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



Fax 432.684.9608

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TABLE OF CONTENTS

Page No.

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

LIST OF APPENDICES

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

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 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 distance from lowermost contaminants to seasonal high water level							
Wellhead Protection Area	>1000' to water	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		lerracon
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	camcdonald@terracon.com slsmith@terracon.com

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 mod	ified	EPA Method 8021B					
SAMPLE DATE	SAMPLE LOCATION	ТРН С ₆ -С ₁₂	TPH >C ₁₂ -C ₃₅	ТРН С ₆ -С ₃₅	BENZENE	TOLUENE	ETHYL- BENZENE	M,P- XYLENES	0- XYLENES	BTEX
03/21/05	DSW-1 2'	457	9940	10400	L					
	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	ļ					
	DNW-1 5'	<10.0	<10.0	<10.0						·····
<u> </u>	DR-1 2'	<10.0	<10.0	<10.0	.					
	DR-14'	<10.0	<10.0	<10.0						
	DR-2 4'	9.8	26.8	26.8						
	DR-3 2'	<10 <u>.0</u>	<10.0	<10.0						
	DR-4 3'	<10.0	<10.0	<10.0						
						0.005		-0.005	10.005	0.005
08/15/05	East NW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	East WW-1	<10.0	42.2	42.2	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	East SW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	East EW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	East BH-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	R-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	R-2	89.1	407	496	<0.025	0.0303	0.0404	0.0775	0.0574	0.2056
L	<u>R-3</u>	121	1160	1280	<0.025	<0.025	<0.025	0.0236	<0.026	0.0236
	R-4	126	399	525	0.0983	0.129	0.255	0.347	0.0669	0.8962
	R-5	12.3	212	224	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	R-6	29.5	169	199	0.00993	0.0225	0.0362	0.0985	0.0227	0.18983
	R-7	<10.0	<10.0	<10.0	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025
	R-8	<10.0	<10.0	<10.0	<0.025	< 0.025	<0.025	0.048	<0.025	0.048
	West WW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	West NW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	West SW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	West BH-1	98	383	481	<0.025	0.0504	0.0547	0.111	0.0677	0.2838
	West EW-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
08/16/05	<u>SP-1</u>	176	1090	1270	<0.025	0.0191	0.0373	0.0625	0.0379	0.1568
	SP-2	56.7	346	403	<0.025	0.0152	0.0274	0.552	0.0347	0.6293
J	SP-3	61.5	444	505	<0.025	<0.025	<0.025	0.0284	<0.025	0.0284
	SP-4	191	1120	1310	<0.025	0.0315	0.0464	0.0831	0.0866	0.2476
09/02/05	0.24		050	004	10.005	0.0000	0.0477	0.0550	0.0474	0.4400
08/23/05	CD 14	28.1	252	281	<0.025	0.0292	0.01//	0.0558	0.01/1	0.1198
	SP-TA	141	1090	1230	<0.025	0.0107	0.0215	0.0498	<0.025	0.082
 	<u>5P-4A</u>	111	890	1000	<0.05	<0.025	0.0182	0.0365	0.0189	0.0736
	I	L		L		I	L	I	I	L

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
	Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Plains All American EH & SProject:1301 S. County Road 1150Project Number:Midland TX, 79706-4476Project Manager:	Plains All American EH & SProject:Shafter Lake 8inch1301 S. County Road 1150Project Number:94057171Midland TX, 79706-4476Project Manager:Daniel Bryant

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 Project: Shafter Lake 8inch								Fax: (432) 687-4914		
1301 S. County Road 1150 Project Number: 94057171									Reported:	
Midland TX, 79706-4476	Midland TX, 79706-4476 Project Manager: Daniel Bryant									
		O	ganics by	y GC						
Environmental Lab of Texas										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
DSW-1 2' (5C22001-01) Soil		<u></u>								
Gasoline Range Organics C6-C12	457	50.0	mg/kg dry	5	FC52310	03/23/05	03/24/05	EPA 8015M		
Diesel Range Organics >C12-C35	9940	50.0		"		"	"	"		
Total Hydrocarbon C6-C35	10400	50.0			u	м	"			
Surrogate: 1-Chlorooctane		17.9 %	67.6-	140	17	"	,,,	"		
Surrogate: 1-Chlorooctadecane		23.8 %	70-1	30	"	n	"	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	н	IF.		
Total Hydrocarbon C6-C35	ND	10.0	u	**	11	H	(1	Ħ		
Surrogate: 1-Chlorooctane		96.4 %	67.6-	140	<i>n</i>	"	"	"		
Surrogate: 1-Chlorooctadecane		103 %	70-1	30	".	n	π	"		
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	"	"	n	н	u	41		
Total Hydrocarbon C6-C35	ND	10.0	"	"	u	"	n	n		
Surrogate: 1-Chlorooctane		113 %	67.6-	140	"	"	"	17		
Surrogate: 1-Chlorooctadecane		125 %	70-1	30	"	"	"	u u		
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	м		н	**		
Total Hydrocarbon C6-C35	ND	10.0	¥	"	"	"	n 	H	· · · · · · · · · · · · · · · · · · ·	
Surrogate: 1-Chlorooctane		104 %	67.6-	140	"	"	n	н		
Surrogate: 1-Chlorooctadecane		110 %	70-1	30	n	и	"	11		
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	u		в	H	11	n		
Total Hydrocarbon C6-C35	ND	10.0	**	"	"	"		u 		
Surrogate: 1-Chlorooctane		92.2 %	67.6-1	140	"	"	"	"		
Surrogate: 1-Chlorooctadecane		101 %	70-1	30	"	"		н .		

Plains All American EH & S	Project: Shafter Lake 8inch				<u></u>		Fax: (432)	587-4914	
1301 S. County Road 1150	Project Number: 94057171						Repor	ted:	
Midland TX, 79706-4476	and TX, 79706-4476 Project Manager: Daniel Bryant							03/29/05	15:35
		O	rganics by	GC					
Environmental Lab of Texas									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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	11	"	n	"		n	
Total Hydrocarbon C6-C35	ND	10.0	"	*	u	0	"	n	
Surrogate: 1-Chlorooctane		93.0 %	67.6-1-	40	"	tt	"	W	
Surrogate: 1-Chlorooctadecane		97.2 %	70-13	0	"	n	'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	"	"	ч	n	"	91	
Total Hydrocarbon C6-C35	ND	10.0	н	"	n		n	u	
Surrogate: 1-Chlorooctane		107 %	67.6-1	40	"	"	"	"	
Surrogate: 1-Chlorooctadecane		120 %	70-13	0	n	n	"	"	
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	J
Diesel Range Organics >C12-C35	26.8	10.0	14	"	u	"	u	u	
Total Hydrocarbon C6-C35	26.8	10.0	0	"	17	n	"	н	
Surrogate: 1-Chlorooctane		111 %	67.6-1	40	"	"	"	"	
Surrogate: 1-Chlorooctadecane		113 %	70-13	0	"	"	"	n	
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	11		"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	n	u	u	*1	. u	"	
Surrogate: 1-Chlorooctane		108 %	67.6-1	40	"	"	"	n	
Surrogate: 1-Chlorooctadecane		124 %	70-13	0	"	"	"	v	
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	n	"	"	11	"	"	
Total Hydrocarbon C6-C35	ND	10.0	н	"		u 	"	11	
Surrogate: 1-Chlorooctane		80.6 %	67.6-1-	40	"	"	#	"	
Surrogate: 1-Chlorooctadecane		88.0 %	70-13	0	n	"	"	"	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prenared	Analyzed	Method	Notes
DSW-1 2' (5C22001-01) Soil							Anaryzeu		
% 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	%	1	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	<u> </u>
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	roject: Sha	ifter Lake 8i	nch				Fax: (432)	687-4914
1301 S. County Road 1150 Midland TX, 79706-4476		Project N Project Ma	umber: 940 anager: Dar	57171 niel Bryant					Repo 03/29/0	nted: 15 15:35
<u></u>	0	rganics by	GC - Q	uality Co	ontrol		· <u> </u>		<u> </u>	
		Environ	nental L	ab of Te	xas					
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: (03/23/05 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	17							
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:	03/23/05 A	nalyzed: 03	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	и	1000		95.0	81.8-105			
Surrogate: 1-Chlorooctane	42.1		mg/kg	50.0		84.2	67.6-140			
Surrogate: 1-Chlorooctadecane	42.1		n	50.0		84.2	70-130			
Calibration Check (EC52310-CCV1)				Prepared:	03/23/05 Ai	nalyzed: 03	3/24/05			
Gasoline Range Organics C6-C12	507		mg/kg	500		101	80-120			
Diesel Range Organics >C12-C35	511		N	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		"	50.0		75.8	70-130			
Matrix Spike (EC52310-MS1)	Sou	rce: 5C21022	2-02	Prepared:	03/23/05 A	nalyzed: 03	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:	03/23/05 A	nalyzed: 03	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		Pr Project Nu Project Ma	oject: Sha mber: 940 nager: Dar	fter Lake 8ir 57171 niel Bryant	nch				Fax: (432) Repo 03/29/0.	687-4914 rted: 5 15:35
General	Chemistry Para	ameters by Environn	EPA / S iental L	Standard ab of Te:	Method	ls - Qual	lity Cont	trol		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch EC52305 - General Preparation (Prep)

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

Environmental Lab of Texas

Plains All 1301 S. Co	American EH & S punty Road 1150	Project: Project Number:	Shafter Lake 8inch 94057171	Fax: (432) 687-4914 Reported:
Midland T	X, 79706-4476	Project Manager:	Daniel Bryant	03/29/05 15:35
		Notes and De	finitions	
S-06	The recovery of this surrogate is outside control lin matrix interference's.	nits due to sample di	lution required from high analyte concentration and/or	
J	Detected but below the Reporting Limit; therefore,	result is an estimate	d concentration (CLP J-Flag).	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the reporting limit			
NR	Not Reported			
dry	Sample results reported on a dry weight basis			
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland K 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	WINTAL-G	LOILCE	INICAL AND C	ONSTRUC	N NOLL	VIT RIALS SERV	CHA	IN OF CUSTODY RECORD
			, ,	ł		ANALYSIS REQUESTED		Lab use only Due Date:
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Consulting Engineers &	Scientists							$\langle \rangle$ when received (C ^a): 0.5 ^C
E Location		Contac	¥					1 2 3 4 5
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vier's Name		Samplei	r's Signature					
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uished by (Signature)	Date:	Time:	Received by: (Sigi	nature)	<u>مّ</u>	ite: Time:	7	
WW - Wastewater Ner VOA - 40 ml viat	W - Water A/G - Amber /	S - Soil Or Glass 1	SD - Solid L - Lin Liter 250 m	hid A - Al	r Bag mouth	C - Charcoal tube P/O - Plastic or other	SL - sludge O - Oil	
no Office 1. Sum Houston Pkwy N., Suite 107 n. Texas 77043	Dathas O S901 Car Dathas, T	Milee spender Freew exas 75247	ray. Suite 100	Fort Wor 2301 E. I Fort Wor	rth Office Loop 820 Nor th. Texas 761	£ 90	Austin Office 3913 Todd Lane, Suite 312 Austin, Texas 787-44	Atlanta Office 66.2.1 Bay Circle, Suite 120 Norccoss, Georgia 30071
22-0700 Fax (713) 122-0768	SQ (F12)	0-i010 Fax	(214) 630-70/0	(11.18)	3-Koun Par	817) 265-8602	1011-764 (710) Xe4 7711-744 (715)	MIE-CAT (NII YWL +110-CAT (NII)

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

Client:	Plaing Pipeline
Date/Time	3/22/05 8:15
Order #:	5022.00
Initials:	CR

Sample Receipt Checklist

Temcerature of container/cooler?	I Yes No	0.5 C
Shiccing container/cocler in gccd condition?	I MEST NO	
Custody Seals intact on shipping container/cooler?	Yes No ;	Not present
Custody Seals intact on sample cottles?	I CO No	Not present
Chain of custody present?	100 I No :	
Samcle Instructions complete on Chain of Custody?	No No	ł
Chain of Custody signed when relinquished and received?	I No I	1
Chain of custody agrees with sample lacel(s)	I COL I NO	1
Container labels legible and intact?	I tes No	
Sample Matrix and properties same as on chain of custody?	I TED' No	
Samcies in proper container/bcttle?	I TES ' No	
Samples properly creserved?	No No	
Sample bottles intact?	NC NC	
Preservations documented on Chain of Custody?	i De No	
Containers documented on Chain of Custody?	Tes No	
Sufficient sample amount for indicated test?	NC NC	
All samples received within sufficient hold time?	NO NO	;
VOC samples have zero headspace?	I (es) No	Not Applicate

Other observations:

•

Variance Documentation:

