |
| Proj. No.                                                                                                 |                                     | Projec  | Project Name       |                                                                                                                                               |                              |                          |              | No/Type of Containers                               | x Cont                            | ainers                                                                                               | 708<br>708                                  |                                                                                                               |                                                                                                                                                                 |
| 9405717                                                                                                   | -                                   | 25      | Shuffer L          | 1.Ke 8''                                                                                                                                      |                              |                          |              | 1                                                   | 0                                 |                                                                                                      |                                             |                                                                                                               |                                                                                                                                                                 |
| Matrix Date                                                                                               | Time                                | OoEo    | a~G<br>bootii      | Identitying Marks of Sample(s)                                                                                                                |                              | Start<br>Depth           | Cepth<br>End | VOA AG                                              | ц 250<br>Ц                        | Q4<br>0 1                                                                                            | 210                                         |                                                                                                               | Lab Sample ID (Lab Use Only)                                                                                                                                    |
| 5 81,5105                                                                                                 | 845                                 | +       | +                  | Est NW-1                                                                                                                                      |                              |                          |              | )<br>†                                              |                                   | 7                                                                                                    | + +                                         |                                                                                                               | 5-116001 -01                                                                                                                                                    |
| 7                                                                                                         | 0<br>%                              |         | h                  | rest ward                                                                                                                                     |                              | <br> <br>                |              |                                                     |                                   | C                                                                                                    | ~                                           |                                                                                                               | -06.                                                                                                                                                            |
|                                                                                                           | 855                                 |         | 1 Gest             | Gest SW-1                                                                                                                                     |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | -03                                                                                                                                                             |
|                                                                                                           | 900                                 |         | / Gest             | Gest Ew-1                                                                                                                                     |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | 40-                                                                                                                                                             |
|                                                                                                           | 905                                 |         | East               | EALT BH-1                                                                                                                                     |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | ß                                                                                                                                                               |
|                                                                                                           | 1Hb                                 |         | K-1                |                                                                                                                                               |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | 3<br>2<br>2<br>3                                                                                                                                                |
|                                                                                                           | 345                                 |         | 2-2                |                                                                                                                                               |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | \$                                                                                                                                                              |
|                                                                                                           | 948                                 |         | 6-3                |                                                                                                                                               |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | 80                                                                                                                                                              |
|                                                                                                           | 953                                 |         | R-4                |                                                                                                                                               |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               | 5                                                                                                                                                               |
| ~ ~                                                                                                       | 95                                  |         | V K-5              |                                                                                                                                               |                              |                          |              |                                                     |                                   | >                                                                                                    | →<br>→                                      |                                                                                                               | P<br>T                                                                                                                                                          |
| Turn around time                                                                                          | Normal                              | mal     | 20%                |                                                                                                                                               | D 100% Rust                  | 4                        |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               |                                                                                                                                                                 |
| Relinguished by (Signature)                                                                               | (Signature)                         |         | Date:              | ر Time:<br>250                                                                                                                                | Receive                      | Received by: (Signature) | Signatu      | (ə                                                  |                                   | Date:                                                                                                | Time:                                       | NOTES:                                                                                                        | Please ( Desire) Burgart                                                                                                                                        |
| Relinquished by (Signature)                                                                               | (Signature)                         |         | Date:              | Time:                                                                                                                                         | Receive                      | Received by: (Signature) | Signatu      | (e)                                                 |                                   | Date:                                                                                                | Time:                                       | · · · · · · · · · · · · · · · · · · ·                                                                         |                                                                                                                                                                 |
| Relinquished by (Signature)                                                                               | (Signature)                         |         | Date:              | Time:                                                                                                                                         | Receive                      | Received by: (Signature) | Signatu      | (e)                                                 |                                   | Date:                                                                                                | Time:                                       |                                                                                                               |                                                                                                                                                                 |
| Relinquished by (Signature)                                                                               | (Signature)                         |         | Date:              | Date: Time: Proceived by: (Signatu                                                                                                            | Proceive                     | N X                      | 1000         | er le                                               |                                   | Collector Collector                                                                                  | S S S                                       | der,                                                                                                          |                                                                                                                                                                 |
| Matrix WV<br>Container VO                                                                                 | WW - Wastewater<br>VOA - 40 mi viat |         | W - Wai<br>A/G - A | ter S - Soil<br>mber / Or Glass                                                                                                               | SD - Soli<br>Liter           | ظ<br>25. '-'             | D ml - Gl    | L - Liquid A - Air Bag<br>250 ml - Glass wide mouth | Bag                               | ł                                                                                                    | C - Charcoal tube<br>P/O - Plastic or other | SL - studge 0 - Oil                                                                                           |                                                                                                                                                                 |
| Houston Office<br>11555 Clay Road, Suite 100<br>Houston, Texas 77043<br>(713) 690-8989 Fax (713) 690-8787 | ite 100<br>3<br>(713) 690-878       | 1       | 0800               | Datase Office           8901 Carpenter Freeway, Suite 100           Datlas, Texus 75247           (214) 630-1010           Fax (214) 630-1010 | way. Suite 1<br>x (214) 630- | 100                      |              | Rort Wor<br>2601 Grav<br>Fort Wort<br>(\$17) 268    | rth Offic<br>vel Driv<br>h. Texas | Rort Worth Office<br>2601 Gravel Dure<br>Fon Worth, Taxas 76118<br>(817) 268-8600 Fax (817) 268-8602 | 268-8602                                    | Austin Office<br>5307 Industrial Oaks Blvd. # )60<br>Austin. Texas 78735<br>(512) 442-1122 Fax (512) 442-1181 | Atlanta Office           0         2455 Preniare Parkway, Suije C           2455 Dujutt, Georgia 30097           1[8]         (770) 623-0755 Fax (770) 623-0628 |
|                                                                                                           |                                     |         |                    |                                                                                                                                               |                              |                          |              |                                                     |                                   |                                                                                                      |                                             |                                                                                                               |                                                                                                                                                                 |

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|                                                                                                           | EN                                           | VIRO     | IN IINN      | ENVIRONMENTAL GEORGIANICA                                                                                    |                              | QSAN -                   | NOU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | STRUC                                                 | NOIL                               | NATH                                                                                 | ASD CONSTRUCTION MATHRIALS SERVICES |                                                                                                                | CHAIN OF CUSTODY RECORD                                                                                            |
|-----------------------------------------------------------------------------------------------------------|----------------------------------------------|----------|--------------|--------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| l.<br>P                                                                                                   | B                                            | $ \cup$  |              |                                                                                                              | l aboratory:                 | C/ A7                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    | ₹Œ                                                                                   | Analysis<br>Reguested               |                                                                                                                | Due Date:                                                                                                          |
| Consulti                                                                                                  | <b>Consulting Engineers &amp; Scientists</b> | ers &    | Scienti      |                                                                                                              | SSS:                         | 1 1                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | Temp. of coolers<br>when received (C <sup>o</sup> ): <i>B</i> , <i>C</i>                                           |
| Office Location Mid/ and                                                                                  | on Mic                                       | ALCO     | pu           |                                                                                                              | ्रद                          |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | 4 C                                                                                                                |
| Project Manager Shawa Sm.X                                                                                | ader She                                     | ALLA     | Saik         | PO/SO                                                                                                        | PO/SO #: 20x 3               | Ce 3-                    | 54100-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                       |                                    |                                                                                      |                                     |                                                                                                                | Lage                                                                                                               |
| Sampler's Name                                                                                            | 3                                            |          |              | Sample                                                                                                       | Sampler's Signature          | ture                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      | 200                                 |                                                                                                                |                                                                                                                    |
| S.                                                                                                        | Sharre Smith                                 | A        |              | ~~                                                                                                           | Dan                          | 4                        | g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                       |                                    |                                                                                      | 578                                 |                                                                                                                |                                                                                                                    |
| Proj. No.<br>9405717                                                                                      | 4                                            | Proje    | Project Name | 1.4. 8"                                                                                                      |                              |                          | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No/Type of Containers                                 | of Contai                          | Ders                                                                                 | 729-                                |                                                                                                                |                                                                                                                    |
| Matrix Date                                                                                               | Time                                         | COEC     | () - 61      | lying Mark                                                                                                   |                              | Start<br>Start           | <<br>Cepth<br>End                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | VOA<br>A =                                            | AG 250                             | Pi0                                                                                  | Tet CI                              |                                                                                                                | رالعلم العلم ا     |
| 5 8/15/6S                                                                                                 | 8                                            | 1        | · •          | R. 6                                                                                                         |                              | - <del> </del><br>       | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                       |                                    | *                                                                                    | ×                                   |                                                                                                                | 11- 1901HG                                                                                                         |
| 1 -                                                                                                       | 1004                                         |          | <u>}</u>     | 4                                                                                                            |                              |                          | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                       |                                    | 7                                                                                    |                                     |                                                                                                                | 12                                                                                                                 |
|                                                                                                           | Fool                                         |          | 6-8          | 20                                                                                                           |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | 13                                                                                                                 |
|                                                                                                           | 1511                                         |          | 100          | ulest wurl                                                                                                   |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | 4                                                                                                                  |
|                                                                                                           | 1513                                         |          | the state    | WEST NW-L                                                                                                    |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | Ŕ                                                                                                                  |
|                                                                                                           | 1514                                         |          | ME           | wert sw-r                                                                                                    |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | 9]                                                                                                                 |
|                                                                                                           | ا 516                                        | !        | Mes          | Nest BH 1                                                                                                    |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                | T                                                                                                                  |
| +                                                                                                         | 1S17                                         |          |              | 1-W3 tcan                                                                                                    |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    | 7                                                                                    | 1                                   |                                                                                                                | 9                                                                                                                  |
|                                                                                                           |                                              |          |              |                                                                                                              |                              |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                |                                                                                                                    |
| Turn around time                                                                                          | a Wormal                                     | Inst     | 150          | 0 50% Rush 01                                                                                                | D 100% Rush                  | -                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                                    |                                                                                      |                                     |                                                                                                                |                                                                                                                    |
| Relinguished by (Signature)                                                                               | (Signature)                                  |          | Date:        | Time:                                                                                                        | Receive                      | Received by: (Signature) | Signatu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (0                                                    |                                    | Date:                                                                                | Time:                               | NOTES: Draine Bryant                                                                                           | iel Bruent                                                                                                         |
| Relinquished by (Signature)                                                                               | (Signature)                                  |          | Date:        |                                                                                                              | Receive                      | Received by: (Signature) | Signatul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (a)                                                   | <b>∤</b><br>                       | Date:                                                                                | Time:                               |                                                                                                                |                                                                                                                    |
| Relinquished by (Signature)                                                                               | (Signature)                                  |          | Date:        | Time:                                                                                                        | Receive                      | Received by: (Signature) | Signatui                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (e                                                    |                                    | Date:                                                                                | Time:                               |                                                                                                                |                                                                                                                    |
| uished t                                                                                                  | (Signature)                                  |          | Date:        | Date: Time: Received by: (Signature)                                                                         | Peeiv<br>V                   | DA DA                    | international supervision of the | (a)                                                   |                                    | Cate,<br>Silula                                                                      | 0.20                                |                                                                                                                |                                                                                                                    |
| Matrix W<br>Container V                                                                                   | WW - Wastewater<br>VOA - 40 ml vial          | ter<br>1 | W-W<br>AG    | ater S - Soil<br>Amber / Or Glass                                                                            | SD - Soli<br>1 Liter         | d L.<br>25               | D ml G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | L - Liquid ()A - Air Bag<br>250 ml - Glass wide mouth | r Bag<br>mouth                     | 5-0<br>10-0<br>10-0                                                                  | ube<br>or other                     | SL - studge 0 - Oil                                                                                            |                                                                                                                    |
| Hoaston Office<br>11555 Clay Road, Snite 100<br>Houston, Texas 77043<br>(713) 690-8989 Fax (713) 690-8787 | inite 100<br>43<br>x (713) 690-876           | \$       |              | Daths Office<br>890) Carpener Freeway. Suite 100<br>Dalles, Texas 75247<br>(214) 630-1010 Fax (214) 630-7070 | way. Suite 1<br>x (214) 630- | 00)<br>0107-             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Fort Wor<br>2601 Gra<br>Fort Wort<br>(817) 268        | th Office<br>wel Drive<br>h. Texas | Fort Worth Office<br>2401 Gravel Drive<br>Fort Worth, Texas 76) 18<br>(817) 268-8602 |                                     | Austin Office<br>5317 Industrial Galas Blvd. # 160<br>Austin, Texas 78/35<br>(512) 442-1122 Fax (512) 442-1181 | Atlanta Office<br>2855 Premiere Parkway, Suite C<br>Duluth, Georgrie 30097<br>11 (770) 623-0755 Fax (770) 623-9628 |

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

| Client:    | Plains  |      |
|------------|---------|------|
| Date/Time: | B/16/05 | 8:50 |
| Order #:   | 5H16001 |      |
| Initials:  | CR      |      |

## Sample Receipt Checklist

| Temperature of container/cooler?                          | Yes  | No | 6.5                                    | C   |
|-----------------------------------------------------------|------|----|----------------------------------------|-----|
| Shipping container/cooler in good condition?              | YES  | No |                                        |     |
| Custody Seals intact on shipping container/ccoler?        | Yes  | No | <not presen<="" td=""><td>₽</td></not> | ₽   |
| Custody Seals intact on sample bottles?                   | (es  | No | Not presen                             | t   |
| Chain of custody present?                                 | (es) | No |                                        |     |
| Sample Instructions complete on Chain of Custody?         | Yes  | No |                                        |     |
| Chain of Custody signed when relinquished and received?   | Yes  | No |                                        |     |
| Chain of custody agrees with sample label(s)              | Yes  | No |                                        |     |
| Container labels legible and intact?                      | Yes  | No |                                        |     |
| Sample Matrix and properties same as on chain of custody? | res  | No |                                        |     |
| Samples in proper container/bottle?                       | Yag  | No |                                        |     |
| Samples properly preserved?                               | ( Co | No |                                        |     |
| Sample bottles intact?                                    | Yes  | No |                                        |     |
| Preservations documented on Chain of Custody?             | Xas  | No |                                        |     |
| Containers documented on Chain of Custody?                | Xes  | No |                                        |     |
| Sufficient sample amount for indicated test?              | ¥36  | No |                                        |     |
| All samples received within sufficient hold time?         | Yes  | No |                                        |     |
| VOC samples have zero headspace?                          | Yes  | No | Not Applicat                           | ble |

Other observations:

| Contact Person:<br>Regarding: | Variance Documentation:<br>Date/Time: | _ Contacted by: |
|-------------------------------|---------------------------------------|-----------------|
| Corrective Action Taken:      | · · · · · · · · · · · · · · · · · · · |                 |
|                               |                                       |                 |