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| Contact Person:<br>Regarding: | Date/Time:                                                                                                     | Contacted by: |
|-------------------------------|----------------------------------------------------------------------------------------------------------------|---------------|
|                               |                                                                                                                |               |
|                               |                                                                                                                |               |
| Corrective Action Takan:      |                                                                                                                |               |
|                               |                                                                                                                |               |
|                               |                                                                                                                |               |
| <ul> <li></li></ul>           |                                                                                                                |               |
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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>Midlard TX, 70706 4476 | Project: Shafter La<br>Project Number: 2003-0014 | ke 8 inch |                | Fax: (432) 687-4914<br>Reported: |
|----------------------------------------------------------------------------------|--------------------------------------------------|-----------|----------------|----------------------------------|
| Millard 17, 77/00-4470                                                           | ANALYTICAL REPORT FOR SA                         | MPLES .   |                |                                  |
| Sample ID                                                                        | Laboratory ID                                    | Matrix    | Date Sampled   | Date Received                    |
| East NW-1                                                                        | 5H16001-01                                       | Soil      | 08/15/05 08:45 | 08/16/05 08:50                   |
| East WW-1                                                                        | 5H16001-02                                       | Soil      | 08/15/05 08:50 | 08/16/05 08:50                   |
| East SW-1                                                                        | 5H16001-03                                       | Soil      | 08/15/05 08:55 | 08/16/05 08:50                   |
| East EW-1                                                                        | 5H16001-04                                       | Soil      | 08/15/05 09:00 | 08/16/05 08:50                   |
| East BH-1                                                                        | 5H16001-05                                       | Soil      | 08/15/05 09:05 | 08/16/05 08:50                   |
| R-1                                                                              | 5H16001-06                                       | Soil      | 08/15/05 09:41 | 08/16/05 08:50                   |
| R-2                                                                              | 5H16001-07                                       | Soil      | 08/15/05 09:45 | 08/16/05 08:50                   |
| R-3                                                                              | 5H16001-08                                       | Soil      | 08/15/05 09:48 | 08/16/05 08:50                   |
| R-4                                                                              | 5H16001-09                                       | Soil      | 08/15/05 09:53 | 08/16/05 08:50                   |
| R-5                                                                              | 5H16001-10                                       | Soil      | 08/15/05 09:57 | 08/16/05 08:50                   |
| R-6                                                                              | 5H16001-11                                       | Soil      | 08/15/05 10:01 | 08/16/05 08:50                   |
| R-7                                                                              | 5H16001-12                                       | Soil      | 08/15/05 10:04 | 08/16/05 08:50                   |
| R-8                                                                              | 5H16001-13                                       | Soil      | 08/15/05 10:07 | 08/16/05 08:50                   |
| West WW-1                                                                        | 5H16001-14                                       | Soil      | 08/15/05 15:11 | 08/16/05 08:50                   |
| West NW-1                                                                        | 5H16001-15                                       | Soil      | 08/15/05 15:13 | 08/16/05 08:50                   |
| West SW-1                                                                        | 5H16001-16                                       | Soil      | 08/15/05 15:14 | 08/16/05 08:50                   |
| West BH-1                                                                        | 5H16001-17                                       | Soil      | 08/15/05 15:16 | 08/16/05 08:50                   |
| West EW-1                                                                        | 5H16001-18                                       | Soil      | 08/15/05 15:17 | 08/16/05 08:50                   |
|                                                                                  |                                                  |           |                |                                  |

| Plains All American EH & S                         |         | I                  |               | Fax: (432) 687-4914 |         |          |          |           |         |  |
|----------------------------------------------------|---------|--------------------|---------------|---------------------|---------|----------|----------|-----------|---------|--|
| 1301 S. County Road 1150<br>Midland TV, 79706 4476 |         | Project N          | umber: 2003   | -00145              |         |          |          | Reported: |         |  |
|                                                    |         | Project M          | anager: Dalla | a Diyani            |         | ·        |          | 08/22/03  |         |  |
|                                                    |         | 0                  | ganics by     | GC                  |         |          |          |           |         |  |
|                                                    | <u></u> | Environ            | mental La     | b of Te             | xas     |          |          |           |         |  |
| Analyte                                            | Result  | Reporting<br>Limit | Units         | Dilution            | Batch   | Prepared | Analyzed | Method    | Not     |  |
| East NW-1 (5H16001-01) Soil                        |         |                    |               |                     |         | Ticpaicu |          |           |         |  |
| Benzene                                            | ND      | 0.0250             | mg/kg dry     | 25                  | EH51802 | 08/17/05 | 08/17/05 | EPA 8021B |         |  |
| Toluene                                            | ND      | 0.0250             |               | u.                  | ч       | "        | **       |           |         |  |
| Ethylbenzene                                       | ND      | 0.0250             | n             | u                   |         | н        | 11       | н         |         |  |
| Xylene (p/m)                                       | ND      | 0.0250             | n             | n                   | v       |          | u        | w         |         |  |
| Xylene (o)                                         | ND      | 0.0250             |               |                     | u       | н        | u        | "         |         |  |
| Surrogate: a.a.a-Trifluorotoluene                  |         | 94.8 %             | 80-12         | 0                   | "       | <i>n</i> | "        | "         |         |  |
| Surrogate: 4-Bromolluorobenzene                    |         | 109 %              | 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               |               |                     | "       | N        |          | "         |         |  |
| Total Hydrocarbon C6-C35                           | ND      | 10.0               | n             | "                   |         |          | u        | u         |         |  |
| Surrogate: 1-Chlorooctane                          |         | 101 %              | 70-13         | 0                   | н       |          | "        | н         |         |  |
| Surrogate: 1-Chlorooctadecane                      |         | 114 %              | 70-13         | 0                   | u       | "        | "        | "         |         |  |
|                                                    |         |                    |               |                     |         |          |          |           |         |  |
| East WW-1 (5H16001-02) Soil                        | ·····   |                    |               |                     |         |          |          |           | <u></u> |  |
| Benzene                                            | ND      | 0.0250             | mg/kg dry     | 25                  | EH51802 | 08/17/05 | 08/17/05 | EPA 8021B |         |  |
| Toluene                                            | ND      | 0.0250             | u             | "                   | "       | н        | n        | n         |         |  |
| Ethylbenzene                                       | ND      | 0.0250             | v             | R                   | "       | μ        | *        | n         |         |  |
| Xylene (p/m)                                       | ND      | 0.0250             | **            | "                   | "       | "        |          | "         |         |  |
| Xylene (o)                                         | ND      | 0.0250             | "             | "                   | н       | "        | u<br>    | U         |         |  |
| Surrogate: a,a,a-Trifluorotoluene                  |         | 90.2 %             | 80-12         | 0                   | "       | "        | "        | и         |         |  |
| Surrogate: 4-Bromofluorobenzene                    |         | 101 %              | 80-12         | 0                   | "       | "        | "        | "         |         |  |
| 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                     | 42.2    | 10.0               |               | "                   | n       | "        | 17       | **        |         |  |
| Total Hydrocarbon C6-C35                           | 42.2    | 10.0               | "             | "                   | 11      | "        |          | **        |         |  |
| Surrogate: 1-Chlorooctane                          |         | 103 %              | 70-13         | 0                   | "       | "        | n        | "         |         |  |
| Surrogate: 1-Chlorooctadecane                      |         | 115 %              | 70-13         | 0                   |         | "        | "        | n         |         |  |
| East SW-1 (5H16001-03) Soil                        |         |                    |               |                     |         |          |          |           |         |  |
| Benzene                                            | ND      | 0.0250             | mg/kg dry     | 25                  | EH51802 | 08/17/05 | 08/17/05 | EPA 8021B |         |  |
| Toluene                                            | ND      | 0.0250             | "             | "                   |         | n        | "        | u         |         |  |
| Ethylbenzene                                       | ND      | 0.0250             | **            | ĸ                   | u       | n        | w        | u         |         |  |
| Xylene (p/m)                                       | ND      | 0.0250             |               | n                   | **      | "        | "        | 11        |         |  |
| Xylene (0)                                         | ND      | 0.0250             | "             | n                   | и       | *        | "        | н         |         |  |
| Surrogate: a,a,a-Trifluorotoluene                  |         | 91.6 %             | 80-12         | 0                   | n       | "        | "        | "         |         |  |
| Surrogate: 4-Bromofluorobenzene                    |         | 98.5 %             | 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       | "        | н        | 17        |         |  |
| Total Hydrocarbon C6-C35                           | ND      | 10.0               | n             |                     | n       | n        | "        |           |         |  |

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| Plains All American EH & S        |        | 1         |             | Fax: (432) 687-4914 |         |          |                              |           |         |  |
|-----------------------------------|--------|-----------|-------------|---------------------|---------|----------|------------------------------|-----------|---------|--|
| 1301 S. County Road 1150          |        | Project N | umber: 200  | 3-00145             |         |          |                              | Reported: |         |  |
| Midland TX, 79706-4476            |        | Project M | anager: Dar | iel Bryant          |         |          |                              | 08/22/05  | 5 08:17 |  |
|                                   |        | Oı        | ganics b    | y GC                |         |          |                              |           |         |  |
|                                   |        | Environ   | mental L    | ab of Te            | exas    |          |                              |           |         |  |
|                                   |        | Reporting |             |                     |         |          | ,,,_,,,,,,,,,,,,,,,,,,,,,,,, |           |         |  |
| Analyte                           | Result | Limit     | Units       | Dilution            | Batch   | Prepared | Analyzed                     | Method    | Notes   |  |
| East SW-1 (5H16001-03) Soil       |        |           |             |                     |         |          |                              |           |         |  |
| Surrogate: 1-Chlorooctane         |        | 83.0 %    | 70-1        | 30                  | EH51606 | 08/16/05 | 08/16/05                     | EPA 8015M |         |  |
| Surrogate: 1-Chlorooctadecane     |        | 113 %     | 70-1        | 30                  | "       | "        | "                            | n         |         |  |
| 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    | 10          | u                   |         | "        | "                            | *         |         |  |
| Ethylbenzene                      | ND     | 0.0250    | "           | *                   | "       | н        | u                            | n         |         |  |
| Xylene (p/m)                      | ND     | 0.0250    | 11          | μ                   | u       | 11       | "                            | D         |         |  |
| Xylene (o)                        | ND     | 0.0250    | u           | v                   | "       | "        | u                            | **        |         |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 91.9 %    | 80-1        | 20                  | "       | "        | "                            | H         |         |  |
| Surrogate: 4-Bromofluorobenzene   |        | 105 %     | 80-1        | 20                  | "       | "        | "                            | п         |         |  |
| 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        | н                            | n         |         |  |
| Total Hydrocarbon C6-C35          | ND     | 10.0      | "           | **                  | u       | u        | "                            | н         |         |  |
| Surrogate: 1-Chlorooctane         |        | 97.2 %    | 70-1        | 30                  | *       | **       | p                            | **        |         |  |
| Surrogate: 1-Chlorooctadecane     |        | 110 %     | 70-130      |                     | "       | n        | "                            | "         |         |  |
| 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          |                     | "       | и        | 11                           | "         |         |  |
| Ethylbenzene                      | ND     | 0.0250    | "           | v                   | n       | "        |                              | "         |         |  |
| Xylene (p/m)                      | ND     | 0.0250    | "           | "                   |         | "        | и                            | 11        |         |  |
| Xylene (o)                        | ND     | 0.0250    | "           | "                   | н       | "        | It                           | IF        |         |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 104 %     | 80-1        | 20                  | "       | "        | "                            | "         |         |  |
| Surrogate: 4-Bromofluorobenzene   |        | 102 %     | 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      | 11          |                     | ۳       |          |                              | н         |         |  |
| Total Hydrocarbon C6-C35          | ND     | 10.0      | "           | u                   | "       |          | н                            |           |         |  |
| Surrogate: 1-Chlorooctane         |        | 93.8 %    | 70-1        | 30                  | "       | "        | "                            | n         |         |  |
| Surrogate: 1-Chlorooctadecane     |        | 106 %     | 70-1        | 30                  | "       | "        | "                            | "         |         |  |

| Plains All American EH & S        |            | l                  | Project: Sha |            | Fax: (432) 687-4914 |          |          |           |       |
|-----------------------------------|------------|--------------------|--------------|------------|---------------------|----------|----------|-----------|-------|
| 1301 S. County Road 1150          |            | Project N          | umber: 200   | 3-00145    |                     |          |          | Report    | ed:   |
| Midland TX, 79706-4476            |            | Project M          | anager: Dar  | iel Bryant |                     | <u>.</u> |          | 08/22/05  | 08:17 |
|                                   |            | O                  | ganics by    | y GC       |                     |          | •        |           |       |
|                                   |            | Environ            | mental L     | ab of Te   | xas                 |          |          |           |       |
| Analyte                           | Result     | Reporting<br>Limit | Units        | Dilution   | Batch               | Prepared | Analyzed | Method    | Not   |
| ₹-1 (5H16001-06) Soil             | <u></u>    |                    |              |            |                     |          |          |           |       |
|                                   | ND         | 0.0250             | mg/kg dry    | 25         | EH51802             | 08/17/05 | 08/17/05 | EPA 8021B |       |
| Toluene                           | ND         | 0.0250             | "            | "          | n                   | **       | 11       |           |       |
| Sthylbenzene                      | ND         | 0.0250             | u            | n          | п                   | 11       | "        | n         |       |
| (ylene (p/m)                      | ND         | 0.0250             | *            | "          |                     | "        | "        |           |       |
| (ylene (o)                        | ND         | 0.0250             |              | "          | п                   | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 85.6%              | 80-1         | 20         | "                   | "        | <br>"    |           |       |
| Surrogate: 4-Bromofluorobenzene   |            | 98.7 %             | 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               |              | н          | 11                  | a        | u        | u         |       |
| fotal Hydrocarbon C6-C35          | ND         | 10.0               | u            | н          |                     | "        | "        | *         |       |
| Surrogate: 1-Chlorooctane         |            | 105 %              | 70-1         | 30         | "                   | "        | "        | ,,        |       |
| Surrogate: 1-Chlorooctadecane     |            | 115 %              | 70-1         | 30         | "                   | "        | n        | v         |       |
| 8-2 (5H16001-07) Soil             |            |                    |              |            |                     |          |          |           |       |
| lenzene                           | ND         | 0.0250             | mg/kg dry    | 25         | EH51802             | 08/17/05 | 08/18/05 | EPA 8021B |       |
| foluene                           | 0.0303     | 0.0250             | н            | н          | u                   | u        | **       | n         |       |
| thylbenzene                       | 0.0404     | 0.0250             |              | "          | u                   | "        | u        | 19<br>1   |       |
| (ylene (p/m)                      | 0.0775     | 0.0250             | n            | "          | n                   | 10       | v        | 5 B       |       |
| (ylene (o)                        | 0.0574     | 0.0250             | 11           | "          | n                   | "        | "        | Ħ         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 84.8 %             | 80-1         | 20         | "                   | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 92.1 %             | 80-1         | 20         | "                   | "        | 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        |          | н         |       |
| fotal Hydrocarbon C6-C35          | 496        | 10.0               | "            | "          | "                   | H        | u        | #         |       |
| urrogate: 1-Chlorooctane          |            | 101 %              | 70-1         | 30         | 56                  | IT       | R.       | **        |       |
| Surrogate: 1-Chlorooctadecane     |            | 128 %              | 70-1         | 30         | n                   | n        | n        | n         |       |
| R-3 (5H16001-08) Soil             |            |                    |              |            |                     |          |          |           |       |
| Benzene                           | ND         | 0.0250             | mg/kg dry    | 25         | EH51802             | 08/17/05 | 08/18/05 | EPA 8021B |       |
| oluene                            | ND         | 0.0250             | u            |            | ч                   | a        | "        | π         |       |
| Sthylbenzene                      | ND         | 0.0250             | **           | "          | н                   | 17       | u        | н         |       |
| (ylene (p/m)                      | J [0.0236] | 0.0250             | **           | n          | "                   | **       | "        | u         |       |
| (ylene (o)                        | ND         | 0.0250             | n            | "          | n<br>               | "        | "        | н         |       |
| Surrogate: a,a,a-Trifluorotoluene |            | 90.2 %             | 80-1         | 20         | "                   | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene   |            | 93.4 %             | 80-1         | 20         | "                   | "        | u        | "         |       |
| Sasoline Range Organics C6-C12    | 121        | 10.0               | mg/kg dry    | l          | EH51606             | 08/16/05 | 08/16/05 | EPA 8015M |       |
| Diesel Range Organics >C12-C35    | 1160       | 10.0               | *            | u          | "                   |          | 11       | "         |       |
| Fotal Hydrocarbon C6-C35          | 1280       | 10.0               | 11           | n          | *                   | H        | 57       | 11        |       |

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Page 4 of 18

| Plains All American EH & S        |        | ]                          | Project: Sha | fter Lake 8 | Fax: (432) 687-4914 |                |          |           |         |  |
|-----------------------------------|--------|----------------------------|--------------|-------------|---------------------|----------------|----------|-----------|---------|--|
| 1301 S. County Road 1150          |        | Project Number: 2003-00145 |              |             |                     |                |          | Reported: |         |  |
| Midland TX, 79706-4476            |        | Project M                  | anager: Dan  | niel Bryant |                     |                |          | 08/22/0   | 5 08:17 |  |
|                                   |        | Oı                         | rganics by   | y GC        |                     |                |          |           |         |  |
|                                   |        | Environ                    | mental La    | ab of Te    | exas                |                |          |           |         |  |
| Analyte                           | Result | Reporting<br>Limit         | Units        | Dilution    | Batch               | Prepared       | Analyzed | Method    | Notes   |  |
| R-3 (5H16001-08) Soil             |        |                            |              |             |                     |                |          |           |         |  |
| Surrogate: 1-Chlorooctane         |        | 104 %                      | 70-1         | 30          | 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                     | *1           | "           | н                   | "              | и        | и         |         |  |
| Xylene (p/m)                      | 0.347  | 0.0250                     |              | "           |                     | **             | "        | и         |         |  |
| Xylene (0)                        | 0.0669 | 0.0250                     | n            | u           | n                   | t <del>i</del> | n        | lt.       |         |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 85.1 %                     | 80-1         | 20          | "                   | "              | "        | "         |         |  |
| Surrogate: 4-Bromofluorobenzene   |        | 102 %                      | 80-1         | 20          | "                   | "              | "        | "         |         |  |
| 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            | "           |                     | "              | и        | **        |         |  |
| Total Hydrocarbon C6-C35          | 525    | 10.0                       | •            | "           | n                   | u              | 11       | 11        |         |  |
| Surrogate: 1-Chlorooctane         |        | 110 %                      | 70-1         | 30          | "                   | "              | "        | "         |         |  |
| Surrogate: 1-Chlorooctadecane     |        | 130 %                      | 70-1         | 30          | n                   | "              | 15       | "         |         |  |
| 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                     | *            |             |                     |                | "        | "         |         |  |
| Ethylbenzene                      | ND     | 0.0250                     |              | "           | u                   |                | u        | u         |         |  |
| Xylene (p/m)                      | ND     | 0.0250                     | "            | "           | 'n                  |                |          | и         |         |  |
| Xylene (o)                        | ND     | 0.0250                     | *            | "           | *                   | "              |          |           |         |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 99,1 %                     | 80-1         | 20          | "                   | "              | "        | "         |         |  |
| Surrogate: 4-Bromofluorobenzene   |        | 98.9 %                     | 80-1         | 20          | n                   | "              | 11       | "         |         |  |
| 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                       | "            | н           | n                   | u              | н        | Ħ         |         |  |
| Total Hydrocarbon C6-C35          | 224    | 10.0                       | "            | "           | 8                   | "              | n        | "         |         |  |
| Surrogate: 1-Chlorooctane         |        | 101 %                      | 70-1         | 30          | "                   | n              | "        | "         |         |  |
| Surrogate: 1-Chlorooctadecane     |        | 127 %                      | 70-1         | 30          | "                   | "              | "        | "         |         |  |

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |              | Project N<br>Project M | Project: Shafter Lake 8 inch<br>Project Number: 2003-00145<br>Project Manager: Daniel Bryant |          |         |          |          |           |      |  |
|----------------------------------------------------------------------------------|--------------|------------------------|----------------------------------------------------------------------------------------------|----------|---------|----------|----------|-----------|------|--|
|                                                                                  |              | O                      | rganics by                                                                                   | y GC     |         |          |          |           |      |  |
|                                                                                  | •            | Environ                | mental La                                                                                    | ab of Te | exas    |          |          |           |      |  |
| Analyte                                                                          | Result       | Reporting<br>Limit     | Units                                                                                        | Dilution | Batch   | Prepared | Analyzed | Method    | Note |  |
| R-6 (5H16001-11) Soil                                                            |              |                        |                                                                                              |          |         |          |          |           |      |  |
| Benzene                                                                          | J [0.00993]  | 0.0250                 | mg/kg dry                                                                                    | 25       | EH51802 | 08/17/05 | 08/18/05 | EPA 8021B |      |  |
| Toluene                                                                          | J [0.0225]   | 0.0250                 | v                                                                                            | 17       | "       | н        | "        | n         |      |  |
| Ethylbenzene                                                                     | 0.0362       | 0.0250                 | "                                                                                            | "        | "       | u        | н        | **        |      |  |
| Xylene (p/m)                                                                     | 0.0985       | 0.0250                 | **                                                                                           |          | "       | "        |          | "         |      |  |
| Xylene (o)                                                                       | J [0.0227]   | 0.0250                 | u                                                                                            | 17       |         | "        | n        | 17        |      |  |
| Surrogate: a,a,a-Trifluorotoluene                                                |              | 82.6 %                 | 80-1                                                                                         | 20       | "       | "        | "        | "         |      |  |
| Surrogate: 4-Bromofluorobenzene                                                  |              | 93.3 %                 | 80-1                                                                                         | 20       | "       | "        | "        | "         |      |  |
| 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                   | "                                                                                            | 57       |         | "        | v        | n         |      |  |
| Total Hydrocarbon C6-C35                                                         | 199          | 10.0                   | u                                                                                            | 11       | u       | "        | п        | n         |      |  |
| Surrogate: 1-Chlorooctane                                                        |              | 112 %                  | 70-1                                                                                         | 30       | 11      | "        | n        | "         |      |  |
| Surrogate: 1-Chlorooctadecane                                                    |              | 129 %                  | 70-1                                                                                         | 30       | "       | "        | "        | "         |      |  |
| 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                 | u                                                                                            | "        | "       | н        | "        | n         |      |  |
| Ethylbenzene                                                                     | ND           | 0.0250                 | *                                                                                            | "        | "       | н        | n        | **        |      |  |
| Xylene (p/m)                                                                     | ND           | 0.0250                 |                                                                                              | n        |         | "        | "        | **        |      |  |
| Xylene (o)                                                                       | ND           | 0.0250                 | н                                                                                            |          |         | *        | u        |           |      |  |
| 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                   | "                                                                                            | и        | u       | **       | "        | "         |      |  |
| Total Hydrocarbon C6-C35                                                         | ND           | 10.0                   | **                                                                                           |          | н       | "        | "        | "         |      |  |
| Surrogate: 1-Chlorooctane                                                        |              | 98.8 %                 | 70-1                                                                                         | 30       | "       | "        | "        | "         |      |  |
| Surrogate: 1-Chlorooctadecane                                                    |              | 125 %                  | 70-1                                                                                         | 30       | "       | "        | "        | "         |      |  |
| R-8 (5H16001-13) Soil                                                            |              |                        |                                                                                              |          |         |          |          |           |      |  |
| Benzene                                                                          | ND           | 0.0250                 | mg/kg dry                                                                                    | 25       | EH51802 | 08/17/05 | 08/18/05 | EPA 8021B |      |  |
| Toluene                                                                          | ND           | 0.0250                 | "                                                                                            |          | n       | "        | u        | 53        |      |  |
| Ethylbenzene                                                                     | ND           | 0.0250                 | u                                                                                            |          | n       | "        | "        | **        |      |  |
| Xylene (p/m)                                                                     | 0.0480       | 0.0250                 | u                                                                                            |          | *       | н        | n        | **        |      |  |
| Xylene (0)                                                                       | ND           | 0.0250                 |                                                                                              | 11       |         | 11       | "        | н         |      |  |
| Surrogate: a,a,a-Trifluorotoluene                                                |              | 89.5 %                 | 80-1                                                                                         | 20       | "       | "        | , "      | "         |      |  |
| Surrogate: 4-Bromofluorobenzene                                                  |              | <i>99.2 %</i>          | 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                   |                                                                                              | u        | "       | "        | v        | 14        |      |  |
| Total Hydrocarbon C6-C35                                                         | ND           | 10.0                   | n                                                                                            | "        |         | u        | u        | "         |      |  |
| Environmental I ab of Tayor                                                      | ···· · · · · |                        |                                                                                              |          |         |          |          |           |      |  |

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.

Page 6 of 18

| Plains All American EH & S Project: Shafter Lake 8 inch |                                                    |             |                |          |              |          |          | Fax: (432) 687-4914 |       |  |  |  |  |
|---------------------------------------------------------|----------------------------------------------------|-------------|----------------|----------|--------------|----------|----------|---------------------|-------|--|--|--|--|
| 1301 S. County Road 1150                                | 301 S. County Road 1150 Project Number: 2003-00145 |             |                |          |              |          |          |                     |       |  |  |  |  |
| Midland TX, 79706-4476                                  | Project M                                          | anager: Dar | 08/22/05 08:17 |          |              |          |          |                     |       |  |  |  |  |
|                                                         |                                                    | O           | rganics b      | y GC     |              |          |          |                     |       |  |  |  |  |
|                                                         | Environmental Lab of Texas                         |             |                |          |              |          |          |                     |       |  |  |  |  |
| Analyte                                                 | Result                                             | Reporting   | Linits         | Dibution | Detak        | Deserved | Analward | Mathod              | Noter |  |  |  |  |
| R.8 (5H16001_13) Soil                                   |                                                    |             |                | Difution | Balco        | Prepared | Anaryzeu | Melliou             |       |  |  |  |  |
|                                                         |                                                    | 10.4.04     |                | 20       |              | <u>_</u> |          |                     |       |  |  |  |  |
| Surrogate: I-Chlorooctane                               |                                                    | 104 %       | 70-1           | 30       | EH51606<br>" | 08/16/05 | 08/16/05 | EPA 8015M<br>"      |       |  |  |  |  |
| Surrogale: 1-Chloroocladecane                           |                                                    | 128 %       | /0-1           | 30       | "            |          | "        | "                   |       |  |  |  |  |
| 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      | "              |          |              | н        | "        |                     |       |  |  |  |  |
| Ethylbenzene                                            | ND                                                 | 0.0250      | "              | *        | "            | n        | **       | *                   |       |  |  |  |  |
| Xylene (p/m)                                            | ND                                                 | 0.0250      | **             |          |              | "        | n        | "                   |       |  |  |  |  |
| Xylene (o)                                              | ND                                                 | 0.0250      | **             |          |              | "        |          | "                   |       |  |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene                       |                                                    | 88.2 %      | 80-1           | 20       | "            | "        | "        | "                   |       |  |  |  |  |
| Surrogate: 4-Bromofluorobenzene                         |                                                    | 93.8 %      | 80-1           | 20       | n            | 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              | "        | "            | "        | н        | N                   |       |  |  |  |  |
| Total Hydrocarbon C6-C35                                | ND                                                 | 10.0        | н              | u        | tr.          | н        | и        | n                   |       |  |  |  |  |
| Surrogate: 1-Chlorooctane                               |                                                    | 94.6 %      | 70-1           | 30       | "            | "        | n        | "                   |       |  |  |  |  |
| Surrogate: 1-Chlorooctadecane                           |                                                    | 129 %       | 70-1           | 30       | "            | n        | "        | "                   |       |  |  |  |  |
| 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        | "            | u        | **       |                     |       |  |  |  |  |
| Xylene (p/m)                                            | ND                                                 | 0.0250      | Ħ              | и        | 0            |          | n        | ۳                   |       |  |  |  |  |
| Xylene (o)                                              | ND                                                 | 0.0250      | u              | n        | Ił           | n        | "        | *                   |       |  |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene                       |                                                    | 106 %       | 80-1           | 20       | "            | "        | "        | "                   | _     |  |  |  |  |
| Surrogate: 4-Bromofluorobenzene                         |                                                    | 94.0 %      | 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        | "              | "        | D            |          | n        | u                   |       |  |  |  |  |
| Total Hydrocarbon C6-C35                                | ND                                                 | 10.0        | "              | "        | н            | "        | P        | "                   |       |  |  |  |  |
| Surrogate: 1-Chlorooctane                               |                                                    | 91.8 %      | 70-1           | 30       | "            | "        | "        | "                   |       |  |  |  |  |
| Surrogate: 1-Chlorooctadecane                           |                                                    | 124 %       | 70-1           | 30       | n            | "        | "        | "                   |       |  |  |  |  |