# Analytical Report

Prepared for:

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

Project: Shafter Lake 8 inch Project Number: 2003-00145 Location: None Given

Lab Order Number: 5H17001

Report Date: 08/22/05

| Plains All American EH & S | Project: Shafter Lake 8 inch   | Fax: (432) 687-4914 |
|----------------------------|--------------------------------|---------------------|
| 1301 S. County Road 1150   | Project Number: 2003-00145     | Reported:           |
| Midland TX, 79706-4476     | Project Manager: Daniel Bryant | 08/22/05 08:23      |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| SP-1      | 5H17001-01    | Soil   | 08/16/05 14:15 | 08/17/05 08:35 |
| SP-2      | 5H17001-02    | Soil   | 08/16/05 14:20 | 08/17/05 08:35 |
| SP-3      | 5H17001-03    | Soil   | 08/16/05 14:25 | 08/17/05 08:35 |
| SP-4      | 5H17001-04    | Soil   | 08/16/05 14:35 | 08/17/05 08:35 |

## Organics by GC

## **Environmental Lab of Texas**

|                                   |            | Reporting |           |          |         |          |          |           |      |
|-----------------------------------|------------|-----------|-----------|----------|---------|----------|----------|-----------|------|
| Analyte                           | Result     | Limit     | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Note |
| SP-1 (5H17001-01) Soil            |            |           |           |          |         |          |          |           |      |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |      |
| Toluene                           | J [0.0191] | 0.0250    | n         | 11       |         |          | "        | n         |      |
| Ethylbenzene                      | 0.0373     | 0.0250    |           | "        |         |          | U        | п         |      |
| Xylene (p/m)                      | 0.0625     | 0.0250    |           | "        | n       | н        | 11       | 11        |      |
| Xylene (o)                        | 0.0379     | 0.0250    |           | 11       | v       | n        |          |           |      |
| Surrogate: a,a,a-Trifluorotoluene |            | 95.3 %    | 80-       | 120      | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |            | 96.4 %    | 80-       | 120      | "       | "        | 11       | "         |      |
| Gasoline Range Organics C6-C12    | 176        | 10.0      | mg/kg dry | 1        | EH51717 | 08/17/05 | 08/17/05 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | 1090       | 10.0      | "         | u        |         | H        | н        | 11        |      |
| Total Hydrocarbon C6-C35          | 1270       | 10.0      |           | n        |         | IJ       |          |           |      |
| Surrogate: 1-Chlorooctane         |            | 86.0 %    | 70-       | 130      | "       | "        | н        | и         |      |
| Surrogate: 1-Chlorooctadecane     |            | 108 %     | 70-       | 130      | n       | IJ       | "        | "         |      |
| SP-2 (5H17001-02) Soil            |            |           |           |          |         |          |          |           |      |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |      |
| Toluene                           | J [0.0152] | 0.0250    | n         |          | "       | "        |          |           |      |
| Ethylbenzene                      | 0.0274     | 0.0250    | "         |          |         | u        | "        | 12        |      |
| Xylene (p/m)                      | 0.0552     | 0.0250    | "         | п        | "       | u        | u        |           |      |
| Xylene (0)                        | 0.0347     | 0.0250    | "         | 11       | u       | "        | "        | **        |      |
| Surrogate: a,a,a-Trifluorotoluene |            | 87.0 %    | 80-       | 120      | "       | "        | "        | 11        |      |
| Surrogate: 4-Bromofluorobenzene   |            | 90.0 %    | 80-       | 120      | "       | 0        | "        | π         |      |
| Gasoline Range Organics C6-C12    | 56.7       | 10.0      | mg/kg dry | 1        | EH51717 | 08/17/05 | 08/17/05 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | 346        | 10.0      | *         | "        | "       |          | n        | 17        |      |
| Total Hydrocarbon C6-C35          | 403        | 10.0      | 11        |          | •       | н        | *        | •         |      |
| Surrogate: 1-Chlorooctane         | ·          | 80.8 %    | 70-       | 130      | "       | "        | "        | "         |      |
| Surrogate: 1-Chlorooctadecane     |            | 105 %     | 70-       | 130      | "       | "        | "        | "         |      |
| SP-3 (5H17001-03) Soil            |            |           |           |          |         |          |          |           |      |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B |      |
| Toluene                           | ND         | 0.0250    | "         | "        | н       | "        | n        | 8         |      |
| Ethylbenzene                      | ND         | 0.0250    |           | 11       | .,      | 11       | *        | п         |      |
| Xylene (p/m)                      | 0.0284     | 0.0250    |           | и        | n       | "        | "        |           |      |
| Xylene (o)                        | ND         | 0.0250    | P         | 11       | u       | "        | 11       | н         |      |
| Surrogate: a,a,a-Trifluorotoluene |            | 88.5 %    | 80-       | 120      | "       | "        | "        | "         |      |
| Surrogate: 4-Bromofluorobenzene   |            | 91.9 %    | 80-       | 120      | "       | "        | "        | "         |      |
| Gasoline Range Organics C6-C12    | 61.5       | 10.0      | mg/kg dry | 1        | EH51717 | 08/17/05 | 08/17/05 | EPA 8015M |      |
| Diesel Range Organics >C12-C35    | 444        | 10.0      |           | "        |         | "        | "        | u         |      |
| Total Hydrocarbon C6-C35          | 505        | 10.0      | "         | "        |         | u        | "        | u         |      |

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 2 of 9

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |         | Project N          | Project: Sha<br>umber: 200<br>anager: Dar | 3-00145  |         |          |          | Fax: (432) 6<br><b>Repor</b><br>08/22/05 | ted:  |
|----------------------------------------------------------------------------------|---------|--------------------|-------------------------------------------|----------|---------|----------|----------|------------------------------------------|-------|
|                                                                                  | <u></u> |                    | ganics b                                  | y GC     |         |          |          |                                          |       |
| Analyte                                                                          | Result  | Reporting<br>Limit | Units                                     | Dilution | Batch   | Prepared | Analyzed | Method                                   | Notes |
| SP-3 (5H17001-03) Soil                                                           |         |                    |                                           |          |         |          |          |                                          |       |
| Surrogate: 1-Chlorooctane                                                        |         | 81.4 %             | 70-1                                      | 30       | EH51717 | 08/17/05 | 08/17/05 | EPA 8015M                                |       |
| Surrogate: 1-Chlorooctadecane                                                    |         | 107 %              | 70-1                                      | 30       | "       | "        | "        | n                                        |       |
| SP-4 (5H17001-04) Soil                                                           |         |                    |                                           |          |         |          |          |                                          |       |
| Benzene                                                                          | ND      | 0.0250             | mg/kg dry                                 | 25       | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B                                |       |
| Toluene                                                                          | 0.0315  | 0.0250             | n                                         | e1       | *       | u        | "        | *                                        |       |
| Ethylbenzene                                                                     | 0.0464  | 0.0250             | **                                        | "        | n       | u        | 11       | **                                       |       |
| Xylene (p/m)                                                                     | 0.0831  | 0.0250             | •                                         |          | n       | н        |          | "                                        |       |
| Xylene (0)                                                                       | 0.0866  | 0.0250             |                                           | "        | u       | U.       | н        | "                                        |       |
| Surrogate: a,a,a-Trifluorotoluene                                                |         | 91.8 %             | 80-1                                      | 20       | "       | n        | n        | "                                        |       |
| Surrogate: 4-Bromofluorobenzene                                                  |         | 93.9 %             | 80-1                                      | 20       | "       | "        | "        | n                                        |       |
| Gasoline Range Organics C6-C12                                                   | 191     | 10.0               | mg/kg dry                                 | 1        | EH51717 | 08/17/05 | 08/17/05 | EPA 8015M                                |       |
| Diesel Range Organics >C12-C35                                                   | 1120    | 10.0               | *                                         |          | "       | "        | н        | "                                        |       |
| Total Hydrocarbon C6-C35                                                         | 1310    | 10.0               |                                           | *        |         | "        | t?       | **                                       |       |
| Surrogate: 1-Chlorooctane                                                        |         | 84.2 %             | 70-1                                      | 30       | "       | n        | "        | "                                        |       |
| Surrogate: I-Chlorooctadecane                                                    |         | 103 %              | 70-1                                      | 30       | "       | "        | "        | "                                        |       |

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.

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## General Chemistry Parameters by EPA / Standard Methods

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| Analyte                | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| SP-1 (5H17001-01) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture             | 3.4    | 0.1                | %     | 1        | EH51801 | 08/17/05 | 08/18/05 | % calculation |       |
| SP-2 (5H17001-02) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture             | 25.1   | 0.1                | %     | 1        | EH51801 | 08/17/05 | 08/18/05 | % calculation |       |
| SP-3 (5H17001-03) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture             | 8.7    | 0.1                | %     | 1        | EH51801 | 08/17/05 | 08/18/05 | % calculation |       |
| SP-4 (5H17001-04) Soil |        |                    |       |          |         |          |          |               |       |
| % Moisture             | 4.6    | 0.1                | %     | 1        | EH51801 | 08/17/05 | 08/18/05 | % calculation |       |

Environmental Lab of Texas

| Plains All American EH & S             |        | F                  | Project: Sha | fter Lake 8    | inch             |            |                |       | Fax: (432)   | 687-491 |
|----------------------------------------|--------|--------------------|--------------|----------------|------------------|------------|----------------|-------|--------------|---------|
| 1301 S. County Road 1150               |        | Project N          | umber: 200   | 3-00145        |                  |            |                |       | Repo         | rted :  |
| Midland TX, 79706-4476                 |        | Project Ma         | anager: Dar  | niel Bryant    |                  |            |                |       | 08/22/0      | 5 08:23 |
|                                        | 0      | rganics by         | GC - Q       | uality Co      | ontrol           |            |                |       |              |         |
|                                        |        | Environ            | nental L     | ab of Te       | kas              |            |                |       |              |         |
| Analyte                                | Result | Reporting<br>Limit | Units        | Spike<br>Level | Source<br>Result | %REC       | %REC<br>Limits | RPD   | RPD<br>Limit | Notes   |
| Batch EH51717 - Solvent Extraction (GC | )      |                    |              |                |                  |            |                |       |              |         |
| Blank (EH51717-BLK1)                   |        |                    |              | Prepared &     | Analyzed:        | 08/17/05   |                |       |              |         |
| 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               | Ħ            |                |                  |            |                |       |              |         |
| Surrogate: 1-Chlorooctane              | 42.9   |                    | mg/kg        | 50.0           |                  | 85.8       | 70-130         |       |              |         |
| Surrogate: 1-Chlorooctadecane          | 45.5   |                    | "            | 50.0           |                  | 91.0       | 70-130         |       |              |         |
| LCS (EH51717-BS1)                      |        |                    |              | Prepared 8     | k Analyzed       | 08/17/05   |                |       |              |         |
| Gasoline Range Organics C6-C12         | 461    | 10.0               | mg/kg wet    | 500            |                  | 92.2       | 75-125         | 1     |              |         |
| Diesel Range Organics >C12-C35         | 488    | 10.0               | н            | 500            |                  | 97.6       | 75-125         |       |              |         |
| Total Hydrocarbon C6-C35               | 950    | 10.0               | "            | 1000           |                  | 95.0       | 75-125         |       |              |         |
| Surrogate: 1-Chlorooctane              | 55.5   |                    | mg/kg        | 50.0           |                  | 111        | 70-130         |       |              |         |
| Surrogate: 1-Chlorooctadecane          | 63.5   |                    | "            | 50.0           |                  | 127        | 70-130         |       |              |         |
| Calibration Check (EH51717-CCV1)       |        |                    |              | Prepared &     | k Analyzed       | : 08/17/05 |                |       |              |         |
| Gasoline Range Organics C6-C12         | 442    |                    | mg/kg        | 500            | ł.               | 88.4       | 80-120         |       |              |         |
| Diesel Range Organics >C12-C35         | 458    |                    | и            | 500            |                  | 91.6       | 80-120         |       |              |         |
| Total Hydrocarbon C6-C35               | 900    |                    | "            | 1000           |                  | 90.0       | 80-120         |       |              |         |
| Surrogate: 1-Chlorooctane              | 46.4   |                    | 'n           | 50.0           |                  | 92.8       | 0-200          |       |              |         |
| Surrogate: 1-Chlorooctadecane          | 52.7   |                    | "            | 50.0           |                  | 105        | 0-200          |       |              |         |
| Matrix Spike (EH51717-MS1)             | Sou    | irce: 5H1700       | 1-02         | Prepared &     | k Analyzed       | 08/17/05   |                |       |              |         |
| Gasoline Range Organics C6-C12         | 749    | 10.0               | mg/kg dry    | 668            | 56.7             | 104        | 75-125         |       |              |         |
| Diesel Range Organics >C12-C35         | 1160   | 10.0               | 11           | 668            | 346              | 122        | 75-125         |       |              |         |
| Total Hydrocarbon C6-C35               | 1910   | 10.0               | п            | 1340           | 403              | 112        | 75-125         |       |              |         |
| Surrogate: 1-Chlorooctane              | 47.7   |                    | mg/kg        | 50.0           |                  | 95.4       | 70-130         |       |              | ~       |
| Surrogate: 1-Chlorooctadecane          | 53.2   |                    | "            | 50.0           |                  | 106        | 70-130         |       |              |         |
| Matrix Spike Dup (EH51717-MSD1)        | Sou    | irce: 5H1700       | 1-02         | Prepared &     | 2 Analyzed       | 08/17/05   |                |       |              |         |
| Gasoline Range Organics C6-C12         | 738    | 10.0               | mg/kg dry    | 668            | 56.7             | 102        | 75-125         | 1.48  | 20           |         |
| Diesel Range Organics >C12-C35         | 1150   | 10.0               | *            | 668            | 346              | 120        | 75-125         | 0.866 | 20           |         |
| Total Hydrocarbon C6-C35               | 1890   | 10.0               | "            | 1340           | 403              | 111        | 75-125         | 1.05  | 20           |         |
| Surrogate: 1-Chlorooctane              | 47.5   |                    | mg/kg        | 50.0           |                  | 95.0       | 70-130         |       |              |         |
| Surrogate: 1-Chlorooctadecane          | 53.4   |                    | "            | 50.0           |                  | 107        | 70-130         |       |              |         |

Reported: 08/22/05 08:23

## **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

| Analysic         Result         Iunit         Units         Level         Revult         % REC         Limit         Note           Batch EH51803 - EPA 5030C (GC)           Bink (EH51803 - BLX1)         Prepared & Analyzed:         08/18/05 <th></th> <th></th> <th>Reporting</th> <th></th> <th>Spike</th> <th>Source</th> <th></th> <th>%REC</th> <th></th> <th>RPD</th> <th></th>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                   |             | Reporting     |           | Spike      | Source      |          | %REC   |     | RPD |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|---------------|-----------|------------|-------------|----------|--------|-----|-----|-------|
| Biank (EH51803-BLK1)         Prepared & Analyzed. 0/18.05           Beazzone         ND         0.0250         """           Kijene         ND         0.0250         ""           Kijene (p/m)         ND         0.0250         "           Skrivene (p/m)         0.0250         "         100         80.70           Skrivene (p/m)         0.0250         "         100         80.120           Edstisted (S)         "         100         108         80-120           Skrivene (p/m)         240         "         200         110         80-120           Skrivene (p/m)         100         100         120         80-120           Skrivene (p/m)         112         "         100         81.120           Skrivene (n)         119         100                                                                                                                                                                                                                                                          | Analyte                           | Result      |               | Units     | •          |             | %REC     |        | RPD |     | Notes |
| Beazzne         ND         0.0250         mg/kg wet           Toluene         ND         0.0250         -           Ethylbenzene         ND         0.0250         -           Sylene (i/n)         ND         0.0250         -           Swrogate: a.a.o.Trffluorotoluene         94.9         ug/kg         100         94.9         80-120           Swrogate: d.arontpluorobenzene         85.7         "         100         65.7         80-120           Swrogate: d.arontpluorobenzene         85.7         "         100         65.7         80-120           Swrogate: d.arontpluorobenzene         85.7         "         100         108         80-120           Toluene         108         "         100         108         80-120           Stylene (i/n)         240         "         200         120         80-120           Stylene (i/n)         240         "         200         120         80-120           Stylene (i/n)         119         "         100         119         80-120           Starogate: d.a.olf/fiburotoluane         100         "         100         80-120           Starogate: d.a.olf/fiburotoluane         112         "         100                                                                                                                                                                                                             | Batch EH51803 - EPA 5030C (GC)    |             |               |           |            |             |          |        |     |     |       |
| Toluene         ND         0.0250         *           Ethylence(n)         ND         0.0250         *           Swirogart: a.a.a.Triffuorotoluene         94.9         ug/g         100         85.7         80-120           Swirogart: a.a.a.Triffuorotoluene         94.9         ug/g         100         85.7         80-120           Swirogart: a.a.a.Triffuorotoluene         85.7         "         100         85.7         80-120           Swirogart: a.a.a.Triffuorotoluene         85.7         "         100         85.7         80-120           Starogart: a.a.a.Triffuorotoluene         108         -         100         108         80-120           Toluene         108         -         100         102         80-120           Stylene (n)         119         -         100         112         80-120           Swirogart: a.g.a.Triffuorotoluene         112         100         112         80-120           Swirogart: a.g.a.Triffuorotoluene         12         "         100         83.8         80-120           Swirogart: a.g.a.Triffuorotoluene         83.8         "         100         80.1         80-120           Swirogart: a.g.a.Triffuorotoluene         83.8         "         100                                                                                                                                                                   | Blank (EH51803-BLK1)              |             |               |           | Prepared & | z Anałyzed: | 08/18/05 |        |     |     |       |
| Barbone (pm)         ND         0.0250         *           Xytee (pm)         ND         0.0250         *           Surrogate: a.a.a-Trifluorotaluene         MD         0.0250         *           Surrogate: a.a.a-Trifluorotaluene         85.7         *         100         85.7         80-120           Surrogate: a-Bromofluoroberazene         85.7         *         100         85.7         80-120           Edexaces         107         ug/kg         100         108         80-120           Edexaces         107         ug/kg         100         108         80-120           Strongate: a.a.a.Trifluorotaluene         100         102         80-120         80-120           Strongate: a.a.a.Trifluorotaluene         100         100         100         80-120           Strongate: a.a.a.Trifluorotaluene         100         100         80-120           Strongate: a.a.a.Trifluorotaluene         100         100         80-120           Strongate: a.a.a.Trifluorotaluene         81         ug/kg         100         81         80-120           Strongate: a.a.a.Trifluorotaluene         82.8         *         100         83.8         80-120           Strongate: a.a.a.Trifluorotaluene         83.8 <td>Benzene</td> <td>ND</td> <td>0.0250</td> <td>mg/kg wet</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>                      | Benzene                           | ND          | 0.0250        | mg/kg wet |            |             |          |        |     |     |       |
| Xylene (p/m)         ND         0.0250         *           Xylene (q)         ND         0.0250         *           Surrogate: q.a.o.7tr/fluorololaene         94.9         ug/gg         100         94.9         80-120           Surrogate: q.a.o.Tr/fluorololaene         85.7         *         100         80-120           Surrogate: q.a.o.Tr/fluorololaene         85.7         *         100         80-120           ECS (EHS1803-BS1)         Prepared & Analyzed: 08/18/05         80-120           Toluene         107         ug/gg         100         108         80-120           Toluene         108         "         100         120         80-120           Sylene (q/m)         240         "         100         119         80-120           Surrogate: a.a.a.Tr/fluorololaene         100         100         80-120         100         80-120           Surrogate: a.a.a.Tr/fluorololaene         100         100         80-120         100         80-120           Surrogate: a.a.a.Tr/fluorololaene         83.8         "         100         80-120         100         100         100         100         100         100         100         100         100         100         100                                                                                                                                                                              | Toluene                           | ND          | 0.0250        | **        |            |             |          |        |     |     |       |
| Kylene (n)         ND         0.0250         "           Surrogate: a.a.o-Trifluorotoluene         94.9         ug/kg         100         8.5.7         80-120           Surrogate: t-Bronng/luorobenzene         85.7         "         100         8.5.7         80-120           LCS (EBS1803-BS1)         Prepared & Analyzed: 08/18/05         80-120           Beazene         107         ug/kg         100         168         80-120           CLS (EBS1803-BS1)         Prepared & Analyzed: 08/18/05         80-120         80-120           Edstylbenzene         100         108         % 100         108         80-120           Kylene (g/m)         240         % 200         120         80-120           Surrogate: a.a.a-Trifluorotoluene         100         100         80-120           Surrogate: 4-Bronnofluorobenzene         112         "         100         112         80-120           Surrogate: 4-Bronnofluorobenzene         112         "         100         112         80-120           Surrogate: 4-Bronnofluorobenzene         83.8         "         100         83.1         80-120           Surrogate: 4-Bronnofluorobenzene         83.8         "         100         90.3         80-120 <tr< td=""><td>Ethylbenzene</td><td>ND</td><td>0.0250</td><td>17</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>                    | Ethylbenzene                      | ND          | 0.0250        | 17        |            |             |          |        |     |     |       |
| Surrogate:         a.g.Ag         100         94.9         80.120           Surrogate:         4.Bromofluorobenzene         85.7         "         100         85.7         80-120           LCS (EH51803-BS1)         Prepared & Analyzed:         08/18/05         Benzzone         107         ug/kg         100         107         80-120           Benzzone         107         ug/kg         100         108         80-120           Ediylbenzzene         108         "         100         108         80-120           Sylene (µm)         240         "         200         120         80-120           Sylene (o'n)         119         "         100         109         80-120           Surrogate:         a.g.a.friftuorotokene         100         100         80-120           Surrogate:         a.g.a.friftuorotokene         112         "         100         100         80-120           Surrogate:         a.g.a.friftuorotokene         112         "         100         102         80-120           Surrogate:         a.g.a.friftuorotokene         112         "         100         81         8         100         S3         8         120           Surrogate: <td>Xylene (p/m)</td> <td>ND</td> <td>0.0250</td> <td>*1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>                                                                | Xylene (p/m)                      | ND          | 0.0250        | *1        |            |             |          |        |     |     |       |
| Surrogate: 4-Bromofluorobenzene         85.7         "         100         85.7         80-120           LCS (EH51803-BS1)         Prepared & Analyzed: 08/18/05         Benzene         107         ug/kg         100         107         80-120           Toluene         108         "         100         108         80-120           Skylenc (µn)         240         "         200         120         80-120           Skylenc (µn)         240         "         100         119         80-120           Skylenc (n)         119         "         100         119         80-120           Skylenc (x)         119         "         100         119         80-120           Skylenc (n)         112         "         100         112         80-120           Skrorogate: a.a.aTrifluorotoluene         100         "         100         80-120           Skrorogate: 4-Bromofluorobenzene         112         "         100         81.10           Calibrane         85.1         ug/kg         100         81.10           Skrorogate: 4-Bromofluorobenzene         85.1         ug/kg         100         80-120           Skrorogate: 4-Bromofluorobenzene         83.8         "                                                                                                                                                                                                   | Xylene (0)                        | ND          | 0.0250        | "         |            |             |          |        |     |     |       |
| Data Program         Dot         Dot <thdot< th=""> <thdot< th=""> <thd< td=""><td>Surrogate: a,a,a-Trifluorotoluene</td><td>94.9</td><td>·</td><td>ug/kg</td><td>100</td><td></td><td>94.9</td><td>80-120</td><td></td><td></td><td></td></thd<></thdot<></thdot<> | Surrogate: a,a,a-Trifluorotoluene | 94.9        | ·             | ug/kg     | 100        |             | 94.9     | 80-120 |     |     |       |
| Benzene         107         ug/kg         100         107         80-120           Toluene         108         "         100         120         80-120           Ethylbenzene         120         "         100         120         80-120           Xylene (µ'm)         240         "         200         120         80-120           Surrogate:         a.aTrifluorotoluene         100         119         80-120           Surrogate:         4.Bornofluorobenzene         100         119         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed:         08/180         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed:         08/180         80-120           Chuene         85.1         ug/kg         100         83.8         80-120           Chuene         83.8         "         100         90.3         80-120           Stylene (p/m)         174         "         200         87.0         80-120           Surrogate:         a.aTrifluorotoluene         83.8         "         100         90.1         80-120           Surrogate:         a.aTrifluorotoluene         83.8         "         100         80.120 <td>Surrogate: 4-Bromofluorobenzene</td> <td>85.7</td> <td></td> <td>"</td> <td>100</td> <td></td> <td>85.7</td> <td>80-120</td> <td></td> <td></td> <td></td>                                | Surrogate: 4-Bromofluorobenzene   | 85.7        |               | "         | 100        |             | 85.7     | 80-120 |     |     |       |
| Toluene       108       "       100       108       80-120         Ethylbenzene       120       "       100       120       80-120         Xylene (p/m)       240       "       200       120       80-120         Surrogate: a.a.a-Trifluorotoluene       100       "       100       100       80-120         Surrogate: a.a.a-Trifluorotoluene       100       "       100       100       80-120         Calibration Check (EH51803-CCV1)       Prepared & Analyzed: 08/18/05       80-120         Surrogate: a.a.a-Trifluorotoluene       85.1       ug/kg       100       90.3       80-120         Xylene (n'm)       174       "       200       87.0       80-120         Surrogate: a.a.a-Trifluorotoluene       83.8       "       100       90.1       80-120         Surrogate: 4-Bromofluorobenzene       84.5       "       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared                                                                                                                                                                          | LCS (EH51803-BS1)                 |             |               |           | Prepared & | k Analyzed: | 08/18/05 |        |     |     |       |
| Hunch         Hot         Hot         Hot         Hot         Hot         Hot         Hot           Ethylbenzene         120         "         100         120         80-120           Xylene (p/m)         240         "         200         119         80-120           Surrogate: a,a,a-Trifluorotoluene         100         "         100         119         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed: 08/18/05         80-120         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed: 08/18/05         80-120           Toluene         83.8         "         100         83.8         80-120           Xylene (p/m)         174         "         200         87.0         80-120           Xylene (o)         90.1         "         100         90.3         80-120           Xylene (o)         90.1         "         100         90.3         80-120           Xylene (o)         90.1         "         100         90.1         80-120           Surrogate: a,a-Trifluorotoluene         83.8         "         100         83.8         0-200           Surrogate: A-Bromofluorobenzene         81.6         "         100 <td>Benzene</td> <td>107</td> <td></td> <td>ug/kg</td> <td>100</td> <td></td> <td>107</td> <td>80-120</td> <td></td> <td>a</td> <td></td>                                              | Benzene                           | 107         |               | ug/kg     | 100        |             | 107      | 80-120 |     | a   |       |
| Liny leading         120         100         120         80-120           Xylene (p/m)         240         "         200         120         80-120           Surrogate: a.a.a.Trifluorotoluene         100         "         100         100         80-120           Surrogate: 4-Bromofluorobenzene         112         "         100         100         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed: 08/18/05         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed: 08/18/05         80-120           Toluene         83.8         "         100         83.8         80-120           Toluene         83.8         "         100         90.3         80-120           Xylene (p/m)         174         "         200         87.0         80-120           Surrogate: a.a.a-Trifluorotoluene         83.8         "         100         90.1         80-120           Surrogate: a.a.a-Trifluorotoluene         83.8         "         100         83.8         0-200           Matrix Spike (EH51803-MS1)         Source: SH16001-15         Prepared & Analyzed: '08/18/05         -           Benzene         91.7         ug/kg         100         ND         91.7                                                                                                                                                       | Toluene                           | 108         |               | "         | 100        |             | 108      | 80-120 |     |     |       |
| Xylene (o)       119       100       119       80-120         Surrogate: a,a,a-Trifluorotoluene       100       100       100       80-120         Surrogate: 4-Bromofluoroberzene       112       100       112       80-120         Calibration Check (EH51803-CCV1)       Prepared & Analyzed: 08/18/05       80-120         Benzene       85.1       ug/kg       100       85.1       80-120         Calibration Check (EH51803-CCV1)       Prepared & Analyzed: 08/18/05       80-120         Enerene       85.1       ug/kg       100       83.8       80-120         Calibration Check (EH51803-MCCV1)       174       200       87.0       80-120         Xylene (o)       90.1       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       100       83.8       0-200         Surogate: a,a,a-Trifluorotoluene       84.5       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: SH16001-15       Prepared & Analyzed: 08/18/05         Benzene       91.7       ug/kg       100       ND       91.7         Toluene       93.6       100       ND       91.7       80-120         Xylene (o)       ND       104                                                                                                                                                                                                                   | Ethylbenzene                      | 120         |               | "         | 100        |             | 120      | 80-120 |     |     |       |
| Surrogate:         a,a,a-Trifluorotoluene         100         100         100         80-120           Surrogate:         4-Bromofluorobenzene         112         "         100         112         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed:         08/18/05         Prepared & Analyzed:         08/18/05           Benzene         85.1         ug/kg         100         85.1         80-120           Calibration Check (EH51803-CCV1)         Prepared & Analyzed:         08/18/05         Solution           Benzene         85.1         ug/kg         100         83.8         80-120           Surrogate:         90.3         80-120         80-120         80-120           Xylene (p/m)         174         "         200         87.0         80-120           Surrogate:         a,a,a-Trifluorotoluene         83.8         "         100         90.1         80-120           Surrogate:         4-Bromofluorobenzene         84.5         "         100         83.8         0-200           Matrix Spike (EH51803-MS1)         Source:         Surrogate:         Surrogate:         91.7         ug/kg         100         ND         91.7         80-120           Toluene         93.6<                                                                                                                                                  | Xylene (p/m)                      | 240         |               |           | 200        |             | 120      | 80-120 |     |     |       |
| Surrogate: 4-Bromofluorobenzene       112       "       100       112       80-120         Calibration Check (EH51803-CCV1)       Prepared & Analyzed: 08/18/05         Benzene       85.1       ug/kg       100       85.1       80-120         Toluene       83.8       "       100       83.8       80-120         Ethylbenzene       90.3       "       100       90.3       80-120         Xylene (p/m)       174       "       200       87.0       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       90.1       80-120         Surrogate: A,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: SH16001-15       Prepared & Analyzed: 08/18/05       "         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.7       80-120         Kylbenc(n)       202       "       200       ND       91.7       80-120         Sturrogate: a,a,a-Trifluorotoluene       93.6       "       100       ND       91.6       80-120         Sturrogate: Bis                                                                                                                                                                                                                                                  | Xylene (0)                        | 119         |               | н         | 100        |             | 119      | 80-120 |     |     |       |
| Calibration Check (EH51803-CCV1)       Prepared & Analyzed: 08/18/05         Benzene       85.1       ug/kg       100       85.1       80-120         Toluene       83.8       "       100       90.3       80-120         Ethylbenzene       90.3       "       100       90.3       80-120         Xylene (p/m)       174       "       200       87.0       80-120         Surrogate: a.a.a.Trifluorotoluene       83.8       "       100       90.1       80-120         Surrogate: 4-Bromofluorobenzene       83.8       "       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared & Analyzed: 08/18/05       -         Toluene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.7       80-120         Xylene (p/m)       202       "       200       ND       91.7       80-120         Xylene (p/m)       202       "       200       ND       101       80-120         Xylene (o)       101       "       100       ND       104       80-120         Xylene (p/m)       202                                                                                                                                                                                                                                                                               | Surrogate: a,a,a-Trifluorotoluene | 100         |               | "         | 100        |             | 100      | 80-120 |     |     |       |
| Benzene       85.1       ug/kg       100       85.1       80-120         Toluene       83.8       "       100       83.8       80-120         Ethylbenzene       90.3       "       100       90.3       80-120         Xylene (p/m)       174       "       200       87.0       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: SH16001-15       Prepared & Analyzed: 08/18/05       91.7       80-120         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       93.6       80-120         Xylene (p/m)       202       "       200       ND       101       80-120         Xylene (o)       101       "       100       ND       104       80-120         Xylene (o)       101       "       100       ND       101       80-120                                                                                                                                                                                                                                                                                              | Surrogate: 4-Bromofluorobenzene   | 112         |               | "         | 100        |             | 112      | 80-120 |     |     |       |
| Toluene       83.8       "       100       83.8       80-120         Ethylbenzene       90.3       "       100       90.3       80-120         Xylene (p/m)       174       "       200       87.0       80-120         Xylene (o)       90.1       "       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       -200         Surrogate: 4-Bromofluorobenzene       84.5       "       100       84.5       -200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared & Analyzed: 08/18/05       -         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.6       80-120         Xylene (p/m)       202       "       200       ND       104       80-120         Xylene (o)       101       "       100       ND       104       80-120         Xylene (o)       101       "       100       ND       101       80-120         Xylene (o)       101       "       100       ND       101       80-120         Xy                                                                                                                                                                                                                                                                                                        | Calibration Check (EH51803-CCV1)  |             |               |           | Prepared 8 | k Analyzed: | 08/18/05 |        |     |     |       |
| Thilden       53.5       50.120         Ethylbenzene       90.3       "       100       90.3       80-120         Xylene (p/m)       174       "       200       87.0       80-120         Xylene (o)       90.1       "       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Matrix Spike (EH51803-MS1)       Source: SH16001-15       Prepared & Analyzed: 08/18/05       -         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.6       80-120         Xylene (p/m)       202       "       200       ND       104       80-120         Xylene (p/m)       202       "       200       ND       101       80-120         Xylene (o)       101       "       100       ND       101       80-120         Xylene (o)       101       "       100       ND       101       80-120         Xylene (o)       101       "       100       ND       101       80-120         Xylene (o)       101       "                                                                                                                                                                                                                                                                                                                    | Benzene                           | 85.1        |               | ug/kg     | 100        |             | 85.1     | 80-120 |     |     |       |
| Xylene (p/m)       174       "       200       87.0       80-120         Xylene (o)       90.1       "       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Surrogate: 4-Bromofluorobenzene       84.5       "       100       84.5       0-200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared & Analyzed: 08/18/05       Source         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.6       80-120         Ethylbenzene       104       "       100       ND       93.6       80-120         Xylene (o)       101       "       100       ND       104       80-120         Surrogate: a,a,a-Trifluorotoluene       92.8       "       100       ND       101       80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Toluene                           | 83.8        |               | **        | 100        |             | 83.8     | 80-120 |     |     |       |
| Xylene (o)       90.1       "       100       90.1       80-120         Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Surrogate: 4-Bromofluorobenzene       84.5       "       100       84.5       0-200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared & Analyzed: 08/18/05       Source         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       91.4       80-120         Ethylbenzene       104       "       100       ND       104       80-120         Xylene (p/m)       202       "       200       ND       101       80-120         Surrogate: a,a,a-Trifluorotoluene       92.8       "       100       ND       104       80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Ethylbenzene                      | 90.3        |               | 11        | 100        |             | 90.3     | 80-120 |     |     |       |
| Surrogate: a,a,a-Trifluorotoluene       83.8       "       100       83.8       0-200         Surrogate: 4-Bromofluorobenzene       84.5       "       100       84.5       0-200         Matrix Spike (EH51803-MS1)       Source: 5H16001-15       Prepared & Analyzed: 08/18/05       91.7       80-120         Benzene       91.7       ug/kg       100       ND       91.7       80-120         Toluene       93.6       "       100       ND       93.6       80-120         Ethylbenzene       104       "       100       ND       104       80-120         Xylene (p/m)       202       "       200       ND       101       80-120         Surrogate: a,a,a-Trifluorotoluene       92.8       "       100       ND       92.8       80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Xylene (p/m)                      | 174         |               | "         | 200        |             | 87.0     | 80-120 |     |     |       |
| Surrogate:     4.8 - 1/1/10/00014/ht     03.0     100     100     03.0     0-200       Matrix Spike (EH51803-MS1)     Source:     5H16001-15     Prepared & Analyzed:     08/18/05       Benzene     91.7     ug/kg     100     ND     91.7     80-120       Toluene     93.6     "     100     ND     93.6     80-120       Ethylbenzene     104     "     100     ND     104     80-120       Xylene (p/m)     202     "     200     ND     101     80-120       Surrogate:     a.a.a-Trifluorotoluene     92.8     "     100     ND     93.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Xylene (o)                        | 90.1        |               |           | 100        |             | 90.1     | 80-120 |     |     |       |
| Matrix Spike (EH51803-MS1)         Source: 5H16001-15         Prepared & Analyzed: 08/18/05           Benzene         91.7         ug/kg         100         ND         91.7         80-120           Toluene         93.6         "         100         ND         93.6         80-120           Ethylbenzene         104         "         100         ND         104         80-120           Xylene (p/m)         202         "         200         ND         101         80-120           Sylene (o)         101         "         100         ND         104         80-120           Surrogate: a,a,a-Trifluorotoluene         92.8         "         100         ND         101         80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Surrogate: a,a,a-Trifluorotoluene | 83.8        |               | 11        | 100        |             | 83.8     | 0-200  |     |     |       |
| Benzene         91.7         ug/kg         100         ND         91.7         80-120           Toluene         93.6         "         100         ND         93.6         80-120           Ethylbenzene         104         "         100         ND         104         80-120           Xylene (p/m)         202         "         200         ND         101         80-120           Xylene (o)         101         "         100         ND         101         80-120           Surrogate: a,a,a-Trifluorotoluene         92.8         "         100         ND         101         80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Surrogate: 4-Bromofluorobenzene   | 84.5        |               | "         | 100        |             | 84.5     | 0-200  |     |     |       |
| Toluene     93.6     "     100     ND     93.6     80-120       Ethylbenzene     104     "     100     ND     104     80-120       Xylene (p/m)     202     "     200     ND     101     80-120       Xylene (o)     101     "     100     ND     101     80-120       Surrogate: a,a,a-Trifluorotoluene     92.8     "     100     ND     101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Matrix Spike (EH51803-MS1)        | Sou         | irce: 5H1600) | 1-15      | Prepared & | k Analyzed: | 08/18/05 |        |     |     |       |
| Initial     Initial     Initial     Initial     Initial     Initial     Initial       Ethylbenzene     104     "     100     ND     104     80-120       Xylene (p/m)     202     "     200     ND     101     80-120       Xylene (o)     101     "     100     ND     101     80-120       Surrogate: a,a,a-Trifluorotoluene     92.8     "     100     92.8     80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Benzene                           | 91.7        |               | ug/kg     | 100        | ND          | 91.7     | 80-120 | ·   |     | -     |
| Xylene (p/m)         202         "         200         ND         101         80-120           Xylene (o)         101         "         100         ND         101         80-120           Surrogate: a,a,a-Trifluorotoluene         92.8         "         100         92.8         80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Toluene                           | 93.6        |               | 11        | 100        | ND          | 93.6     | 80-120 |     |     |       |
| Xylene (o)         101         "         100         ND         101         80-120           Surrogate: a,a,a-Trifluorotoluene         92.8         "         100         92.8         80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Ethylbenzene                      | 104         |               | н         | 100        | ND          | 104      | 80-120 |     |     |       |
| Surrogate:         a,a-Trifluorotoluene         92.8         "         100         92.8         80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Xylene (p/m)                      | 202         |               | "         | 200        | ND          | 101      | 80-120 |     |     |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Xylene (o)                        | 101         |               | "         | 100        | ND          | 101      | 80-120 |     |     |       |
| Surrogate: 4-Bromofluorobenzene 98.8 " 100 98.8 80-120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Surrogate: a,a,a-Trifluorotoluene | 92.8        |               | "         | 100        |             | 92.8     | 80-120 |     |     |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Surrogate: 4-Bromofluorobenzene   | <b>98.8</b> |               | "         | 100        |             | 98.8     | 80-120 |     |     |       |