| Plains All American EH & S        |        |                    | Project: Sha | fter Lake 8 | inch    |          |          | Fax: (432) | 687-4914 |
|-----------------------------------|--------|--------------------|--------------|-------------|---------|----------|----------|------------|----------|
| 1301 S. County Road 1150          |        | Project N          | umber: 200   | 3-00145     |         |          |          | Repor      | ted:     |
| Midland TX, 79706-4476            |        | Project M          | anager: Dar  | iel Bryant  |         |          |          | 08/22/05   | 08:17    |
|                                   |        | O                  | rganics by   | y GC        |         |          |          |            |          |
|                                   |        | Environ            | mental L     | ab of Te    | xas     |          |          |            |          |
| Analyte                           | Result | Reporting<br>Limit | Units        | Dilution    | Batch   | Prenared | Analyzed | Method     | Note     |
| West SW-1 (5H16001-16) Sail       |        | ···                |              |             |         |          |          |            |          |
| Benzene                           | ND     | 0.0250             | mg/kg dry    | 25          | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B  |          |
| Toluene                           | ND     | 0.0250             |              |             | #       | n        | "        | "          |          |
| Ethylbenzene                      | ND     | 0.0250             |              |             | *       | "        |          |            |          |
| Xvlene (p/m)                      | ND     | 0.0250             | "            | "           | •       | u        |          | u          |          |
| Xylene (o)                        | ND     | 0.0250             | n            | "           | *       | н        | "        | n          |          |
| Surrogate: a.a.a-Trifluorotoluene |        | 100 %              | 80-1         | 20          | "       | "        | n        | "          |          |
| Surrogate: 4-Bromofluorobenzene   |        | 93.4 %             | 80-1         | 20          | "       | "        | "        | н          |          |
| 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               |              | -           |         | *        |          | "          |          |
| Total Hydrocarbon C6-C35          | ND     | 10.0               | "            | п           | "       |          | "        | н          |          |
| Surrogate: 1-Chlorooctane         |        | 90.6 %             | 70-1         | 30          |         | "        | "        | н          |          |
| Surrogate: 1-Chlorooctadecane     |        | 125 %              | 70-1         | 30          | ,,      | н        | "        | "          |          |
| West DU 1 (8114001 17) Soil       |        |                    |              |             |         |          |          |            |          |
| west Bn-1 (5110001-17) 500        |        |                    |              |             |         |          |          |            |          |
| Benzene                           | ND     | 0.0250             | mg/kg dry    | 25          | EH51803 | 08/18/05 | 08/18/05 | EPA 8021B  |          |
| Toluene                           | 0.0504 | 0.0250             | u<br>u       | u           | 11      | "        | "        | "          |          |
| Ethylbenzene                      | 0.0547 | 0.0250             |              | u.          | "       | u        | u        |            |          |
| Xylene (p/m)                      | 0.111  | 0.0250             | u            | "           |         | н        | U        | "          |          |
| Xylene (0)                        | 0.0677 | 0.0250             | n<br>        | "           | "       | "        | "        |            |          |
| Surrogate: a,a,a-Trifluorotoluene |        | 94.1 %             | 80-1         | 20          | "       | "        | "        | "          |          |
| Surrogate: 4-Bromofluorobenzene   |        | 90.6 %             | 80-1         | 20          | "       | "        | "        | "          |          |
| 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               | w            | "           | H       |          | **       | n          |          |
| Total Hydrocarbon C6-C35          | 481    | 10.0               | "<br>·       | "           | H       | It       | "        |            |          |
| Surrogate: 1-Chlorooctane         |        | 107 %              | 70-1         | 30          | "       | "        | "        | "          |          |
| Surrogate: 1-Chlorooctadecane     |        | 126 %              | 70-1         | 30          | 11      | "        | "        | n          |          |
| 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             | "            | "           | "       | "        | Ħ        | "          |          |
| Ethylbenzene                      | ND     | 0.0250             | ۳            | "           |         |          | u        | н          |          |
| Xylene (p/m)                      | ND     | 0.0250             | "            |             |         | u        | *        | u          |          |
| Xylene (o)                        | ND     | 0.0250             | u            | "           |         | n        | n        | 0          |          |
| Surrogate: a,a,a-Trifluorotoluene |        | 89.2 %             | 80-1         | 20          | н       | "        | и        | "          |          |
| Surrogate: 4-Bromofluorobenzene   |        | 92.5 %             | 80-1         | 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       |          | *        | 11         |          |
| Total Hydrocarbon C6-C35          | ND     | 10.0               |              |             |         |          |          |            |          |

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |        | Pr<br>Project Nu<br>Project Man | roject: Sha<br>mber: 200<br>nager: Dar | fter Lake 8<br>3-00145<br>viel Bryant | inch    |          |          | Fax: (432) (<br>Report<br>08/22/05 | 587-4914<br>ted:<br>08:17 |
|----------------------------------------------------------------------------------|--------|---------------------------------|----------------------------------------|---------------------------------------|---------|----------|----------|------------------------------------|---------------------------|
|                                                                                  |        | Org<br>Environm                 | ganics by<br>nental L                  | y GC<br>ab of Te                      | exas    |          |          |                                    |                           |
| Analyte                                                                          | Result | Reporting<br>Limit              | Units                                  | Dilution                              | Batch   | Prepared | Analyzed | Method                             | Notes                     |
| West EW-1 (5H16001-18) Soil                                                      |        |                                 |                                        |                                       |         |          |          |                                    |                           |
| Surrogate: 1-Chlorooctane                                                        |        | 101 %                           | 70-1                                   | 30                                    | EH51607 | 08/16/05 | 08/17/05 | EPA 8015M                          |                           |
| Surrogate: 1-Chlorooctadecane                                                    |        | 112 %                           | 7 <b>0-1</b>                           | 30                                    | "       | "        | "        | "                                  |                           |

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| Midland TX, 79706-4476      | <u></u>      | 08/22/05 08:17          |                    |                       |                |          |          |               |      |
|-----------------------------|--------------|-------------------------|--------------------|-----------------------|----------------|----------|----------|---------------|------|
|                             | General Cher | nistry Para<br>Environn | neters  <br>nental | by EPA /<br>Lab of Te | Standar<br>xas | d Method | S        |               |      |
| Analyte                     | Result       | Reporting               | Units              | Dilution              | Batch          | Prenared | Analyzed | Method        | Note |
| 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       |              | <u></u>                 |                    |                       |                |          |          |               |      |
| % 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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Page 10 of 18

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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       |                            | <u></u>            |       |          |         |          |          |               |       |
| % 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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| 1301 S. County Road 1150<br>Midland TX, 79706-4476 |         | Project N<br>Project Ma | umber: 200<br>anager: Dai | 3-00145<br>niel Bryant |             |             |         |      | <b>Repo</b><br>08/22/0 | rted:<br>508:17 |
|----------------------------------------------------|---------|-------------------------|---------------------------|------------------------|-------------|-------------|---------|------|------------------------|-----------------|
|                                                    | Or      | ganics by               | y GC - Q                  | uality Co              | ontrol      |             |         |      |                        |                 |
|                                                    |         | Environ                 | nental L                  | ab of Te               | xas         |             |         |      |                        |                 |
|                                                    | Denuite | Reporting               | 1 Indea                   | Spike                  | Source      | 9/DEC       | %REC    | BBD  | RPD                    | Noton           |
|                                                    | Result  | Lunu                    | Units                     | Level                  | Result      | 70KEU       | Limits  | KPD  | Lunit                  | INDIES          |
| Batch EH51606 - Solvent Extraction (GC)            |         |                         |                           |                        |             |             | <u></u> |      | <u></u>                |                 |
| Blank (EH51606-BLK1)                               |         |                         |                           | Prepared &             | k Analyzed: | 08/16/05    |         |      |                        |                 |
| Gasoline Range Organics C6-C12                     | ND      | 10.0                    | mg/kg wet                 |                        |             |             |         |      |                        |                 |
| Diesel Range Organics >C12-C35                     | ND      | 10.0                    | 11                        |                        |             |             |         |      |                        |                 |
| Total Hydrocarbon C6-C35                           | ND      | 10.0                    | 11                        |                        |             |             |         |      |                        |                 |
| 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 &             | 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    |                         | п                         | 50.0                   |             | 112         | 70-130  |      |                        |                 |
| Calibration Check (EH51606-CCV1)                   |         |                         |                           | Prepared: (            | 08/16/05 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  |      |                        |                 |
| Total Hydrocarbon C6-C35                           | 901     |                         | "                         | 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             | 1-01                      | Prepared 8             | 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  |      |                        |                 |
| Total 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     | rce: 5H16001            | 1-01                      | Prepared &             | Analyzed:   | 08/16/05    |         |      |                        |                 |
| Gasoline Range Organics C6-C12                     | 486     | 10.0                    | mg/kg dry                 |                        | 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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| 1301 S. County Road 1150<br>Midland TX, 79706-4476 |        | Project N<br>Project Ma | umber: 200<br>anager: Dau | )3-00145<br>niel Bryant |            |              |         |      | <b>Rеро</b><br>08/22/0 | 5 08:17 |
|----------------------------------------------------|--------|-------------------------|---------------------------|-------------------------|------------|--------------|---------|------|------------------------|---------|
|                                                    | Or     | panics by               |                           | uality Co               | ontrol     |              |         | _    |                        | <u></u> |
|                                                    | ]      | Environ                 | nental L                  | ab of Te                | xas        |              |         |      |                        |         |
|                                                    | Develo | Reporting               | I huite                   | Spike                   | Source     | #/BEC        | %REC    |      | RPD<br>Limit           | Notas   |
| Analyte                                            | Kesult | Limit                   | Units                     | Level                   | Kesult     | %REC         | Limits  |      |                        | inoles  |
| Batch EH51607 - Solvent Extraction (GC)            |        |                         |                           |                         |            |              |         |      |                        |         |
| Blank (EH51607-BLK1)                               |        |                         |                           | Prepared: (             | 08/16/05 A | nalyzed: 08  | 8/17/05 |      |                        |         |
| Gasoline Range Organics C6-C12                     | ND     | 10.0                    | mg/kg wet                 |                         |            |              |         |      |                        |         |
| Diesel Range Organics >C12-C35                     | ND     | 10.0                    | н                         |                         |            |              |         |      |                        |         |
| Total Hydrocarbon C6-C35                           | ND     | 10.0                    | "                         |                         |            |              |         |      |                        |         |
| Surrogate: 1-Chlorooctane                          | 46.6   |                         | mg/kg                     | 50.0                    |            | 93.2         | 70-130  |      |                        |         |
| Surrogate: 1-Chlorooctadecane                      | 60.0   |                         | "                         | 50.0                    |            | 120          | 70-130  |      |                        |         |
| LCS (EH51607-BS1)                                  |        |                         |                           | Prepared: (             | 08/16/05 A | nalyzed: 01  | 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                    | "                         | 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 A | nalyzed: 0   | 8/17/05 |      |                        |         |
| Gasoline Range Organics C6-C12                     | 414    |                         | mg/kg                     | 500                     |            | 82.8         | 80-120  |      |                        |         |
| Diesel Range Organics >C12-C35                     | 484    |                         |                           | 500                     |            | 96.8         | 80-120  |      |                        |         |
| Total Hydrocarbon C6-C35                           | 898    |                         | **                        | 1000                    |            | 89.8         | 80-120  |      |                        |         |
| Surrogate: 1-Chlorooctane                          | 51.7   |                         | "                         | 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: (             | 08/16/05 A | 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                    | "                         | 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: (             | 08/16/05 A | 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         | nager: Da | niel Bryant    |                  |             |                |     | 08/22/0      | 5 08:17 |
|-----------------------------------|--------------|--------------------|-----------|----------------|------------------|-------------|----------------|-----|--------------|---------|
|                                   | 0            | rganics by         | - GC - Q  | Quality Co     | ontrol           |             |                |     |              |         |
|                                   |              | Environ            | nental I  | ab of Te       | xas              |             |                |     |              |         |
| 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)    |              |                    |           |                |                  |             |                |     |              |         |
| Blank (EH51802-BLK1)              |              |                    |           | Prepared: (    | 08/17/05 Ai      | nalyzed: 08 | 8/18/05        |     |              |         |
| Benzene                           | ND           | 0.0250             | mg/kg wet |                |                  |             |                |     |              |         |
| Toluene                           | ND           | 0.0250             | *         |                |                  |             |                |     |              |         |
| Ethylbenzene                      | ND           | 0.0250             | "         |                |                  |             |                |     |              |         |
| Xylene (p/m)                      | ND           | 0.0250             | "         |                |                  |             |                |     |              | •       |
| Xylene (o)                        | ND           | 0.0250             | *         |                |                  |             |                |     |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 105          |                    | ug/kg     | 100            |                  | 105         | 80-120         |     |              |         |
| Surrogate: 4-Bromofluorobenzene   | <b>98</b> .1 |                    | "         | 100            |                  | 98. I       | 80-120         |     |              |         |
| LCS (EH51802-BS1)                 |              |                    |           | Prepared &     | k Analyzed:      | 08/17/05    |                |     |              |         |
| Benzene                           | 100          |                    | ug/kg     | 100            |                  | 100         | 80-120         |     |              |         |
| Toluene                           | 102          |                    | n         | 100            |                  | 102         | 80-120         |     |              |         |
| Ethylbenzene                      | 119          |                    | н         | 100            |                  | 119         | 80-120         |     |              |         |
| Xylene (p/m)                      | 230          |                    | "         | 200            |                  | 115         | 80-120         |     |              |         |
| Xylene (o)                        | 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 | 8/18/05        |     |              |         |
| Benzene                           | 90.0         |                    | ug/kg     | 100            |                  | 90.0        | 80-120         |     |              |         |
| Toluene                           | 88.8         |                    |           | 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          |                    | "         | 100            |                  | 100         | 80-120         |     |              |         |
| Surrogate: a,a,a-Trifluorotoluene | 86.2         |                    | "         | 100            |                  | 86.2        | 0-200          |     | *****        |         |
| Surrogate: 4-Bromofluorobenzene   | 92.1         |                    | "         | 100            |                  | 92.1        | 0-200          |     |              |         |
| Matrix Spike (EH51802-MS1)        | Sou          | irce: 5H16001      | -14       | Prepared: (    | 08/17/05 Ai      | nalyzed: 08 | 8/18/05        |     |              |         |
| Benzene                           | 100          |                    | ug/kg     | 100            | ND               | 100         | 80-120         |     |              |         |
| Toluene                           | 100          |                    |           | 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          |                    | п         | 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)   | Sourc  | ce: 5H16001-14           | Prepared: (    | 08/17/05 A       | nalyzed: 08 | /1 <b>8</b> /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    |                          | 100            | ND               | 102         | 80-120          | 12.0 | 20           |       |
| Xylene (p/m)                      | 196    | а                        | 200            | ND               | 98.0        | 80-120          | 11.5 | 20           |       |
| Xylene (o)                        | 101    | "                        | 100            | ND               | 101         | 80-120          | 13.8 | 20           |       |
| Surrogate: a,a,a-Trifluorotoluene | 84.4   | н                        | 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 |                |                 |        |   |
| Toiuene                           | ND   | 0.0250 |           |                |                 |        |   |
| Ethylbenzene                      | ND   | 0.0250 |           |                |                 |        |   |
| Xylene (p/m)                      | ND   | 0.0250 | u         |                |                 |        |   |
| 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            | 85.7            | 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  |        |           | 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 |   |