## **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

|                                   | <u></u> | · · ·                    | a 1            |                  |          |                |       |              |       |
|-----------------------------------|---------|--------------------------|----------------|------------------|----------|----------------|-------|--------------|-------|
| Analyte                           | Result  | Reporting<br>Limit Units | Spike<br>Level | Source<br>Result | %REC     | %REC<br>Limits | RPD   | RPD<br>Limit | Notes |
| Batch EH51803 - EPA 5030C (GC)    |         |                          |                |                  |          |                |       |              |       |
| Matrix Spike Dup (EH51803-MSD1)   | Sour    | ce: 5H16001-15           | Prepared &     | 2 Analyzed       | 08/18/05 |                |       |              |       |
| Benzene                           | 90.1    | ug/kg                    | 100            | ND               | 90.1     | 80-120         | 1.76  | 20           |       |
| Toluene                           | 90.9    | *                        | 100            | ND               | 90.9     | 80-120         | 2.93  | 20           |       |
| Ethylbenzene                      | 102     | 17                       | 100            | ND               | 102      | 80-120         | 1.94  | 20           |       |
| Xylene (p/m)                      | 199     | "                        | 200            | ND               | 99.5     | 80-120         | 1.50  | 20           |       |
| Xylene (o)                        | 100     |                          | 100            | ND               | 100      | 80-120         | 0.995 | 20           |       |
| Surrogate: a,a,a-Trifluorotoluene | 88.0    | "                        | 100            |                  | 88.0     | 80-120         |       |              |       |
| Surrogate: 4-Bromofluorobenzene   | 95.8    | 11                       | 100            |                  | 95.8     | 80-120         |       |              |       |

Environmental Lab of Texas

| Plains All American EH & S | Project:         | Shafter Lake 8 inch | Fax: (432) 687-4914 |
|----------------------------|------------------|---------------------|---------------------|
| 1301 S. County Road 1150   | Project Number:  | 2003-00145          | Reported:           |
| Midland TX, 79706-4476     | Project Manager: | Daniel Bryant       | 08/22/05 08:23      |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

| Environmental | Lab | of | Texas |
|---------------|-----|----|-------|
|---------------|-----|----|-------|

| Analyte                            | Result    | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD   | RPD<br>Limit | Notes |
|------------------------------------|-----------|--------------------|-------|----------------|------------------|-------------|----------------|-------|--------------|-------|
| Batch EH51801 - General Preparatio | on (Prep) |                    |       |                |                  |             |                |       |              |       |
| Blank (EH51801-BLK1)               |           |                    |       | Prepared: 0    | 08/17/05 A       | nalyzed: 08 | /18/05         |       |              |       |
| % Solids                           | 100       |                    | %     |                | <b>L</b>         |             |                |       |              |       |
| Duplicate (EH51801-DUP1)           | Sour      | e: 5H17001-        | 01    | Prepared: 0    | )8/17/05 A       | nalyzed: 08 | /18/05         |       |              |       |
| % Solids                           | 96.7      |                    | %     |                | 96,6             |             |                | 0.103 | 20           |       |

Environmental Lab of Texas

| 1301 S. C | 1 American EH & S<br>County Road 1150<br>TX, 79706-4476 | Project:<br>Project Number:<br>Project Manager: |                               | Fax: (432) 687-4914<br>Reported:<br>08/22/05 08:23 |
|-----------|---------------------------------------------------------|-------------------------------------------------|-------------------------------|----------------------------------------------------|
|           |                                                         | Notes and De                                    |                               |                                                    |
| J         | Detected but below the Reporting L                      | limit; therefore, result is an estimated        | d concentration (CLP J-Flag). |                                                    |
| DET       | Analyte DETECTED                                        |                                                 |                               |                                                    |
| ND        | Analyte NOT DETECTED at or above t                      | 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 Juits 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.

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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.

8/22/2005

|                                           |                             | ENVIR                                                                                                                 | RONNENT      | ENVIRONMENTAL GEORECHNICAL                                                                                    |                                                                                                      | <b>ONSTRUCT</b>                                                                  | TAN NOL                                                                                                      | AND CONSTRUCTION MATERIALS SERVICES           | ACTS:                                                                                                  | CHAIN OF CUSTODY RECORD                                                                                      | OHD    |
|-------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------|
|                                           |                             |                                                                                                                       | ,            |                                                                                                               |                                                                                                      |                                                                                  |                                                                                                              | ANALYSIS                                      |                                                                                                        | / / / / Lab use only                                                                                         |        |
| ĩ                                         |                             | N<br>N<br>N                                                                                                           | - \          | Labo                                                                                                          | Laboratory: <u>ECOT</u>                                                                              | -                                                                                |                                                                                                              | REQUESTED                                     |                                                                                                        | Due Date:                                                                                                    |        |
|                                           |                             |                                                                                                                       |              | Address:                                                                                                      |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        | Temp. of cociers                                                                                             | , i    |
|                                           | Consuming E                 | consuming Engineers a sciences                                                                                        | chol 1       | TX Contact:                                                                                                   | act:                                                                                                 | an an annan aireann a' an Annan a' an Anna                                       |                                                                                                              |                                               |                                                                                                        | 1 2 3                                                                                                        | Q.     |
| }                                         |                             |                                                                                                                       |              |                                                                                                               | 6.                                                                                                   | na mana any amin'ny finana amin'ny finana manana manana manana mana mana man     |                                                                                                              |                                               |                                                                                                        | Page of                                                                                                      |        |
| Proje                                     | oct Manag                   | Project Manager Shunter Smith                                                                                         | Smith        |                                                                                                               | o#: 2003 -                                                                                           | 00 145                                                                           |                                                                                                              | (                                             |                                                                                                        |                                                                                                              |        |
| Sampl                                     | Sampler's Name              |                                                                                                                       |              |                                                                                                               | Sampler's Signature                                                                                  |                                                                                  |                                                                                                              | 7050                                          | 87                                                                                                     |                                                                                                              |        |
| 2                                         | Brandon Wil                 | Wilson                                                                                                                |              | Ø.                                                                                                            | LE                                                                                                   |                                                                                  |                                                                                                              | 15                                            | 02/                                                                                                    |                                                                                                              |        |
| Proj. No.                                 | Ko.                         |                                                                                                                       | Project Name |                                                                                                               |                                                                                                      | No/Type of Containers                                                            | Containers                                                                                                   | 08                                            | 81                                                                                                     |                                                                                                              |        |
| र्मु                                      | 94057171                    | S                                                                                                                     | <u>_</u>     | Lake 8"                                                                                                       | ~~                                                                                                   | 7-7                                                                              | 102.                                                                                                         |                                               |                                                                                                        |                                                                                                              |        |
| Matrix                                    | Date                        |                                                                                                                       | Q-a2         | identifying Marks of Sample(s)                                                                                | iampie(s)                                                                                            | NOA AG                                                                           | 250 P/O                                                                                                      | गुरु<br>नग                                    |                                                                                                        | / 5HLTOO(<br>Lab Sample ID (Lab Use Only)                                                                    | ~      |
| S                                         | 8/11/05                     | 14:15 J                                                                                                               | ļ            | 5 <i>P.</i>                                                                                                   |                                                                                                      |                                                                                  |                                                                                                              | $\sqrt{}$                                     |                                                                                                        | 10-                                                                                                          |        |
|                                           | þ                           | 14:20 1                                                                                                               | S            | SP - 2                                                                                                        |                                                                                                      |                                                                                  | _ <b></b>                                                                                                    |                                               |                                                                                                        | 70-                                                                                                          |        |
|                                           |                             | 14:25 1                                                                                                               | 5            | SP.3                                                                                                          |                                                                                                      |                                                                                  | -                                                                                                            | ///                                           |                                                                                                        | -63                                                                                                          |        |
|                                           | 1                           | 14:35 1                                                                                                               | S            | 50 -4                                                                                                         |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        | 40                                                                                                           |        |
|                                           |                             |                                                                                                                       |              |                                                                                                               |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |
|                                           |                             |                                                                                                                       |              |                                                                                                               |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |
|                                           |                             |                                                                                                                       |              |                                                                                                               |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |
|                                           |                             |                                                                                                                       |              |                                                                                                               | ور بر ما بالغالي المدر الحد المدينية المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |
|                                           |                             | /                                                                                                                     |              | - Andrew - An Alfred Andrew - The summer                                                                      | fannin den in 1999, fo a "Lafanni arbiteks" og uppende f                                             |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              | İ      |
| Turn arot                                 | Turn around time            | 2 Normei                                                                                                              | D 50% Rush   | L 100% Rush                                                                                                   |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |
|                                           | Relipedisped by (Signature) | Signature)                                                                                                            | A DO         | LA CO. S.S.                                                                                                   | Received by: (Signature)                                                                             | inature)                                                                         | Date:                                                                                                        | Time:                                         | Danie / BNant C                                                                                        | u/plains                                                                                                     |        |
| Reling                                    | Relinquished by (Signature) | Signature)                                                                                                            | Date:        |                                                                                                               | Received by: (Signature)                                                                             | nature)                                                                          | Date:                                                                                                        | Time:                                         |                                                                                                        |                                                                                                              | ****** |
| Reling                                    | Relinquished by (Signature) | Signature)                                                                                                            | Date:        | Time:                                                                                                         | Received by: (Signature)                                                                             | nature)                                                                          | Date:                                                                                                        | Time:                                         |                                                                                                        |                                                                                                              |        |
| Reling                                    | Relinquished by (Signature) | Signature)                                                                                                            | Date:        | Time:                                                                                                         | Received by: (Signature)                                                                             | nature)<br>7000                                                                  | C Date:                                                                                                      | CG DISSE                                      |                                                                                                        |                                                                                                              |        |
| Matrix<br>Container                       | Ter VOA                     | WW - Wastewater<br>VOA - 40 ml vial                                                                                   | - W<br>AG    | W - Water S - Soil SD - Solid<br>A/G - Amber / Or Glass 1 Liter                                               |                                                                                                      | L - Liquid K - Air Bag<br>250 ml - Giass Ande mouth                              | i                                                                                                            | C - Charcoel tube<br>P/O - Plastic or other _ | SL - sludge 0 - Oi                                                                                     |                                                                                                              |        |
| Houston<br>2313 W.<br>Houston<br>(713) 72 | n Office<br>                | Houston Office<br>2313 W. Sam Houston Pkwy N., Suite 107<br>Houston, Texas 77043<br>(713) 722-0700 Fax (713) 722-0788 |              | Dallas Office<br>8901 Carpaner Freeway. Suite 100<br>Dallas, Texos 75247<br>(214) 630-1010 Fax (214) 630-7070 | way. Suite 100<br>x (214) 630-7070                                                                   | Fort Worth Office<br>2301 E. Loop 520  <br>Fort Worth, Texas<br>(817) 268-8600 F | Fort Worth Office<br>2301 E. Loop \$20 North<br>Fort Worth, Texas 76118<br>(§17) 268-8600 Fax (§17) 268-8602 | 268-8602                                      | Austin Offloe<br>3913 Todd Lauc, Sulie 312<br>Anstin, Texas 78744<br>(512) 442-1122 Fax (512) 442-1181 | Atlanta Office<br>6621 Ray Circle, Suite 120<br>Norcross, Georgia 30071<br>(770) 263-6774 Tax (770) 263-9766 | 3-9766 |
|                                           |                             |                                                                                                                       |              |                                                                                                               |                                                                                                      |                                                                                  |                                                                                                              |                                               |                                                                                                        |                                                                                                              |        |

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

| Client:    | Plains  |      |
|------------|---------|------|
| Date/Time: | elinlos | 8:55 |
| Order #:   | 5417001 |      |
| Initials:  | CK      |      |

## Sample Receipt Checklist

| Temperature of container/cooler?                          | Yes  | No | 5.6 C          |
|-----------------------------------------------------------|------|----|----------------|
| Shipping container/cooler in good condition?              | (ES  | No |                |
| Custody Seals intact on shipping container/cooler?        | Yes  | No | Oot present    |
| Custody Seals intact on sample bottles?                   | (es  | No | Not present    |
| Chain of custody present?                                 | 1985 | No |                |
| Sample Instructions complete on Chain of Custody?         | (ES) | No |                |
| Chain of Custody signed when relinquished and received?   | ¥#3  | No |                |
| Chain of custody agrees with sample label(s)              | Yes. | No |                |
| Container labels legible and intact?                      | (B)  | No |                |
| Sample Matrix and properties same as on chain of custody? | (E)  | No |                |
| Samples in proper container/bottle?                       | B    | No |                |
| Samples properly preserved?                               | (es  | No |                |
| Sample bottles intact?                                    | (Fes | No |                |
| Preservations documented on Chain of Custody?             | YES  | No |                |
| Containers documented on Chain of Custody?                | Yes  | No | ·              |
| Sufficient sample amount for indicated test?              | Kes  | No |                |
| All samples received within sufficient hold time?         | Yes  | No |                |
| VOC samples have zero headspace?                          | Yes  | No | Not Applicable |

Other observations:

| Contact Person:<br>Regarding: | Variance Documentation:<br>Date/Time: | _ Contacted by:                                                                                                                                                                                                                    |
|-------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Corrective Action Taken:      |                                       |                                                                                                                                                                                                                                    |
|                               |                                       | 94 - Palvis Martin Martin and San and S<br>Mart And San Am |
|                               | · · · · · · · · · · · · · · · · · · · |                                                                                                                                                                                                                                    |
|                               |                                       |                                                                                                                                                                                                                                    |



# Analytical Report

Prepared for:

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

Project: Shafter Lake 8 inch Project Number: 2003-00145 Location: None Given

Lab Order Number: 5H23015

Report Date: 08/24/05

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476 Project: Shafter Lake 8 inch Project Number: 2003-00145 Project Manager: Daniel Bryant

## Fax: (432) 687-4914

Reported: 08/24/05 14:05

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| R-3A      | 5H23015-01    | Soil   | 08/23/05 12:44 | 08/23/05 15:19 |
| SP-1A     | 5H23015-02    | Soil   | 08/23/05 12:49 | 08/23/05 15:19 |
| SP-4A     | 5H23015-03    | Soil   | 08/23/05 12:51 | 08/23/05 15:19 |

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

Project: Shafter Lake 8 inch Project Number: 2003-00145 Project Manager: Daniel Bryant

Reported: 08/24/05 14:05

## Organics by GC

## **Environmental Lab of Texas**

|                                   |            | Reporting |              |          |         |          |          |           |       |
|-----------------------------------|------------|-----------|--------------|----------|---------|----------|----------|-----------|-------|
| Analyte                           | Result     | Limit     | Units        | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
| R-3A (5H23015-01) Soil            |            |           |              |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250    | mg/kg dry    | 25       | EH52312 | 08/23/05 | 08/23/05 | EPA 8021B |       |
| Toluene                           | 0.0292     | 0.0250    |              | **       | v       | "        | n        | **        |       |
| Ethylbenzene                      | J [0.0177] | 0.0250    | u            | n        | "       | u        | н        | u         | -     |
| Xylene (p/m)                      | 0.0558     | 0.0250    | n            | "        |         | 11       | n        | **        |       |
| Xylene (0)                        | J [0.0171] | 0.0250    | н            |          |         | н        | n        | **        | J     |
| Surrogate: a,a,a-Trifluorotoluene |            | 85.6 %    | 80           | 120      | "       | "        | "        | n         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 95.0 %    | <b>80-</b> . | 120      | "       | "        | "        | "         |       |
| Gasoline Range Organics C6-C12    | 28.7       | 10.0      | mg/kg dry    | 1        | EH52309 | 08/23/05 | 08/24/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 252        | 10.0      | "            | n        | "       | n        | W        | "         |       |
| Total Hydrocarbon C6-C35          | 281        | 10.0      |              | n        |         | 11       | "        | "         |       |
| Surrogate: 1-Chlorooctane         |            | 97.6 %    | 70-          | 130      | "       | п        | 0        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 111 %     | 7 <b>0</b>   | 130      | "       | "        | "        | "         |       |
| SP-1A (5H23015-02) Soil           |            |           |              |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250    | mg/kg dry    | 25       | EH52312 | 08/23/05 | 08/23/05 | EPA 8021B |       |
| Toluene                           | J [0.0107] | 0.0250    | ۳            | "        | "       | *        | "        |           | -     |
| Ethylbenzene                      | J [0.0215] | 0.0250    |              |          | n       | 11       | n        |           |       |
| Xylene (p/m)                      | 0.0498     | 0.0250    | "            | U        |         | 11       | п        | "         |       |
| Xylene (0)                        | ND         | 0.0250    |              | "        | "       | a        | Ħ        |           |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 82.6 %    | 80           | 120      | "       | "        | "        | n         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 93.2 %    | 80           | 120      | "       | "        | n        | "         |       |
| Gasoline Range Organics C6-C12    | 141        | 10.0      | mg/kg dry    | 1        | EH52309 | 08/23/05 | 08/24/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 1090       | 10.0      |              | "        | n       | 14       | n        | IT        |       |
| Total Hydrocarbon C6-C35          | 1230       | 10.0      |              | "        | н       | n        | **       | n         |       |
| Surrogate: 1-Chlorooctane         |            | 91.2 %    | 70           | 130      | "       | 11       | "        | "         |       |
| Surrogate: 1-Chlorooctadecane     |            | 117 %     | 70           | 130      | "       | "        | "        | "         |       |
| SP-4A (5H23015-03) Soil           |            |           |              |          |         |          |          |           |       |
| Benzene                           | ND         | 0.0250    | mg/kg dry    | 25       | EH52312 | 08/23/05 | 08/23/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250    | "            |          | "       | 11       | u        | 11        |       |
| Ethylbenzene                      | J [0.0182] | 0.0250    | "            | "        | "       | u        | "        | н         | j     |
| Xylene (p/m)                      | 0.0365     | 0.0250    |              | "        | **      | *        |          | "         |       |
| Xylene (o)                        | J [0.0189] | 0.0250    |              | **       | "       | n<br>    | "        |           |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 84.1 %    | 80           | 120      | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 104 %     | 80-,         | 120      | "       | "        | "        | 11        |       |
| Gasoline Range Organics C6-C12    | 111        | 10.0      | mg/kg dry    | 1        | EH52309 | 08/23/05 | 08/24/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 890        | 10.0      | n            | 14       |         | "        |          | "         |       |
| Total Hydrocarbon C6-C35          | 1000       | 10.0      | "            | "        |         | *1       | и        | u         |       |

Environmental Lab of Texas

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |        | Project Nu         | mber: 20             | after Lake 8<br>03-00145<br>aniel Bryant |         |          |          | Fax: (432) 6<br><b>Report</b><br>08/24/05 | ed:   |
|----------------------------------------------------------------------------------|--------|--------------------|----------------------|------------------------------------------|---------|----------|----------|-------------------------------------------|-------|
|                                                                                  |        | Org<br>Environm    | ganics  <br>nental ] | •                                        | xas     |          |          | - <u> </u>                                |       |
| Analyte                                                                          | Result | Reporting<br>Limit | Units                | Dilution                                 | Batch   | Prepared | Analyzed | Method                                    | Notes |
| SP-4A (5H23015-03) Soil                                                          |        |                    |                      |                                          |         |          |          |                                           |       |
| Surrogate: 1-Chlorooctane                                                        |        | 101 %              | 70-                  | 130                                      | EH52309 | 08/23/05 | 08/24/05 | EPA 8015M                                 |       |

70-130

..