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#### Environmental Lab of Texas

|                                   |        | Reporting       | Spike    | Source     |             | %REC   | •     | RPD   |       |
|-----------------------------------|--------|-----------------|----------|------------|-------------|--------|-------|-------|-------|
| Analyte                           | Result | Limit Uni       | ts Level | Result     | %REC        | Limits | RPD   | Limit | Notes |
| Batch EH51803 - EPA 5030C (GC)    |        |                 |          |            |             |        |       |       | _     |
| Calibration Check (EH51803-CCV1)  |        |                 | Prepared | & Analyzed | i: 08/18/05 |        |       |       |       |
| Benzene                           | 85.1   | ug/i            | ag 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 |       |       |       |
| Xylene (o)                        | 90.1   | n               | 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)        | Sou    | rce: 5H16001-15 | Prepared | & Analyzed | i: 08/18/05 |        |       |       |       |
| Benzene                           | 91.7   | ug/l            | ig 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    | n               | 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)   | Sou    | rce: 5H16001-15 | Prepared | & Analyzed | i: 08/18/05 |        |       |       |       |
| Benzene                           | 90.1   | ug/l            | (g 100   | ND         | 90.1        | 80-120 | 1.76  | 20    |       |
| Toluene                           | 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   | н               | 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>Limit | Units | Spike<br>Level | Source<br>Result | %REC         | %REC<br>Limits | RPD  | RPD<br>Limit | Notes |
|--------------------------------------------|--------|--------------------|-------|----------------|------------------|--------------|----------------|------|--------------|-------|
| Batch EH51703 - General Preparation (Prep) |        |                    |       |                |                  |              |                |      |              |       |
| Blank (EH51703-BLK1)                       |        |                    |       | Prepared: (    | 08/16/05         | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                                   | 100    |                    | %     | ·              |                  |              | ·              |      |              |       |
| Duplicate (EH51703-DUP1)                   | Sou    | rce: 5H16001-      | 01    | Prepared: (    | 8/16/05          | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                                   | 85.3   |                    | %     |                | 86.7             |              |                | 1.63 | 20           |       |
| Duplicate (EH51703-DUP2)                   | Sou    | rce: 5H16002-      | 03    | Prepared: 0    | )8/16/05         | Analyzed: 08 | /17/05         |      |              |       |
| % Solids                                   | 91.3   |                    | %     |                | 87.6             |              |                | 4.14 | 20           |       |

Environmental Lab of Texas

| Plains All A<br>1301 S. Cou<br>Midland TX | American EH & S<br>unty Road 1150<br>K, 79706-4476      | Project:<br>Project Number:<br>Project Manager: | Shafter Lake 8 inch<br>2003-00145<br>Daniel Bryant | Fax: (432) 687-4914<br>Reported:<br>08/22/05 08:17 |
|-------------------------------------------|---------------------------------------------------------|-------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
|                                           |                                                         | Notes and De                                    | finitions                                          |                                                    |
| J                                         | Detected but below the Reporting Limit; therefore, resu | ult is an estimated                             | d concentration (CLP J-Flag).                      |                                                    |
| DET                                       | Analyte DETECTED                                        |                                                 |                                                    |                                                    |
| ND                                        | Analyte NOT DETECTED at or above the reporting limit    |                                                 |                                                    |                                                    |
| NR                                        | Not Reported                                            |                                                 |                                                    |                                                    |
| dry                                       | Sample results reported on a dry weight basis           |                                                 |                                                    |                                                    |
| RPD                                       | Relative Percent Difference                             |                                                 |                                                    |                                                    |
| LCS                                       | Laboratory Control Spike                                |                                                 |                                                    |                                                    |
| MS                                        | Matrix Spike                                            |                                                 |                                                    |                                                    |
| Dup                                       | Duplicate                                               |                                                 |                                                    |                                                    |
|                                           |                                                         |                                                 |                                                    |                                                    |

Report Approved By:

Raland K. 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 STREET                            | VIRO                                       | <b>UNN</b> | NTAL GEOTH                                                               | CHINICA                                   | I. ANI         | ( ON                  | STRU                                       | CTIO                            | N M                               | TERIAL                                 | S SERVI                                 | GEN STATE                                                                                               | CHAIN C      | DF CUSTODY RECOF                                                                                              |
|------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------|------------|--------------------------------------------------------------------------|-------------------------------------------|----------------|-----------------------|--------------------------------------------|---------------------------------|-----------------------------------|----------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------|
|                                                                              |                                      | $\cup$                                     |            | de l                                                                     | oratory:                                  | £,7            | h                     |                                            |                                 |                                   | ANAL                                   | YSIS<br>IESTED                          |                                                                                                         |              | / Lab use only<br>Due Date:                                                                                   |
| Consult                                                                      | ing Engine                           | Ser Se | Scie CO    | Add<br>Intists                                                           | dress:                                    |                |                       |                                            |                                 |                                   | ······································ | · · · · · · · · · · · · · · · · · · ·   |                                                                                                         |              | Temp. of coclers<br>when received (C°): Q C                                                                   |
| Office Locat                                                                 | lion_Mid                             | ilend                                      |            | s S                                                                      | ntact:                                    |                |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              | 1 2 3 4 5                                                                                                     |
| Project Man                                                                  | ager She                             | ALLA                                       | 5          | PDC PC                                                                   | SO #: 2                                   | 1003           | 0014                  | 5                                          |                                 |                                   |                                        |                                         |                                                                                                         |              | rage0101                                                                                                      |
| Sampler's Nam                                                                | 16                                   |                                            |            | San                                                                      | npler's Signe                             | ture           |                       |                                            |                                 |                                   |                                        | P                                       |                                                                                                         |              |                                                                                                               |
| <u>V</u> J                                                                   | )herri                               | S.                                         | ¥          | νv                                                                       | Theman                                    | And            | s                     |                                            |                                 |                                   | ي -<br>                                | 872                                     |                                                                                                         | ****         |                                                                                                               |
| Proj. No.                                                                    |                                      | Proje                                      | ct Nan     | 16                                                                       |                                           |                | }                     | No/Type                                    | of Con                          | tainers                           | 108                                    | 80%                                     |                                                                                                         |              |                                                                                                               |
| 940571                                                                       | 71                                   | 21<br>S                                    | 王          | 1 Like 8"                                                                |                                           |                |                       |                                            | 0                               |                                   | <i>t</i>                               | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                                                                                                         |              |                                                                                                               |
| Matrix Date                                                                  | Time                                 | CoEa                                       | <br>۲۵~۵   | identifying Marks o                                                      | f Sample(s)                               | hisi2<br>AtqeO | Depth<br>End          | VON                                        | - 12<br>17                      | TE LEC                            | 20                                     | 21त                                     |                                                                                                         | ۲.<br>       | ab Sample ID (Lab Usa Only)                                                                                   |
| 5 8/.5/0                                                                     | S45 2                                |                                            | x<br>x     | 1-MN-1                                                                   |                                           |                |                       |                                            |                                 | <b>7</b>                          | *                                      |                                         |                                                                                                         | 51           | 10-100911-                                                                                                    |
| 7                                                                            | 0<br>%                               |                                            |            | cet ww-l                                                                 |                                           |                |                       |                                            |                                 | (                                 |                                        |                                         |                                                                                                         |              | -20-                                                                                                          |
|                                                                              | 855                                  |                                            |            | Sest SW-1                                                                |                                           |                |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              | 69                                                                                                            |
|                                                                              | 900                                  |                                            | -          | sert EW-1                                                                |                                           |                |                       |                                            | <br>                            |                                   |                                        |                                         |                                                                                                         |              | 40-                                                                                                           |
|                                                                              | 596                                  |                                            | <u>ш</u>   | L-HO TA                                                                  |                                           |                |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              | Ş                                                                                                             |
|                                                                              | 1,Hb                                 |                                            | ×          | [-]                                                                      |                                           |                | •••••                 |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              | 90<br>90                                                                                                      |
|                                                                              | 545                                  |                                            | ×          | 2-,                                                                      |                                           |                |                       |                                            |                                 |                                   | $\langle   \rangle$                    |                                         |                                                                                                         |              | 5                                                                                                             |
|                                                                              | 948                                  |                                            | ~~         | ¢.3                                                                      |                                           |                |                       |                                            |                                 | ·                                 |                                        |                                         |                                                                                                         |              | 80-                                                                                                           |
|                                                                              | 953                                  |                                            |            | <u>. 4</u>                                                               |                                           |                |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              | 5                                                                                                             |
| <b>・</b><br>・<br>・<br>・                                                      | 459                                  |                                            | X          | ۍ:<br>۲                                                                  |                                           |                |                       |                                            |                                 |                                   | →<br>→                                 |                                         |                                                                                                         |              | 0                                                                                                             |
| Turn around tim                                                              | ne KNo                               | rmal                                       |            | 50% Rush                                                                 | C 100% Rus                                | ų              |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              |                                                                                                               |
| Relinquished b                                                               | y (Signature)                        |                                            | ä&`        | ie/os 550                                                                | Receiv                                    | ed by: (       | Signatu               | ire)                                       |                                 | Dat                               | <br>io                                 | Time:                                   | NOTES:<br>Planse 1                                                                                      | Deriel &     | Pué en tr                                                                                                     |
| Relinquished b                                                               | y (Signature)                        |                                            | Ď          | ate: Time                                                                | : Receiv                                  | ed by: (       | Signati               | (e)                                        |                                 | Dat                               |                                        | Time:                                   | · · · · · · · · · · · · · · · · · · ·                                                                   |              |                                                                                                               |
| Relinquished b                                                               | y (Signature)                        |                                            |            | ate: Time                                                                | Receiv                                    | ed by: (       | Signatu               | (e)                                        |                                 | Dat                               |                                        | Time:                                   |                                                                                                         |              |                                                                                                               |
| Relinquished b                                                               | y (Signature)                        |                                            | ă          | ate: Time                                                                | E Proceiv                                 | AL N.          | Signati               | ES                                         |                                 | e lat                             | 62                                     | i o                                     | don,                                                                                                    |              |                                                                                                               |
| Matrix<br>Containor                                                          | WW - Wastewa<br>VOA - 40 ml via      | at ter                                     | 3¥         | - Water S - S(<br>G - Amber / Or Gla                                     | oil SD - Soli<br>ss 1 Liter               | л<br>2         | - Liquid<br>10 ml - G | itass widt                                 | kir Bag<br>s mouth              | 00°                               | - Charcoel<br>/O - Plastic             | turbe S<br>or other                     | 4 ort- gless                                                                                            |              |                                                                                                               |
| Houston Office<br>11555 Clay Road,<br>Houston, Texas 771<br>(713) 690-8989 F | Suite 100<br>143<br>'ax (713) 690-87 | 68.                                        |            | Dallas Office<br>8901 Carpenter I<br>Dallas, Texus 75,<br>(214) 630-1010 | Freeway, Suite  <br>247<br>Fax (214) 630- | 100            |                       | Fort Wo<br>2601 Gr<br>Fort Wa<br>(\$17) 26 | arth Off<br>avel Du<br>rth, Tex | Rce<br>Ive<br>35 76118<br>Fax (8) | 17) 268-8602                           |                                         | Austin Office<br>5307 Industrial Oaks Blvd. # )(<br>Austin, Texas 78735<br>(512) 442-4122 Fax (512) 442 | 60<br>5-1181 | Atlanus Office<br>2855 Premiere Parkway, Suite C<br>Duluth, Georgia 30097<br>(770) 623-0755 Fax (770) 623-962 |
|                                                                              |                                      |                                            |            |                                                                          |                                           |                |                       |                                            |                                 |                                   |                                        |                                         |                                                                                                         |              |                                                                                                               |