114 %

Surrogate: 1-Chlorooctadecane

Environmental Lab of Texas

| Plains All American EH & S | Project: Shafter Lake 8 incl   | h Fax: (432) 687-4914 |
|----------------------------|--------------------------------|-----------------------|
| 1301 S. County Road 1150   | Project Number: 2003-00145     | Reported:             |
| Midland TX, 79706-4476     | Project Manager: Daniel Bryant | 08/24/05 14:05        |

## General Chemistry Parameters by EPA / Standard Methods

|                         |        | Environn           | nental I | Lab of Te | exas    |          |          |               |       |
|-------------------------|--------|--------------------|----------|-----------|---------|----------|----------|---------------|-------|
| Analyte                 | Result | Reporting<br>Limit | Units    | Dilution  | Batch   | Prepared | Analyzed | Method        | Notes |
| R-3A (5H23015-01) Soil  |        |                    | •        |           |         |          |          | · · · · ·     |       |
| -<br>% Moisture         | 8.4    | 0.1                | %        | 1         | EH52401 | 08/23/05 | 08/24/05 | % calculation |       |
| SP-1A (5H23015-02) Soil |        |                    |          |           |         |          |          |               |       |
| % Moisture              | 4.2    | 0.1                | %        | 1         | EH52401 | 08/23/05 | 08/24/05 | % calculation |       |
| SP-4A (5H23015-03) Soil |        |                    |          |           |         |          |          |               |       |
|                         | 4.6    | 0.1                | %        | 1         | EH52401 | 08/23/05 | 08/24/05 | % calculation |       |

Environmental Lab of Texas

**Reported:** 08/24/05 14:05

## **Organics by GC - Quality Control**

## **Environmental Lab of Texas**

|                                         |        | Reporting  |           | Spike       | Source     |             | %REC    |      | RPD   |       |
|-----------------------------------------|--------|------------|-----------|-------------|------------|-------------|---------|------|-------|-------|
| Analyte                                 | Result | Limit      | Units     | Level       | Result     | %REC        | Limits  | RPD  | Limit | Notes |
| Batch EH52309 - Solvent Extraction (GC) | ···-   |            |           |             |            |             |         |      |       |       |
| Blank (EH52309-BLK1)                    |        |            |           | Prepared &  | Analyzed:  | 08/23/05    |         |      |       |       |
| Gasoline Range Organics C6-C12          | ND     | 10.0       | mg/kg wet |             |            |             |         |      |       | -     |
| Diesel Range Organics >C12-C35          | ND     | 10.0       | v         |             |            |             |         |      |       |       |
| Total Hydrocarbon C6-C35                | ND     | 10.0       | "         |             |            |             |         |      |       |       |
| Surrogate: 1-Chlorooctane               | 43.7   |            | mg/kg     | 50.0        |            | 87.4        | 70-130  |      |       |       |
| Surrogate: 1-Chlorooctadecane           | 51.2   |            | "         | 50.0        |            | 102         | 70-130  |      |       |       |
| LCS (EH52309-BS1)                       |        |            |           | Prepared &  | Analyzed:  | 08/23/05    |         |      |       |       |
| Gasoline Range Organics C6-C12          | 394    | 10.0       | mg/kg wet | 500         |            | 78.8        | 75-125  |      |       |       |
| Diesel Range Organics >C12-C35          | 401    | 10.0       | "         | 500         |            | 80.2        | 75-125  |      |       |       |
| Total Hydrocarbon C6-C35                | 795    | 10.0       |           | 1000        |            | 79.5        | 75-125  |      |       |       |
| Surrogate: 1-Chlorooctane               | 50.3   |            | mg/kg     | 50.0        |            | 101         | 70-130  |      |       |       |
| Surrogate: 1-Chlorooctadecane           | 52.8   |            | "         | 50.0        |            | 106         | 70-130  |      |       |       |
| Calibration Check (EH52309-CCV1)        |        |            |           | Prepared: ( | )8/23/05 A | nalyzed: 08 | 8/24/05 |      |       |       |
| Gasoline Range Organics C6-C12          | 433    |            | mg/kg     | 500         |            | 86.6        | 80-120  |      |       |       |
| Diesel Range Organics >C12-C35          | 403    |            | H         | 500         |            | 80.6        | 80-120  |      |       |       |
| Total Hydrocarbon C6-C35                | 836    |            | •1        | 1000        |            | 83.6        | 80-120  |      |       |       |
| Surrogate: 1-Chlorooctane               | 55.1   |            |           | 50.0        |            | 110         | 0-200   |      |       |       |
| Surrogate: 1-Chlorooctadecane           | 55.0   |            | "         | 50.0        |            | 110         | 0-200   |      |       |       |
| Matrix Spike (EH52309-MS1)              | Sourc  | e: 5H2301  | 1-01      | Prepared: ( | )8/23/05 A | nalyzed: 08 | 3/24/05 |      |       |       |
| Gasoline Range Organics C6-C12          | 428    | 10.0       | mg/kg dry | 531         | 9.65       | 78.8        | 75-125  |      |       |       |
| Diesel Range Organics >C12-C35          | 459    | 10.0       |           | 531         | 55.5       | 76.0        | 75-125  |      |       |       |
| Total Hydrocarbon C6-C35                | 887    | 10.0       |           | 1060        | 55.5       | 78.4        | 75-125  |      |       |       |
| Surrogate: 1-Chlorooctane               | 49.5   |            | mg/kg     | 50.0        |            | 99.0        | 70-130  |      |       |       |
| Surrogate: 1-Chlorooctadecane           | 48.5   |            | "         | 50.0        |            | 97.0        | 70-130  |      |       |       |
| Matrix Spike Dup (EH52309-MSD1)         | Sourc  | e: 5H23011 | -01       | Prepared: ( | )8/23/05 A | nalyzed: 08 | 8/24/05 |      |       |       |
| Gasoline Range Organics C6-C12          | 450    | 10.0       | mg/kg dry | 531         | 9.65       | 82.9        | 75-125  | 5.01 | 20    |       |
| Diesel Range Organics >C12-C35          | 459    | 10.0       |           | 531         | 55.5       | 76.0        | 75-125  | 0.00 | 20    |       |
| Fotal Hydrocarbon C6-C35                | 909    | 10.0       | н         | 1060        | 55.5       | 80.5        | 75-125  | 2.45 | 20    |       |
| Surrogate: 1-Chlorooctane               | 47.1   |            | mg/kg     | 50.0        |            | 94.2        | 70-130  |      |       | _     |
| Surrogate: 1-Chlorooctadecane           | 53.4   |            | "         | 50.0        |            | 107         | 70-130  |      |       |       |

Reported: 08/24/05 14:05

## **Organics by GC - Quality Control**

## **Environmental Lab of Texas**

|                                   | -      | Reporting    |           | Spike      | Source    | A        | %REC   |     | RPD   |       |
|-----------------------------------|--------|--------------|-----------|------------|-----------|----------|--------|-----|-------|-------|
| Analyte                           | Result | Limit        | Units     | Level      | Result    | %REC     | Limits | RPD | Limit | Notes |
| Batch EH52312 - EPA 5030C (GC)    |        |              |           |            |           |          |        |     |       |       |
| Blank (EH52312-BLK1)              |        |              |           | Prepared & | Analyzed: | 08/23/05 |        |     |       |       |
| Benzene                           | ND     | 0.0250       | mg/kg wet |            |           |          |        |     |       |       |
| Toluene                           | ND     | 0.0250       | н         |            |           |          |        |     |       |       |
| Ethylbenzene                      | ND     | 0.0250       | "         |            |           |          |        |     |       |       |
| Xylene (p/m)                      | ND     | 0.0250       | u         |            |           |          |        |     |       |       |
| Xylene (o)                        | ND     | 0.0250       |           |            |           |          |        |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 89.7   |              | ug/kg     | 100        |           | 89.7     | 80-120 |     |       |       |
| Surrogate: 4-Bromofluorobenzene   | 88.2   |              | "         | 100        |           | 88.2     | 80-120 |     |       |       |
| LCS (EH52312-BS1)                 |        |              |           | Prepared & | Analyzed: | 08/23/05 |        |     |       |       |
| Benzene                           | 89.5   |              | ug/kg     | 100        |           | 89.5     | 80-120 |     |       |       |
| Toluene                           | 91.3   |              |           | 100        |           | 91.3     | 80-120 |     |       |       |
| Ethylbenzene                      | 101    |              |           | 100        |           | 101      | 80-120 |     |       |       |
| Xylene (p/m)                      | 197    |              |           | 200        |           | 98.5     | 80-120 |     |       |       |
| Xylene (o)                        | 97.5   |              | **        | 100        |           | 97.5     | 80-120 |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 91.9   |              | "         | 100        |           | 91.9     | 80-120 |     |       |       |
| Surrogate: 4-Bromofluorobenzene   | 91.7   |              | "         | 100        |           | 91.7     | 80-120 |     |       |       |
| Calibration Check (EH52312-CCV1)  |        |              |           | Prepared & | Analyzed  | 08/23/05 |        |     |       |       |
| Benzene                           | 82.6   |              | ug/kg     | 100        |           | 82.6     | 80-120 |     | ····· |       |
| Toluene                           | 81.5   |              |           | 100        |           | 81.5     | 80-120 |     |       |       |
| Ethylbenzene                      | 88.1   |              | *         | 100        |           | 88.1     | 80-120 |     |       |       |
| Xylene (p/m)                      | 171    |              | u         | 200        |           | 85.5     | 80-120 |     |       |       |
| Xylene (o)                        | 89.6   |              |           | 100        |           | 89.6     | 80-120 |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 80.3   | ·            | "         | 100        |           | 80.3     | 0-200  |     |       |       |
| Surrogate: 4-Bromofluorobenzene   | 85.0   |              | v         | 100        |           | 85.0     | 0-200  |     |       |       |
| Matrix Spike (EH52312-MS1)        | Sou    | irce: 5H2301 | 5-03      | Prepared & | Analyzed  | 08/23/05 |        |     |       |       |
| Benzene                           | 2140   |              | ug/kg     | 2500       | ND        | 85.6     | 80-120 |     |       |       |
| Toluene                           | 2240   |              | u         | 2500       | 198       | 81.7     | 80-120 |     |       |       |
| Ethylbenzene                      | 2510   |              | n         | 2500       | 434       | 83.0     | 80-120 |     |       |       |
| Xylene (p/m)                      | 4960   |              | 14        | 5000       | 871       | 81.8     | 80-120 |     |       |       |
| Xylene (o)                        | 2490   |              | u         | 2500       | 450       | 81.6     | 80-120 |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 86.1   |              | "         | 100        |           | 86.1     | 80-120 |     |       |       |
| Surrogate: 4-Bromofluorobenzene   | 103    |              | "         | 100        |           | 103      | 80-120 |     |       |       |

Environmental Lab of Texas

Reported: 08/24/05 14:05

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## **Organics by GC - Quality Control**

## **Environmental Lab of Texas**

|                                   |        | Reporting    |       | Spike      | Source    |          | %REC   |       | RPD   |       |
|-----------------------------------|--------|--------------|-------|------------|-----------|----------|--------|-------|-------|-------|
| Analyte                           | Result | Limit        | Units | Level      | Result    | %REC     | Limits | RPD   | Limit | Notes |
| Batch EH52312 - EPA 5030C (GC)    |        |              |       |            |           |          |        |       |       |       |
| Matrix Spike Dup (EH52312-MSD1)   | Sourc  | e: 5H23015-0 | 03    | Prepared & | Analyzed: | 08/23/05 |        |       |       |       |
| Benzene                           | 2270   |              | ug/kg | 2500       | ND        | 90.8     | 80-120 | 5.90  | 20    |       |
| Toluene                           | 2340   |              |       | 2500       | 198       | 85.7     | 80-120 | 4.78  | 20    |       |
| Ethylbenzene                      | 2690   |              | **    | 2500       | 434       | 90.2     | 80-120 | 8.31  | 20    |       |
| Xylene (p/m)                      | 5200   |              | "     | 5000       | 871       | 86.6     | 80-120 | 5.70  | 20    |       |
| Xylene (o)                        | 2510   |              | "     | 2500       | 450       | 82.4     | 80-120 | 0.976 | 20    |       |
| Surrogate: a,a,a-Trifluorotoluene | 91.7   |              | "     | 100        |           | 91.7     | 80-120 |       |       |       |
| Surrogate: 4-Bromofluorobenzene   | 115    |              | "     | 100        |           | 115      | 80-120 |       |       |       |

Environmental Lab of Texas

Reported: 08/24/05 14:05

#### 00/2 #03

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## **Environmental Lab of Texas**

|                                            |        | Reporting   |       | Spike       | Source   |              | %REC   |       | RPD   |       |
|--------------------------------------------|--------|-------------|-------|-------------|----------|--------------|--------|-------|-------|-------|
| Analyte                                    | Result | Limit       | Units | Level       | Result   | %REC         | Limits | RPD   | Limit | Notes |
| Batch EH52401 - General Preparation (Prep) |        |             |       |             |          |              |        |       |       |       |
| Blank (EH52401-BLK1)                       |        |             |       | Prepared: 0 | 8/23/05  | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 100    |             | %     |             |          |              |        |       |       |       |
| Duplicate (EH52401-DUP1)                   | Sourc  | e: 5H23009- | 03    | Prepared: ( | 8/23/05  | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 99.9   |             | %     |             | 99.6     |              |        | 0.301 | 20    |       |
| Duplicate (EH52401-DUP2)                   | Sourc  | e: 5H23011- | 04    | Prepared: 0 | )8/23/05 | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 90.2   |             | %     |             | 90.6     |              |        | 0.442 | 20    |       |