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|                                                                                 | EN                                 | VIRO     | IN IINN   | AL GEORIC                                                                      | RNICAI                       | OS V               | NOU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | STRUC                                          | NOIL                               | NATH                  | NIALS SERV                        | JOES (                                                                                                         | CHAIN OF CUSTODY RECORD                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------|------------------------------------|----------|-----------|--------------------------------------------------------------------------------|------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------|-----------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| l.<br>P                                                                         | B                                  | $ \cup$  |           |                                                                                | atory:                       | L A                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    | ₹Œ                    | NALYSIS<br>TEQUESTEC              |                                                                                                                | Due Date:                                                                                                                                                                                                                          |
| Consulti                                                                        | ng Engine                          | ers &    | Scienti   | Addre                                                                          | SSS:                         |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | Temp. of coolers<br>when received (C <sup>o</sup> ): <i>B</i> , <i>C</i>                                                                                                                                                           |
| Office Locati                                                                   | on Mic                             | ALCO     | pu        | Conta                                                                          | ्रद                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | Dom 7 of 5                                                                                                                                                                                                                         |
| Project Mané                                                                    | ader She                           | ALLA     | Saik      | PO/S(                                                                          | 0#: 2                        | Ce 3-              | 00145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                |                                    |                       |                                   |                                                                                                                | Lage                                                                                                                                                                                                                               |
| Sampler's Name                                                                  | 3                                  |          |           | Sample                                                                         | er's Signa                   | ture               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       | 200                               |                                                                                                                |                                                                                                                                                                                                                                    |
| S.                                                                              | we zu                              | A        |           | ~~                                                                             | Rem                          | 4                  | g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                    |                       | 500                               |                                                                                                                |                                                                                                                                                                                                                                    |
| Proj. No.<br>940571                                                             | 4                                  | Proje    | ct Name   | 1 2 4 4 St                                                                     |                              |                    | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Vo/Type c                                      | of Contai                          | Ders                  | 729-                              |                                                                                                                |                                                                                                                                                                                                                                    |
| Matrix Date                                                                     | Time                               | COEC     | () - 61   | tifying Marks of Si                                                            | ample(s)                     | Start<br>Start     | Cepth<br>End                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | VO<br>VO                                       | E CU                               | PIO                   | Tet CI                            |                                                                                                                | رالعلم المعلم المعلم<br>المعلم المعلم |
| 5 8/15/6                                                                        | 8                                  | 1        | × 8       | <u> </u>                                                                       |                              | - <del> </del><br> | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                    | ×                     | ×                                 |                                                                                                                | 11- 1901HG                                                                                                                                                                                                                         |
| (                                                                               | 1001                               |          | 8         | 4                                                                              |                              |                    | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                |                                    | 7                     |                                   |                                                                                                                | 12                                                                                                                                                                                                                                 |
|                                                                                 | Fool                               |          | ý         | 20                                                                             |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | 13                                                                                                                                                                                                                                 |
|                                                                                 | 1511                               |          | 100       | t ww-l                                                                         |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | 4                                                                                                                                                                                                                                  |
|                                                                                 | 1513                               |          | the state | F NW-L                                                                         |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | Ŕ                                                                                                                                                                                                                                  |
|                                                                                 | 1514                               |          | ME        | t sw-1                                                                         |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | 9]                                                                                                                                                                                                                                 |
|                                                                                 | ا 516                              | !        | Me        | F BH 1                                                                         |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                | T                                                                                                                                                                                                                                  |
| +                                                                               | 1S17                               |          | 4 here    | ナミミー                                                                           |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    | 7                     |                                   |                                                                                                                | 9                                                                                                                                                                                                                                  |
|                                                                                 |                                    |          |           |                                                                                |                              |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                |                                                                                                                                                                                                                                    |
| Turn around time                                                                | Nor a                              | Inst     | 150       | K Rush D                                                                       | 100% Rusi                    | -                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                    |                       |                                   |                                                                                                                |                                                                                                                                                                                                                                    |
| Relinguished by                                                                 | (Signature)                        |          | Date      | Time:                                                                          | Receive                      | ed by: (           | Signatu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (0                                             |                                    | Date:                 | Time:                             | NOTES:                                                                                                         | iel Bruent                                                                                                                                                                                                                         |
| Relinquished by                                                                 | (Signature)                        |          | Date:     | Time:                                                                          | Receive                      | ed by: (           | Signatul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (a)                                            | <b>∤</b><br>                       | Date:                 | Time:                             |                                                                                                                |                                                                                                                                                                                                                                    |
| Relinquished by                                                                 | (Signature)                        |          | Date:     | Time:                                                                          | Receive                      | ed by: (           | Signatui                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (e                                             |                                    | Date:                 | Time:                             |                                                                                                                |                                                                                                                                                                                                                                    |
| Relinquished by                                                                 | (Signature)                        |          | Date:     | Time:                                                                          | Peeiv<br>V                   | A by               | international supervision of the | (a)                                            |                                    | Date,<br>Slite/6      | 0.20                              |                                                                                                                |                                                                                                                                                                                                                                    |
| Matrix M<br>Container V                                                         | /// - Wastewał<br>OA - 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | OA - All<br>BSS wide                           | r Bag<br>mouth                     | 5-0<br>10-0<br>10-0   | varcoal tube<br>Plastic or other. | SL - studge 0 - Oil                                                                                            |                                                                                                                                                                                                                                    |
| Houston Office<br>11555 Clay Road, S<br>Houston, Texas 770<br>(713) 690-8989 Fa | inite 100<br>43<br>x (713) 690-876 | \$       |           | Dallas Office<br>8901 Carpener Free<br>Dalles, Texas 75247<br>2141 630-1010 Fa | 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 | 76) 18<br>ax (817) 26 | 58-8602                           | Austin Office<br>5.107 Ibdustriai (Jaks Blvd. # 160<br>Austin, Texas 78/35<br>(512) 442-1122 Fax (512) 442-118 | Atlanta Office<br>2855 Premiere Partway, Suite C<br>Duluth, Georgrie 30097<br>(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   | ₽   |
| 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

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

## 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                         |
| SP-2<br>SP-3<br>SP-4 | 5H17001-02<br>5H17001-03<br>5H17001-04 | Soil<br>Soil<br>Soil | 08/16/05 14:20<br>08/16/05 14:25<br>08/16/05 14:35 | 08/17/05 (<br>08/17/05 (<br>08/17/05 ( |

## Organics by GC

### **Environmental Lab of Texas**

|                                   | _                                     | Reporting    |                |          |         |               |          |               |       |
|-----------------------------------|---------------------------------------|--------------|----------------|----------|---------|---------------|----------|---------------|-------|
| Analyte                           | Result                                | Limit        | Units          | Dilution | Batch   | Prepared      | Analyzed | Method        | Notes |
| 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       | u              | "        |         | 12            | u        | n             | J     |
| Ethylbenzene                      | 0.0373                                | 0.0250       | 11             | "        |         |               | u        |               |       |
| Xylene (p/m)                      | 0.0625                                | 0.0250       | п              | *        | H       | н             | "        | n             |       |
| Xylene (0)                        | 0.0379                                | 0.0250       | "              | **       | ν       | n             | "        |               |       |
| Surrogate: a,a,a-Trifluorotoluene |                                       | 95.3 %       | 80-1           | 20       | "       | "             | "        | "             |       |
| Surrogate: 4-Bromofluorobenzene   |                                       | 96.4 %       | 80-1           | 20       | "       | "             | н        | "             |       |
| 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              |          |         | "             | н        | n             |       |
| Total Hydrocarbon C6-C35          | 1270                                  | 10.0         | "              | v        | 11      |               | "        | n             |       |
| Surrogate: 1-Chlorooctane         |                                       | 86.0 %       | 70-1           | 30       | "       | "             | н        | n             |       |
| Surrogate: 1-Chlorooctadecane     |                                       | 108 %        | 70-1           | 30       | 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              |          | n       | "             | "        | 19            | L     |
| Ethylbenzene                      | 0.0274                                | 0.0250       | "              |          | *       | u             | "        | 83            |       |
| Xylene (p/m)                      | 0.0552                                | 0.0250       | n              | "        | 14      |               | u        | n             |       |
| Xylene (0)                        | 0.0347                                | 0.0250       | "              | "        | u       | "             | 11       | "             |       |
| Surrogate: a,a,a-Trifluorotoluene |                                       | 87.0 %       | 80-1           | 20       | "       | #             | "        | n             |       |
| Surrogate: 4-Bromofluorobenzene   |                                       | 90.0 %       | 80-1           | 20       | u       | "             | "        | n             |       |
| 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             | "        | 19      | 11            | "        | n             |       |
| Surrogate: 1-Chlorooctane         |                                       | 80.8 %       | 70-1           | 30       | "       | "             | "        | "             |       |
| Surrogate: 1-Chlorooctadecane     |                                       | 105 %        | 70-1           | 30       | "       | "             | "        | "             |       |
| 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            | 21       | n             |       |
| Xylene (p/m)                      | 0.0284                                | 0.0250       | "              | н        | n       | N             | "        | н             |       |
| Xylene (o)                        | ND                                    | 0.0250       | *              |          | u       | "             | н        | N             |       |
| Surrogate: a,a,a-Trifluorotoluene |                                       | 88.5 %       | 80-1           | 20       | "       | "             | "        | "             |       |
| Surrogate: 4-Bromofluorobenzene   |                                       | 91.9%        | 80-1           | 20       | "       | "             | "        | "             |       |
| Gasoline Range Organics C6-C12    |                                       |              | a 1            |          | ~~~~~   | 00/10/06      | 09/17/06 | FPA 8015M     |       |
|                                   | 61.5                                  | 10.0         | mg/kg dry      | 1        | EH51717 | 08/17/05      | 08/1//05 | Di li Goldini |       |
| Diesel Range Organics >C12-C35    | 61.5<br>444                           | 10.0<br>10.0 | mg/kg dry<br>" | 1        | EH51717 | U8/17/US<br>" | "        | "             |       |

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        |        | Project: Shafter Lake 8 inch |             |             |         |          |          |           |       |  |
|-----------------------------------|--------|------------------------------|-------------|-------------|---------|----------|----------|-----------|-------|--|
| 1301 S. County Road 1150          |        | Project N                    | umber: 200  | 3-00145     |         |          |          | Repor     | ted:  |  |
| Midland TX, 79706-4476            |        | Project M                    | anager: Dar | niel Bryant |         |          |          | 08/22/05  | 08:23 |  |
|                                   |        | Oı                           | ganics by   | y GC        |         |          |          |           |       |  |
|                                   |        | Environ                      | mental L    | ab of Te    | xas     |          |          |           |       |  |
| 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          | "       | "        | "        | "         |       |  |
| 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                       | "           | e1          | *       | u        | "        | *         |       |  |
| Ethylbenzene                      | 0.0464 | 0.0250                       | "           | "           | 11      | u        | ч        | *         |       |  |
| Xylene (p/m)                      | 0.0831 | 0.0250                       | **          | "           | 0       |          | "        |           |       |  |
| Xylene (0)                        | 0.0866 | 0.0250                       | "           | "           | 0       | v        | н        | n         |       |  |
| Surrogate: a,a,a-Trifluorotoluene |        | 91.8 %                       | 80-1        | 20          | "       | n        | "        | "         |       |  |
| Surrogate: 4-Bromofluorobenzene   |        | 93.9 %                       | 80-1        | 20          | "       | "        | "        | "         |       |  |
| 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        | н        | n         |       |  |
| Total Hydrocarbon C6-C35          | 1310   | 10.0                         | "           | H           | n       | "        | ti       |           |       |  |
| Surrogate: 1-Chlorooctane         |        | 84.2 %                       | 70-1        | 30          | "       | "        | "        | "         |       |  |
| Surrogate: 1-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