Environmental Lab of Texas

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |                                             | Project Number:                      | Project: Shafter Lake 8 inch<br>Project Number: 2003-00145<br>Project Manager: Daniel Bryant |  |  |  |
|----------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|--|--|--|
|                                                                                  |                                             | Notes and De                         | finitions                                                                                    |  |  |  |
| 1                                                                                | Detected but below the Reporting Limi       | t; therefore, result is an estimated | concentration (CLP J-Flag).                                                                  |  |  |  |
| DET                                                                              | Analyte DETECTED                            |                                      |                                                                                              |  |  |  |
| ND                                                                               | Analyte NOT DETECTED at or above the r      | eporting limit                       |                                                                                              |  |  |  |
| NR                                                                               | Not Reported                                |                                      |                                                                                              |  |  |  |
| dry                                                                              | Sample results reported on a dry weight bas | is                                   |                                                                                              |  |  |  |
| RPD                                                                              | Relative Percent Difference                 |                                      |                                                                                              |  |  |  |
| LCS                                                                              | Laboratory Control Spike                    |                                      |                                                                                              |  |  |  |
| MS                                                                               | Matrix Spike                                |                                      |                                                                                              |  |  |  |
| Dup                                                                              | Duplicate                                   |                                      |                                                                                              |  |  |  |

Report Approved By:

Raland K Julits

8/24/2005

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

| CHAIN OF CUSTODY RECORD                   | Due Date:             | of coolers<br>oceived (C          |                         |                         |                |              |                        | 5 H 230(5<br>Lab Sample 10 (Lab Use Only)                                                                                           | 10-    | 20-     | -03            |  |                           | NOTES: Plains ! David Bruant | L                           | Press real Shawn 557-16694/2 North | applices                      | G K                                                             |  |
|-------------------------------------------|-----------------------|-----------------------------------|-------------------------|-------------------------|----------------|--------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------|---------|----------------|--|---------------------------|------------------------------|-----------------------------|------------------------------------|-------------------------------|-----------------------------------------------------------------|--|
| MALENIALS SERVIC                          | ANALYSIS<br>REQUESTED |                                   |                         | 7                       | 8              | 720          | 8                      | 77 22 Ord                                                                                                                           |        | 1       | XXX            |  |                           | Date: Time: N                | Date: Time:                 | Date: Time:                        | Date: 1 Time:<br>022/05/5/5/9 |                                                                 |  |
| NIGAL-AND-CONSTRUCTION MATERIALS SERVICES | tory: <u>ELoT</u>     | o.                                |                         | #: 2003-00145           | gua            | Shanne Snit  | No/Type of Containers  | mple(s) ແປ້ກາ<br>ກາຍກາກ VOA AG 250<br>ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີເຊຍີ່ມີ | ]      |         |                |  | Q 100% Rush               | Received by: (Signature)     | Received by: (Signature)    | Received by: (Signature)           | K. (Signature)                | <u>کی -</u>                                                     |  |
|                                           | Laboratory:           | cientists                         |                         | Sm.X- PO/SO#:           |                |              | 1 - to Q'              | ntfying Ma                                                                                                                          | R-36   | 50-14   | 5 <i>6</i> -4A |  | D 50% Rush 10/10          | Cate: Time:                  | Date: Time:                 | Date: Time:                        | Date: Time:                   | W - Water S - Soil SD - Solid<br>A/G - Amber / Or Glass 1 Liter |  |
|                                           | HBC                   | Consulting Engineers & Scientists | Office Location Midland | Project Manager_Shawwa- | Sampler's Name | Shanua Smith | Proj. No. Project Name | Date Time                                                                                                                           | 1744 P | 8/23/05 | 2423/05        |  | Turn around time O Normal | Reinquished by (Signature)   | Relinquished by (Signature) | Relinquished by (Signature)        | Relinquished by (Signature)   | Matrix WW - Wastewater<br>Container VOA - 40 mi vial            |  |

and the second 
# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

| Client:    | Plains  |       |
|------------|---------|-------|
| Date/Time: | 8/23/05 | [5:20 |
| Order #:   | 5423015 |       |
| Initials:  | CK      |       |

## Sample Receipt Checklist

| Temperature of container/cooler?                          | Yes      | No | -2.0 C         |
|-----------------------------------------------------------|----------|----|----------------|
| Shipping container/cooler in good condition?              | <b>C</b> | No |                |
| Custody Seals intact on shipping container/cooler?        | Yes      | No | Not present    |
| Custody Seals intact on sample bottles?                   | XES      | No | Not present    |
| Chain of custody present?                                 | Yes      | No |                |
| Sample Instructions complete on Chain of Custody?         | No.      | No |                |
| Chain of Custody signed when relinquished and received?   | 10       | No |                |
| Chain of custody agrees with sample label(s)              | (es      | No |                |
| Container labels legible and intact?                      | YEB      | No |                |
| Sample Matrix and properties same as on chain of custody? | Yes      | No |                |
| Samples in proper container/bottle?                       | Ves      | No |                |
| Samples properly preserved?                               | Ces      | No |                |
| Sample bottles intact?                                    | Yess,    | No |                |
| Preservations documented on Chain of Custody?             | Yes,     | No |                |
| Containers documented on Chain of Custody?                | <b>K</b> | No |                |
| Sufficient sample amount for indicated test?              | 1200     | No |                |
| All samples received within sufficient hold time?         | (CO)     | No |                |
| VOC samples have zero headspace?                          | Yes      | No | Not Applicable |

Other observations:

| Contact Person:<br>Regarding:          | Date/Time: | Contacted by: |                                          |
|----------------------------------------|------------|---------------|------------------------------------------|
|                                        |            |               | الا يستجري المستجدين ( الفل مراجع من الم |
| Corrective Action Taken:               | ،          |               |                                          |
|                                        |            |               |                                          |
|                                        |            |               |                                          |
|                                        |            |               |                                          |
|                                        |            |               |                                          |
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|                                        |            |               |                                          |
| ·····                                  |            |               |                                          |
| ······································ |            |               |                                          |

**APPENDIX C** 

Waste Manifests

| Image: State Approved LAND PARM       N2       2585         STATE Approved LAND PARM       N2       2585         Prione (305) 394-3481       N2       2585         COMPANY NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                               |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COMPANY NAME <u>Eath</u><br>COMPANY REPRESENTATIVE NAME <u>JAMAN</u> <u>Herrandry</u><br>LEASE NAME <u>Standar Lake TB 6503</u><br>SEC TOWNSHIP - RANGE OR LOCATION <u>Sec 33</u> T755 R 326<br>TRUCKING COMPANY NAME <u>FT</u><br>DRIVER'S SIGNATURE <u>Herritoric transmit</u> 5 loar at 14 yrs <u>20</u> yrs<br>EXEMPT WASTE FROM OIL & GAS PRODUCTION <u>EXPLAIN</u><br>OTHER <u>EXPLAIN</u> <u>COPY OF ANALYSIS ATTACHED: YES NO <u>C</u><br/>CELL NO. <u>12</u><br/>COMMENTS: <u>J</u><br/>NAME OF ATTENDANT ON DUTY <u>DOGM</u> <u>DOGM</u> <u>DOGM</u> <u>COPY OF ATTENDANT ON DUTY</u> <u>DOGM</u> <u>DOGM</u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                               | STATE APPROVED LAND FARM<br>PHONE (505) 394-3481<br>P.O. BOX 969 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| COMPANY REPRESENTATIVE NAME <u>TO MARKE</u> <u>TO 6503</u><br>LEASE NAME <u>Strather TO 6503</u><br>SEC TOWNSHIP - RANGE OR LOCATION <u>Sec 33</u> <u>T755</u> <u>R 326</u><br>TRUCKING COMPANY NAME <u>SPE</u><br>DRIVER'S SIGNATURE <u>Here</u> <u>Here</u><br><u>EXEMPT WASTE FROM OIL &amp; GAS PRODUCTION</u><br><u>OTHER</u> <u>EXPLAIN</u> <u>Strather</u><br>COPY OF ANALYSIS ATTACHED: YES <u>NO</u><br><u>CELL NO. 12</u><br>COMMENTS: <u><u>COMMENTS</u><br/><u>NAME OF ATTENDANT ON DUTY</u> <u>POGGA MODUCE</u><br/>DATE ACCEPTED <u>6.663</u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | /                                             |                                                                  | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| LEASE NAME       Statili Inter TB       6503         SEC TOWNSHIP - RANGE OR LOCATION       Ide 33       T755       R 326         TRUCKING COMPANY NAME       Ide TB       Ide TB       Ide TB         DRIVER'S SIGNATURE       Ide TB       Ide TB       Ide TB         TYPE OF MATERIAL AND QUANTITY       Ide TB       Ide TB       Ide TB         EXEMPT WASTE FROM OIL & GAS PRODUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COMPANY NAME                                  |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| SEC. TOWNSHIP - RANGE OR LOCATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                               |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TRUCKING COMPANY NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | LEASE NAME                                    | - 1, y = 4                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| DRIVER'S SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SEC TOWNSHIP - RANGE OI                       | R LOCATION 33 1755 R 37E                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TYPE OF MATERIAL AND QUANTITY <u>locitania dia soit 5 loors at 14 yps</u> 70 yps         EXEMPT WASTE FROM OIL & GAS PRODUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TRUCKING COMPANY NAME                         |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| EXEMPT WASTE FROM OIL & GAS PRODUCTION   OTHER   COPY OF ANALYSIS ATTACHED:   YES   CELL NO.   12   COMMENTS:     Image: Comparison of the state | DRIVER'S SIGNATURE                            | Water                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| OTHER EXPLAIN<br>COPY OF ANALYSIS ATTACHED: YES NO<br>CELL NO?<br>COMMENTS:<br>COMMENTS:<br>MAME OF ATTENDANT ON DUTY OGGA POPULC<br>DATE ACCEPTED (J)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TYPE OF MATERIAL AND QUA                      | NTITY Containing and soit 5 loves at                             | 714 yrs 10 yrds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| COPY OF ANALYSIS ATTACHED: YES NO<br>CELL NO?<br>COMMENTS:<br>MAME OF ATTENDANT ON DUTY<br>DATE ACCEPTED (5 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EXEMPT WASTE FROM                             | OIL & GAS PRODUCTION                                             | ······                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CELL NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | OTHER                                         | EXPLAIN                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| COMMENTS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | COPY OF ANALYSIS ATTACH                       | ED: YES NO                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| NAME OF ATTENDANT ON DUTY _ Poger Poger Poger<br>DATE ACCEPTED _ 6-6-63                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | CELL NO                                       | ·                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                             | <b>EVIRONMENTAL PLL., IN</b><br>STATE APPROVED LAND FARM         |         | 0500          |
|-----------------------------|------------------------------------------------------------------|---------|---------------|
|                             | PHONE (505) 394-3481<br>P.O. BOX 969<br>EUNICE, NEW MEXICO 88231 | N2      | 2586          |
| E-AF                        |                                                                  |         |               |
| COMPANY NAME                |                                                                  |         |               |
| LEASE NAME                  | 14 10 6103                                                       |         |               |
| SEC TOWNSHIP - RANGE OR LO  | CATION <u>Sec 33</u> T255 R 37E                                  |         |               |
|                             | PI,                                                              |         |               |
| DRIVER'S SIGNATURE          | stell                                                            |         |               |
| TYPE OF MATERIAL AND QUANTI | ry Contominated soil 5 loods.                                    | at/Zyis | <u>2 vd</u> . |
| EXEMPT WASTE FROM OIL       |                                                                  |         |               |
| OTHER                       | EXPLAIN                                                          |         |               |
| COPY OF ANALYSIS ATTACHED:  | YES NO                                                           |         |               |
| CELL NO                     |                                                                  |         |               |
|                             |                                                                  |         |               |
| -                           |                                                                  |         |               |
| <u> </u>                    |                                                                  |         |               |
| Logn Dome                   | 2                                                                |         | . <u></u>     |
| NAME OF ATTENDANT ON DUTY   |                                                                  |         |               |
| DATE ACCEPTED               | 3                                                                |         |               |
|                             |                                                                  |         |               |
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**APPENDIX D** 

1 10 10 Photographs



## West view of origination point of leak.



North view of east excavation.



Eastern view of west excavation.



West view of road excavation and stockpiles.



North view of site restoration.



East view of site restoration.

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East view of site restoration.

APPENDIX E

**Regulatory Reports** 



June 6, 2003

Mr. Paul Sheeley New Mexico Oil Conservation Division 1625 North French Hobbs, New Mexico 88240

Subject: EOTT Energy Pipeline "Shafter Lake 8-Inch Sweet" (2003-00145) Initial C-141 and Remediation Plan

Dear Mr. Sheeley:

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, EOTT Energy Company, submits the attached New Mexico Oil Conservation Division Form C-141 for the above referenced leak site located on lands owned by Joyce Willis. The release volume is estimated to be 250-bbl of crude petroleum with 190-bbl recovered. The release site is located in the NE¼ of the SE¼ (Unit Letter I), Section 33, Township 25 South, and Range 37 East. The geographic location is N32°05'04.92"; W103°09'34.56". The site is ~2.8 miles south-southeast (bearing 134.8°) from Jal, Lea County, New Mexico. According to information obtained from the New Mexico Office of the State Engineer (NMOSE) database, ground water level beneath this site is >200-ft bgs. The site matrix ranking for this site is 0 due to the depth to ground water from lower contaminant level being >150-ft. There are no water wells and/or surface water features within 1000-ft of the release site.

The remedial action plan for this site is to delineate and characterize the soil contamination along the flow path, excavate, dispose of and/or blend and attenuate on-site the RCRA non-exempt contaminated soils, and backfill the excavation with clean soil materials obtained on-site and/or off-site from private or public sources. Any RCRA non-hazardous contaminated soils excavated from the site will be disposed of in a NMOCD approved surface waste disposal facility.

The Constituents of Concern (CoC's) and associated NMOCD acceptable remedial levels are as follows:

- BTEX<sup>8620</sup> (Benzene, Toluene, Ethyl Benzene, and Xylenes): 50 mg/kg
- TPH<sup>8015m</sup> (Total Petroleum Hydrocarbon): 5000 mg/kg
- Benzene<sup>8620</sup>: 10 mg/kg

It is EPI's standard operating procedure to evaluate crude oil release sites for the presence of elevated levels of  $SO_4^{=}$  and/or Cl<sup>-</sup> ions. These inorganic contaminants are often present in subsurface soils associated with sour crude releases and/or releases containing a brine component. Chloride and sulfate contamination of the soil will be evaluated relative to NMWQCC Ground Water Standards, 250 mg/ml and 600 mg/ml respectively.