**Environmental Lab of Texas** 

| 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                | %     | I        | 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)      | ) 687-4914         |
|----------------------------------------------------|--------|-------------------------|---------------------------|------------------------|------------------|----------|----------------|-------|-----------------|--------------------|
| 1301 S. County Road 1150<br>Midland TX, 79706-4476 |        | Project N<br>Project Ma | umber: 200<br>inager: Dar | 3-00145<br>niel Bryant |                  |          |                |       | Repo<br>08/22/0 | orted:<br>05 08:23 |
|                                                    | Or     | ganics by               | / GC - Q                  | uality Co              | ontrol           |          |                |       |                 |                    |
|                                                    |        | Environ                 | nental L                  | ab of Te               | xas              |          |                |       |                 |                    |
| 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 (GG             | C)     |                         |                           |                        |                  |          |                |       |                 |                    |
| Blank (EH51717-BLK1)                               |        |                         |                           | Prepared &             | k 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   |                         | п                         | 50.0                   |                  | 91.0     | 70-130         |       |                 |                    |
| LCS (EH51717-BS1)                                  |        |                         |                           | Prepared &             | k Analyzed:      | 08/17/05 |                |       |                 |                    |
| Gasoline Range Organics C6-C12                     | 461    | 10.0                    | mg/kg wet                 | 500                    |                  | 92.2     | 75-125         |       |                 |                    |
| 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 &             | & Analyzed:      | 08/17/05 |                |       |                 |                    |
| Gasoline Range Organics C6-C12                     | 442    |                         | mg/kg                     | 500                    | R                | 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   |                         | ,,                        | 50.0                   |                  | 92.8     | 0-200          |       |                 |                    |
| Surrogate: 1-Chlorooctadecane                      | 52.7   |                         | "                         | 50.0                   |                  | 105      | 0-200          |       |                 |                    |
| Matrix Spike (EH51717-MS1)                         | Sou    | rce: 5H1700             | 1-02                      | Prepared &             | & 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                    | "                         | 668                    | 346              | 122      | 75-125         |       |                 |                    |
| Total Hydrocarbon C6-C35                           | 1910   | 10.0                    | "                         | 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    | rce: 5H1700             | 1-02                      | Prepared &             | k 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** 

|                                   |          | Reporting    |           | Spike      | Source    |          | %REC   |     | RPD   |       |
|-----------------------------------|----------|--------------|-----------|------------|-----------|----------|--------|-----|-------|-------|
| Analyte                           | Result   | Limit        | Units     | Level      | Result    | %REC     | Limits | RPD | Limit | Notes |
| Batch EH51803 - EPA 5030C (GC)    |          |              |           |            |           |          |        |     |       |       |
| Blank (EH51803-BLK1)              | <b>.</b> |              |           | Prepared & | Analyzed  | 08/18/05 |        |     |       |       |
| Benzene                           | ND       | 0.0250       | mg/kg wet |            |           |          |        |     |       |       |
| Toluene                           | ND       | 0.0250       | **        |            |           |          |        |     |       |       |
| Ethylbenzene                      | ND       | 0.0250       | "         |            |           |          |        |     |       |       |
| Xylene (p/m)                      | ND       | 0.0250       | "         |            |           |          |        |     |       |       |
| Xylene (o)                        | ND       | 0.0250       |           |            |           |          |        |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 94.9     |              | ug/kg     | 100        |           | 94.9     | 80-120 |     |       |       |
| 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 |     | 7.11A |       |
| Toluene                           | 108      |              | **        | 100        |           | 108      | 80-120 |     |       |       |
| Ethylbenzene                      | 120      |              | "         | 100        |           | 120      | 80-120 |     |       |       |
| Xylene (p/m)                      | 240      |              | 11        | 200        |           | 120      | 80-120 |     |       |       |
| Xylene (0)                        | 119      |              | н         | 100        |           | 119      | 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 |        |     |       |       |
| Benzene                           | 85.1     |              | ug/kg     | 100        |           | 85.1     | 80-120 |     |       |       |
| Toluene                           | 83.8     |              | **        | 100        |           | 83.8     | 80-120 |     |       |       |
| Ethylbenzene                      | 90.3     |              | w         | 100        |           | 90.3     | 80-120 |     |       |       |
| Xylene (p/m)                      | 174      |              | "         | 200        |           | 87.0     | 80-120 |     |       |       |
| Xylene (o)                        | 90.1     |              | 0         | 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)        | Sou      | rce: 5H16001 | -15       | Prepared & | Analyzed: | 08/18/05 |        |     | ***** |       |
| Benzene                           | 91.7     |              | ug/kg     | 100        | ND        | 91.7     | 80-120 |     |       |       |
| Toluene                           | 93.6     |              | 14        | 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        |           | 92.8     | 80-120 |     |       |       |
| Surrogate: 4-Bromofluorobenzene   | 98.8     |              | "         | 100        |           | 98.8     | 80-120 |     |       |       |

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

**Environmental Lab of Texas** 

| [                                 |        |                |       |            |           |          |        |       |       |       |
|-----------------------------------|--------|----------------|-------|------------|-----------|----------|--------|-------|-------|-------|
|                                   |        | Reporting      |       | Spike      | Source    |          | %REC   |       | RPD   |       |
| Analyte                           | Result | Limit U        | Inits | Level      | Result    | %REC     | Limits | RPD   | Limit | Notes |
| Batch EH51803 - EPA 5030C (GC)    |        |                |       |            |           |          |        |       |       |       |
| Matrix Spike Dup (EH51803-MSD1)   | Sour   | ce: 5H16001-15 |       | Prepared & | Analyzed: | 08/18/05 |        |       |       |       |
| Benzene                           | 90.1   | uş             | g/kg  | 100        | ND        | 90.1     | 80-120 | 1.76  | 20    |       |
| Toluene                           | 90.9   |                | "     | 100        | ND        | 90.9     | 80-120 | 2.93  | 20    |       |
| Ethylbenzene                      | 102    |                | н     | 100        | ND        | 102      | 80-120 | 1.94  | 20    |       |
| Xylene (p/m)                      | 199    |                | 11    | 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   |                | 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 08:23      |

## 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 Preparation (Prep) |        |                    |       |                |                  |               |                |       |              |       |
| Biank (EH51801-BLK1)                       |        |                    |       | Prepared: 0    | 8/17/05 A        | Analyzed: 08/ | /18/05         |       |              |       |
| % Solids                                   | 100    |                    | %     |                |                  |               |                |       |              |       |
| Duplicate (EH51801-DUP1)                   | Sour   | ce: 5H17001-       | 01    | Prepared: 0    | 8/17/05 A        | Analyzed: 08/ | /18/05         |       |              |       |
| % Solids                                   | 96.7   |                    | %     |                | 96.6             |               |                | 0.103 | 20           |       |

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                  | FX, 79706-4476                       | Project Manager:                      | Daniel Bryant                 | 08/22/05 08:23      |
|                          |                                      | Notes and De                          | finitions                     |                     |
| J                        | Detected but below the Reporting Lin | nit; therefore, result is an estimate | d concentration (CLP J-Flag). |                     |
| DET                      | Analyte DETECTED                     |                                       |                               |                     |
| ND                       | Analyte NOT DETECTED at or above the | e 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

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8/22/2005

|                                           |                          | ENVIR                              | RONMENT      | AL. GEOTIEC                                                                      | HNICAL AND C                                                                                         | <b>ONSTRUCT</b>                                                              | TAN NOL                                                 | ERIALS SERV                           | ACTS - STOL                                                                                         | CHAIN OF CUSTODY REC                                                                                  | OHD    |
|-------------------------------------------|--------------------------|------------------------------------|--------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------|
|                                           |                          |                                    | ,            |                                                                                  |                                                                                                      |                                                                              |                                                         | ANALYSIS                              |                                                                                                     | / / / / Lab use only                                                                                  |        |
| ĩ                                         |                          | N<br>N<br>N                        | - \          | Labo                                                                             | ratory: <u>ELD</u> .                                                                                 | -                                                                            |                                                         | REQUESTER                             |                                                                                                     | Due Date:                                                                                             |        |
|                                           |                          |                                    |              | Addre                                                                            | SSS:                                                                                                 |                                                                              |                                                         |                                       |                                                                                                     | Temp. of coolers                                                                                      | , i    |
|                                           | consuming<br>e l ocetior | $m M_{i,0} $                       | chol 1       | Sus Conta                                                                        | act:                                                                                                 | an an annan aireann a' an Annan a' an Anna                                   |                                                         |                                       |                                                                                                     | 1 2 3                                                                                                 | Q.     |
| }                                         |                          |                                    |              | Phon                                                                             | 6.                                                                                                   | na mana any amin'ny finana amin'ny finana manana manana manana mana mana man |                                                         |                                       |                                                                                                     | Page of                                                                                               |        |
| Proje                                     | oct Manag                | per Shanne                         | Smith        | PO/S                                                                             | o#: 2003 -                                                                                           | 00 145                                                                       |                                                         | (                                     |                                                                                                     |                                                                                                       |        |
| Sampl                                     | ler's Name               |                                    |              | Samp                                                                             | er's Signature                                                                                       |                                                                              |                                                         | 7050                                  | 87                                                                                                  |                                                                                                       |        |
| 2                                         | crictor                  | Wilson                             |              | Ø.                                                                               | L-L-L                                                                                                |                                                                              |                                                         | 15                                    | 02/                                                                                                 |                                                                                                       |        |
| Proj. N                                   | Ko.                      | Pro                                | yect Name    |                                                                                  |                                                                                                      | No/Type of                                                                   | Containers                                              | 08                                    | 8                                                                                                   |                                                                                                       |        |
| र्मु                                      | JL112                    | S<br>S                             | hailter      | Lake 8                                                                           | ~~                                                                                                   | 7-7                                                                          | 102.                                                    |                                       |                                                                                                     |                                                                                                       |        |
| Matrix                                    | Date                     |                                    | مع<br>20- مح | tifying Marks of S                                                               | iampie(s)                                                                                            | NOA AG                                                                       | 250 P/O                                                 | गुरु<br>नग                            |                                                                                                     | / 5HI 100(<br>Lab Sample ID (Lab Use On                                                               | ~      |
| S                                         | 8/11/05                  | 14:15 J                            | 51           | 0.                                                                               |                                                                                                      |                                                                              |                                                         | $\sqrt{}$                             |                                                                                                     | 10-                                                                                                   |        |
|                                           | þ                        | 14:20 1                            | S            | p.2                                                                              |                                                                                                      |                                                                              | _ <b></b>                                               |                                       |                                                                                                     | 70-                                                                                                   |        |
|                                           |                          | 14:25 1                            | 5            | 0.3                                                                              |                                                                                                      |                                                                              | -                                                       | ///                                   |                                                                                                     | -63                                                                                                   |        |
|                                           | 1                        | 14:35 1                            | S            | p-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 "Lafanda articles" og uppende f                                             |                                                                              |                                                         |                                       |                                                                                                     |                                                                                                       | İ      |
| Turn arot                                 | undume                   | 2 Normei                           | D 50% Rush   | L 100% Rush                                                                      |                                                                                                      |                                                                              |                                                         |                                       |                                                                                                     |                                                                                                       |        |
|                                           | yd Dødsių                | Signature)                         | <b>A</b>     | LA CO. S.S.                                                                      | Received by: (Sig                                                                                    | inature)                                                                     | Date:                                                   | Time:                                 | Danie / BNant C                                                                                     | / plains                                                                                              |        |
| Reling                                    | uished by (              | Signature)                         | Date:        | Time:                                                                            | Received by: (Sig                                                                                    | nature)                                                                      | Date:                                                   | Time:                                 |                                                                                                     |                                                                                                       | ****** |
| Reling                                    | luished by ((            | Signature)                         | Date:        | Time:                                                                            | Received by: (Sig                                                                                    | nature)                                                                      | Date:                                                   | Time:                                 |                                                                                                     |                                                                                                       |        |
| Reling                                    | luished by (             | Signature)                         | Date:        | Time:                                                                            | Received by: (Sig                                                                                    | nature)<br>7000                                                              | C Date:                                                 |                                       |                                                                                                     |                                                                                                       |        |
| Matrix<br>Contain                         | Ter VOA                  | / - Wastewater<br>A - 40 ml vísi   | W-W<br>AG-A  | ater S - Soil<br>Amber / Or Glass                                                | SD - Solid L - Li<br>1 Liter 250 n                                                                   | quid K - Mir B<br>ni - Giassunide m                                          | lag L C                                                 | Charcoel tube<br>- Plastic or other _ | SL - sludge 0 - Oi                                                                                  |                                                                                                       |        |
| Houston<br>2313 W.<br>Houston<br>(713) 72 | n Office<br>             | Pkwy N., Suite 1<br>(713) 722-0788 | 10           | Dallas Office<br>8901 Carpenter Free<br>Dallas, Texas 75247<br>(214) 630-1010 Fa | way. Suite 100<br>x (214) 630-7070                                                                   | Fort Worth<br>2301 E. Lor<br>Fort Worth,<br>(817) 268-8                      | Office<br>pp 820 North<br>Texas 761 18<br>600 Fax (817) | 268-8602                              | Austia Office<br>3913 Todd Lauc, Sulie 312<br>Anstin, Texas 78744<br>(\$12) 442-1122 Fax (\$12) 44: | Atlanta Office<br>6621 Bay Circle, Suite 120<br>Norcross, Georgia 30071<br>(770) 263-6774 Tax (770) 2 | 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