If there are any questions please call Mr. Ben Miller, or myself, at our office or at (505) 390-0288 and (505) 390-9804, respectively or Mr. Frank Hernandez at (915) 638-3799. All official written communications should be addressed to:

Mr. Frank Hernandez EOTT Energy Pipeline, L.P. PO Box 1660 Midland, TX 79701

Sincerely,

John Good FM Environmental Consultant

cc: Frank Hernandez, EOTT – District Environmental Supervisor, w/enclosure Bill Von Drehle - EOTT-Environmental Director, w/enclosure Ben Miller, EPI Vice President and General Manager Sherry Miller, EPI President

P.O. Box 1558 ... 2100 AVENUE O ... TELEPHONE 505 • 394 • 3481 ... FAX 505+394+2601

| E           |        |
|-------------|--------|
| <i>eott</i> | energy |

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Incident Date and NMOCD Notified?

6/05/03-2:45 PM

#### Assigned Site Reference 2003-00145

|                                                                                                                                                                            |                                                                                                                           |                                                                                                                |                                                                                                                                                                                                     |                                                    | · · · · · · · · · · · · · · · · · · ·                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| SITE: Shafter Lak                                                                                                                                                          | ie 8"                                                                                                                     |                                                                                                                | Assigned Site                                                                                                                                                                                       | Reference                                          | 2003-00145                                                                                            |
| Company:                                                                                                                                                                   | EOTT Ene                                                                                                                  | rgy Pipeline                                                                                                   | LP                                                                                                                                                                                                  |                                                    |                                                                                                       |
| Street Address:                                                                                                                                                            |                                                                                                                           |                                                                                                                |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Mailing Address:                                                                                                                                                           | 5805 E. Hv                                                                                                                | wy 80                                                                                                          |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| City, State, Zip:                                                                                                                                                          | Midland, T                                                                                                                | X 79702                                                                                                        |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Representative:                                                                                                                                                            | Frank Herr                                                                                                                | nandez                                                                                                         |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Representative Teleph                                                                                                                                                      | ione: 915-638-37                                                                                                          | 799                                                                                                            |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Telephone:                                                                                                                                                                 | · · · · · · · · · · · · · · · · · · ·                                                                                     |                                                                                                                |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Fluid volume released                                                                                                                                                      | (bbls): 250                                                                                                               | Recovere                                                                                                       | ed (bbls): 190                                                                                                                                                                                      |                                                    |                                                                                                       |
|                                                                                                                                                                            | >25 bbls: Not                                                                                                             | ify NMOCD ver                                                                                                  | bally within 24 hrs and submit for                                                                                                                                                                  | m C-141 within                                     | 15 days.                                                                                              |
|                                                                                                                                                                            | 5-25 bbls: Submit form C-                                                                                                 | 141 within 15 d                                                                                                | ays (Also applies to unauthorized                                                                                                                                                                   | releases of 50-                                    | -500 mcf Natural Gas)                                                                                 |
| Leak, Spill, or Pit (LSF                                                                                                                                                   | ) Name:                                                                                                                   | 2003-0014                                                                                                      | 5                                                                                                                                                                                                   |                                                    |                                                                                                       |
| Source of contamination                                                                                                                                                    |                                                                                                                           | Shafter Lak                                                                                                    | e 8" Steel Pipeline                                                                                                                                                                                 |                                                    | ······································                                                                |
| Land Owner, i.e., BLM                                                                                                                                                      | , ST, Fee, Other:                                                                                                         | Joyce Willi                                                                                                    | 5                                                                                                                                                                                                   |                                                    |                                                                                                       |
| LSP Dimensions:                                                                                                                                                            | <u> </u>                                                                                                                  |                                                                                                                | -ft (Site diagram Attached                                                                                                                                                                          | d)                                                 |                                                                                                       |
| LSP Area:                                                                                                                                                                  |                                                                                                                           |                                                                                                                | -ft <sup>2</sup>                                                                                                                                                                                    |                                                    |                                                                                                       |
| Location of Reference                                                                                                                                                      | Point (RP):                                                                                                               |                                                                                                                |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Location distance and                                                                                                                                                      | direction from RP:                                                                                                        |                                                                                                                |                                                                                                                                                                                                     |                                                    | •••••••••••••••••••••••••••••••••••••••                                                               |
| Latitude:                                                                                                                                                                  | · · · · · · · · · · · · · · · · · · ·                                                                                     | N32° 05' 04                                                                                                    | 1.92"                                                                                                                                                                                               |                                                    |                                                                                                       |
| Lonaitude:                                                                                                                                                                 |                                                                                                                           | W103° 09'                                                                                                      |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Elevation above mear                                                                                                                                                       | sea level:                                                                                                                | 3200                                                                                                           | -ft amsl                                                                                                                                                                                            |                                                    |                                                                                                       |
| Feet from South Secti                                                                                                                                                      | on Line:                                                                                                                  | 1864                                                                                                           |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Feet from West Section                                                                                                                                                     | n Line:                                                                                                                   | 5128                                                                                                           |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Location - Unit and 1/4                                                                                                                                                    | 4 1/4: UL-                                                                                                                | 1                                                                                                              | NE 1/4 of SE                                                                                                                                                                                        | 1/4                                                | ······································                                                                |
| Location - Section:                                                                                                                                                        |                                                                                                                           | 33                                                                                                             |                                                                                                                                                                                                     |                                                    | •••••••••••••••••••••••••••••••••••••••                                                               |
| Location - Township:                                                                                                                                                       |                                                                                                                           | 25S                                                                                                            |                                                                                                                                                                                                     |                                                    |                                                                                                       |
| Location - Range:                                                                                                                                                          |                                                                                                                           | 37E                                                                                                            |                                                                                                                                                                                                     |                                                    |                                                                                                       |
|                                                                                                                                                                            | thin 1000' radius of Sit                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | thin 1000' radius of Sit                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | within 1000' radius of S                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | within 1000' radius of S                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | s within 1000' radius of                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | s within 1000' radius of                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | ells within 1000' radius                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   |                                                    |                                                                                                       |
|                                                                                                                                                                            | ells within 1000' radius                                                                                                  |                                                                                                                | 0                                                                                                                                                                                                   | · · · · · · · · · · · · · · · · · · ·              |                                                                                                       |
|                                                                                                                                                                            | urface to ground water                                                                                                    |                                                                                                                | 200                                                                                                                                                                                                 |                                                    |                                                                                                       |
|                                                                                                                                                                            |                                                                                                                           | <u>( /·</u>                                                                                                    | 10                                                                                                                                                                                                  | • ···· · · · ·                                     |                                                                                                       |
| Depth (ft) of contamin                                                                                                                                                     |                                                                                                                           |                                                                                                                |                                                                                                                                                                                                     |                                                    |                                                                                                       |
|                                                                                                                                                                            |                                                                                                                           | V.                                                                                                             | 190                                                                                                                                                                                                 |                                                    |                                                                                                       |
| Depth (ft) to ground w                                                                                                                                                     | ater (DG - DC = DtGW                                                                                                      | **************************************                                                                         | 190                                                                                                                                                                                                 | 3                                                  | Distance to Surface Water Body                                                                        |
| Depth (ft) to ground w<br>1. Groui                                                                                                                                         | ater (DG - DC = DtGW<br>nd Water                                                                                          | 2. Weill                                                                                                       | nead Protection Area                                                                                                                                                                                |                                                    | Distance to Surface Water Body                                                                        |
| Depth (ft) to ground w<br><b>1. Grou</b><br>If Depth to GW <50 fe                                                                                                          | ater (DG - DC = DtGW<br>nd Water<br>et: 20 points                                                                         | <b>2. Welli</b><br>If <1000' fr<br><200' from                                                                  | nead Protection Area<br>om water source, or,<br>private domestic water                                                                                                                              |                                                    | Distance to Surface Water Body<br>ontal feet: 20 points                                               |
| Depth (ft) to ground w<br><b>1. Grou</b><br>If Depth to GW <50 fe                                                                                                          | ater (DG - DC = DtGW<br>nd Water<br>et: 20 points                                                                         | <b>2. Weili</b><br>If <1000' fr<br><200' from<br>source: 20                                                    | nead Protection Area<br>om water source, or,<br>private domestic water<br>points                                                                                                                    | <200 horiz                                         |                                                                                                       |
| Depth (ft) to ground w<br><b>1. Grou</b><br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9                                                                                | ater (DG - DC = DtGW<br>nd Water<br>vet: 20 points<br>99 feet: 10 points                                                  | 2. Weili<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr                                           | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,                                                                                            | <200 horiz<br>200-100 l                            | ontal feet: 20 points<br>norizontal feet: 10 points                                                   |
| Depth (ft) to ground w<br><b>1. Grou</b><br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9                                                                                | ater (DG - DC = DtGW<br>nd Water<br>vet: 20 points<br>99 feet: 10 points                                                  | 2. Weili<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr                                           | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water                                                                  | <200 horiz<br>200-100 l                            | ontal feet: 20 points                                                                                 |
| Depth (ft) to ground w<br>1. Groun<br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9<br>If Depth to GW >100 f                                                             | ater (DG - DC = DtGW<br>nd Water<br>vet: 20 points<br>99 feet: 10 points                                                  | 2. Welli<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p              | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water                                                                  | <200 horiz<br>200-100 l<br>>1000 hori              | ontal feet: 20 points<br>norizontal feet: 10 points                                                   |
| Depth (ft) to ground w<br><b>1. Groun</b><br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9<br>If Depth to GW >100 f<br>Ground water Score:                               | ater (DG - DC = DtGW<br>nd Water<br>et: 20 points<br>99 feet: 10 points<br>ieet: 0 points                                 | 2. Welli<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p              | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water<br>oints                                                         | <200 horiz<br>200-100 l<br>>1000 hori              | ontal feet: 20 points<br>norizontal feet: 10 points<br>izontal feet: 0 points                         |
| Depth (ft) to ground w<br><b>1. Groun</b><br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9<br>If Depth to GW >100 f<br>Ground water Score:                               | ater (DG - DC = DtGW<br>nd Water<br>ret: 20 points<br>29 feet: 10 points<br>reet: 0 points<br>0<br>0<br>0                 | 2. Well<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p<br>Wellhead F | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water<br>oints                                                         | <200 horiz<br>200-100 ł<br>>1000 hori<br>Surface W | ontal feet: 20 points<br>norizontal feet: 10 points<br>izontal feet: 0 points<br>fater Score: 0       |
| Depth (ft) to ground w<br><b>1. Groun</b><br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9<br>If Depth to GW >100 f<br>Ground water Score:                               | ater (DG - DC = DtGW<br>nd Water<br>ret: 20 points<br>29 feet: 10 points<br>reet: 0 points<br>0<br>0<br>0                 | 2. Well<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p<br>Wellhead F | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water<br>oints<br>Protection Area Scor 0                               | <200 horiz<br>200-100 ł<br>>1000 hori<br>Surface W | ontal feet: 20 points<br>norizontal feet: 10 points<br>izontal feet: 0 points<br>fater Score: 0       |
| Depth (ft) to ground w<br>1. Ground<br>If Depth to GW <50 fe<br>If Depth to GW 50 to 9<br>If Depth to GW >100 f<br>Ground water Score:<br>Site Rank (1+2+3) =<br>Parameter | ater (DG - DC = DtGW<br>nd Water<br>set: 20 points<br>39 feet: 10 points<br>feet: 0 points<br>0<br>0<br>Total S           | 2. Well<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p<br>Wellhead F | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water<br>oints<br>Protection Area Scor 0<br>Score and Acceptable       | <200 horiz<br>200-100 ł<br>>1000 hori<br>Surface W | ontal feet: 20 points<br>norizontal feet: 10 points<br>zontal feet: 0 points<br><i>fater Score: 0</i> |
| 1. Groun   If Depth to GW <50 fe                                                                                                                                           | ater (DG - DC = DtGW<br>nd Water<br>et: 20 points<br>39 feet: 10 points<br>ieet: 0 points<br>0<br>0<br>Total S<br>20 or > | 2. Well<br>If <1000' fr<br><200' from<br>source: 20<br>If >1000' fr<br>>200' from<br>source: 0 p<br>Wellhead F | nead Protection Area<br>om water source, or,<br>private domestic water<br>points<br>om water source, or,<br>private domestic water<br>oints<br>Protection Area Scor 0<br>Score and Acceptable<br>10 | <200 horiz<br>200-100 ł<br>>1000 hori<br>Surface W | ontal feet: 20 points<br>norizontal feet: 10 points<br>zontal feet: 0 points<br>/ater Score: 0        |









District I

District III

District IV

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Date:

6/6/03

Phone:

1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Road, Aztec, NM 87410

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised March 17, 1999

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

#### 1220 S. St. Francis Dr., Santa Fe, NM 87505 side of form **Release Notification and Corrective Action** Initial Report □ Final Report **OPERATOR** Name of Company Contact EOTT Energy Pipeline LP Frank Hernandez Telephone No. Address 5805 E. Hwy 80 Midland, TX 79702 915-638-3799 Facility Name Facility Type **Crude Oil Main Line** Shafter Lake 8" Surface Owner Mineral Owner Lease No. **Joyce Willis** NA NA LOCATION OF RELEASE Unit Letter Section Township Range Feet from Feet from Longitude Latitude County: South Line West Line I 33 **25**S 37E W103° 09' 34.56" N32º 05' 04.92" Lea 1864 5128 NATURE OF RELEASE Type of Release Volume of Release Volume Recovered **Crude Oil Release and associated components** 250 bbl 190 bbl Date and Hour of Occurrence Source of Release Date and Hour of Discovery 6/05/03-1:30 PM 6/05/03-2:00 PM Shafter Lake 8" Steel Pipeline Was Immediate Notice Given? If YES, To Whom? ☑ Yes 🗆 No Not Required Paul Sheeley, NMOCD-Hobbs By Whom? Date and Hour Pat McCasland - EPI 6/05/03-2:45 PM Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. □ Yes 🛛 No NA If a Watercourse was Impacted, Describe Fully.\* NA Describe Cause of Problem and Remedial Action Taken.\* Internally and/or Externally Corroded pipeline, repaired with clamp Describe Area Affected and Cleanup Action Taken.\* ~12,750-ft<sup>2</sup> surface area affected (400-ft X 18-ft). 250-bbl of product released, 190 recovered. RCRA Non-Exempt Nonhazardous grossly contaminated soil was excavated and stockpiled on plastic by EPI. 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. **OIL CONSERVATION DIVISION** Signature: Printed Name: **Frank Hernandez** Approved by District Supervisor: Title: **District Environmental Supv.**

915-638-3799 Conditions of Approval:

Approval Date:

Expiration Date:

Attached