|                                                           | and the second se |    |                |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------|
| Temperature of container/cooler?                          | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No | <u>5.6</u> C   |
| Shipping container/cooler in good condition?              | KED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No |                |
| Custody Seals intact on shipping container/cooler?        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No | Oot present    |
| Custody Seals intact on sample bottles?                   | (Jes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No | Not present    |
| Chain of custody present?                                 | (98)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 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?                      | (es)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No |                |
| Sample Matrix and properties same as on chain of custody? | Kes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No |                |
| Samples in proper container/bottle?                       | 103                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 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?              | (es)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 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:      |                                              |                 |
|                               |                                              |                 |
|                               |                                              |                 |
|                               |                                              |                 |
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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: 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            |            |           |           |          |         |          |          |           | <u></u> |
| Benzene                           | ND         | 0.0250    | mg/kg dry | 25       | EH52312 | 08/23/05 | 08/23/05 | EPA 8021B |         |
| Toluene                           | 0.0292     | 0.0250    |           | "        | v       | и        | 11       |           |         |
| Ethylbenzene                      | J [0.0177] | 0.0250    | u         |          |         | u        | 11       | n         | J       |
| Xylene (p/m)                      | 0.0558     | 0.0250    | n         | "        |         |          | v        | "         |         |
| Xylene (0)                        | J [0.0171] | 0.0250    | н         | n        |         | N        | "        | "         | J       |
| Surrogate: a,a,a-Trifluorotoluene |            | 85.6 %    | 80-1      | 20       | "       | "        | "        | "         | _       |
| Surrogate: 4-Bromofluorobenzene   |            | 95.0 %    | 80-1      | 20       | "       | "        | n        | n         |         |
| 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        | W        | u         |         |
| Total Hydrocarbon C6-C35          | 281        | 10.0      |           | "        |         | 11       |          | u<br>     |         |
| Surrogate: 1-Chlorooctane         |            | 97.6 %    | 70-1      | 30       | "       | п        | 0        | "         |         |
| Surrogate: 1-Chlorooctadecane     |            | 111 %     | 70-1      | 30       | "       | "        | "        | "         |         |
| 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    | n         | "        |         | "        | n        | "         | L       |
| Ethylbenzene                      | J [0.0215] | 0.0250    | "         | н        | "       | "        | n        |           | J       |
| Xylene (p/m)                      | 0.0498     | 0.0250    | "         | U        |         | "        | "        | "         |         |
| Xylene (o)                        | ND         | 0.0250    |           | 11       | "       | "        | н        |           |         |
| Surrogate: a,a,a-Trifluorotoluene |            | 82.6 %    | 80-1      | 20       | "       | rt       | "        | "         |         |
| Surrogate: 4-Bromofluorobenzene   |            | 93.2 %    | 80-1      | 20       | "       | v        | "        | "         |         |
| 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      | "         | "        | п       | "        | n        | r         |         |
| Total Hydrocarbon C6-C35          | 1230       | 10.0      | "         | "        | H       | "        | "        | n<br>     |         |
| Surrogate: 1-Chlorooctane         |            | 91.2 %    | 70-1      | 30       | "       | "        | <i>v</i> | "         |         |
| Surrogate: 1-Chlorooctadecane     |            | 117 %     | 70-1      | 30       | "       | "        | "        | "         |         |
| 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    | и         | "        | "       | "        |          | II        |         |
| Ethylbenzene                      | J [0.0182] | 0.0250    | "         | "        | "       | u        | "        | н         | I       |
| Xylene (p/m)                      | 0.0365     | 0.0250    | н         | n        |         | "        | н        | u         |         |
| Xylene (o)                        | J [0.0189] | 0.0250    | n         | **       | **      | "        | 11       |           | J       |
| Surrogate: a,a,a-Trifluorotoluene |            | 84.1%     | 80-1      | 20       | "       | "        | "        | "         |         |
| Surrogate: 4-Bromofluorobenzene   |            | 104 %     | 80-1      | 20       | "       | "        | "        | "         |         |
| 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      | н         | Ħ        |         | н        |          | и         |         |
| Total Hydrocarbon C6-C35          | 1000       | 10.0      | 11        | "        | "       | **       | IT       |           |         |
|                                   |            |           |           |          |         |          |          |           |         |

Environmental Lab of Texas

| Plains All American EH & S<br>1301 S. County Road 1150<br>Midland TX, 79706-4476 |        | P<br>Project Nu<br>Project Ma | roject: Sh<br>imber: 20<br>nager: Da | after Lake 8<br>03-00145<br>iniel Bryant | inch    |               |          | Fax: (432) 6<br><b>Report</b><br>08/24/05 | 87-4914<br>ed:<br>14:05 |
|----------------------------------------------------------------------------------|--------|-------------------------------|--------------------------------------|------------------------------------------|---------|---------------|----------|-------------------------------------------|-------------------------|
|                                                                                  |        | Or;<br>Environn               | ganics b<br>nental I                 | oy GC<br>∠ab of Te                       | exas    |               |          |                                           |                         |
| 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 inch | 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           | iental L | lab of Te | xas     |          |          |               |       |
|-------------------------|--------|--------------------|----------|-----------|---------|----------|----------|---------------|-------|
| Analyte                 | Result | Reporting<br>Limit | Units    | Dilution  | Batch   | Prepared | Analyzed | Method        | Notes |
| R-3A (5H23015-01) Soil  |        |                    |          |           |         |          |          | ,             |       |
| % 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 |        |                    |          |           |         |          |          |               |       |
| % Moisture              | 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 &  | ک 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: 0 | 8/24/05 |      |       |       |
| Gasoline Range Organics C6-C12          | 433    | <u> </u>     | mg/kg     | 500         |            | 86.6       | 80-120  |      |       |       |
| Diesel Range Organics >C12-C35          | 403    |              | "         | 500         |            | 80.6       | 80-120  |      |       |       |
| Total Hydrocarbon C6-C35                | 836    |              | **        | 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)              | Sou    | rce: 5H2301  | 1-01      | Prepared: ( | )8/23/05 A | nalyzed: 0 | 8/24/05 |      |       |       |
| 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         | Ħ         | 1060        | 55.5       | 78.4       | 75-125  |      |       |       |
| Surrogate: 1-Chloroociane               | 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)         | Sou    | rce: 5H23011 | 1-01      | Prepared: 0 | )8/23/05 A | nalyzed: 0 | 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    |       |
| Total Hydrocarbon C6-C35                | 909    | 10.0         | ч         | 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   |              | n         | 50.0        |            | 107        | 70-130  |      |       |       |

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 5 of 9

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

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 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       | n         |            |             |          |        |     |       |       |
| 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   |              | u         | 100        |             | 91.3     | 80-120 |     |       |       |
| Ethylbenzene                      | 101    |              | н         | 100        |             | 101      | 80-120 |     |       |       |
| Xylene (p/m)                      | 197    |              | n         | 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   |              | 17        | 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   |              | u         | 100        |             | 89.6     | 80-120 |     |       |       |
| Surrogate: a,a,a-Trifluorotoluene | 80.3   |              | 33        | 100        |             | 80.3     | 0-200  | ·   |       |       |
| Surrogate: 4-Bromofluorobenzene   | 85.0   |              | v         | 100        |             | 85.0     | 0-200  |     |       |       |
| Matrix Spike (EH52312-MS1)        | Sou    | rce: 5H23015 | 5-03      | Prepared & | Analyzed:   | 08/23/05 |        |     |       |       |
| Benzene                           | 2140   |              | ug/kg     | 2500       | ND          | 85.6     | 80-120 |     |       |       |
| Toluene                           | 2240   |              | "         | 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 |     |       |       |

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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)   | Sour   | ce: 5H23015-03 | Prepared 8 | k Analyzed | : 08/23/05 |        |       |       |       |
| Benzene                           | 2270   | ug/kg          | 2500       | ND         | 90.8       | 80-120 | 5.90  | 20    |       |
| Toluene                           | 2340   | v              | 2500       | 198        | 85.7       | 80-120 | 4.78  | 20    |       |
| Ethylbenzene                      | 2690   | **             | 2500       | 434        | 90.2       | 80-120 | 8,31  | 20    |       |
| Xylene (p/m)                      | 5200   | н              | 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 |       |       |       |

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#### 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) |        | <u></u>       |       |             |                   |              |        |       |       |       |
| Blank (EH52401-BLK1)                       |        |               |       | Prepared: ( | 8/23/05           | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 100    |               | %     |             |                   |              |        |       |       |       |
| Duplicate (EH52401-DUP1)                   | Sou    | rce: 5H23009- | 03    | Prepared: ( | ) <b>8/23</b> /05 | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 99.9   |               | %     |             | 99.6              |              |        | 0.301 | 20    |       |
| Duplicate (EH52401-DUP2)                   | Sou    | rce: 5H23011- | 04    | Prepared: ( | )8/23/05          | Analyzed: 08 | /24/05 |       |       |       |
| % Solids                                   | 90.2   |               | %     |             | 90.6              |              |        | 0.442 | 20    |       |

Environmental Lab of Texas

| Plains A | ll 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                    |               | 08/24/05 14:05      |
| •        |                                               | Notes and Definitions                             |               |                     |
| 1        | Detected but below the Reporting Limit;       | therefore, result is an estimated concentration ( | (CLP J-Flag). |                     |
| DET      | Analyte DETECTED                              |                                                   |               |                     |
| ND       | Analyte NOT DETECTED at or above the rej      | orting 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

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:             | Temp. cf coolers         |                         |                         |                |             |                    | 5 H 230(5<br>Lab Sample 10 (Lab Use Only) | 10-           | 20-            | -03            |  |                           | Plains David Brugat        |                             | Press real Shawn 557-16694/2 North | applices                    |                                                                      |  |
|-------------------------|-----------------------|--------------------------|-------------------------|-------------------------|----------------|-------------|--------------------|-------------------------------------------|---------------|----------------|----------------|--|---------------------------|----------------------------|-----------------------------|------------------------------------|-----------------------------|----------------------------------------------------------------------|--|
| MALENIALS SERVIC        | ANALYSIS<br>REQUESTED |                          |                         | 7                       | 8              | 720         | Jers 4             | 77 22 Ord                                 |               | × ×<br>× ×     | XXX            |  |                           | Date: Time: N              | Date: Time:                 | Date: Time:                        | Date: 1 Time:               | C. Charcoal tube St.<br>P/O - Plastic or other                       |  |
| NIGAL-AND-CONSTRUCTION  | tory: <u>ELoT</u>     | o.                       |                         | #: 2003-00145           | 's Signature   | anne Smit   | No/Type of Contait | mple(s) Act for VOA AG 250                |               |                |                |  | 0% Rush                   | Received by: (Signature)   | Received by: (Signature)    | Received by: (Signature)           | Received by (Signature)     | SD - Solid L - Liquid A - Air Bag<br>Liter 250 ml - Glaberwide mouth |  |
|                         | Laborat               | scientists               | Contact                 | Smill PO/SO             | Sampler        | r<br>She    | Name<br>Name 200   | identifying Marks of Sam                  | 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 S<br>AG - Amber / Or Glass 1 L                    |  |
|                         | HBC                   | Consulting Engineers & 5 | Office Location MitMans | Project Manager_Shawwa- | Sampler's Name | Shanua Smit | Proj. No. Project  | Matrix Date Time 0                        | < 8123/m 1244 | 5 8123/05 1749 | 5 2405/1351    |  | 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 | 15:20    |
| Order #:   | 5H23015 | <u>.</u> |
| 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 | Alot 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?                               | <b>C</b> | 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?         | (ED)     | No |                |
| VOC samples have zero headspace?                          | Yes      | No | Not Applicable |

Other observations:

| Contact Person:<br>Regarding:          | Date/Time:                            | Contacted by: |                                                                       |
|----------------------------------------|---------------------------------------|---------------|-----------------------------------------------------------------------|
|                                        |                                       |               | <del>الا ي برا المحمد ( الم الم الم الم الم الم الم الم الم الم</del> |
| Corrective Action Taken:               | ، ـــــــــــــــــــــــــــــــــــ |               |                                                                       |
|                                        |                                       |               |                                                                       |
|                                        |                                       |               |                                                                       |
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|                                        |                                       |               |                                                                       |
|                                        |                                       |               |                                                                       |
| ······································ |                                       |               |                                                                       |

**APPENDIX C** 

Waste Manifests

| Image: State Approved Land PACH   State Approved Land PACH   State Approved Land PACH   N2   2585     Image: State Approved Land PACH   Prone (305) 394-3481   N2   2585     Image: State Approved Land PACH   Prone (305) 394-3481   N2   2585     COMPANY NAME   Image: State Pack Pack   Image: State Pack Pack Pack Pack Pack Pack Pack Pack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | · · · · · · · · · · · · · · · · · · · |                                                 |                                                                                                                  |                  |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| STATE APPROVED LAND PARM<br>PHONE (305) 394-3481   N2   258E     STATE APPROVED LAND PARM<br>PHONE (305) 394-3481   N2   258E     COMPANY NAME   Eat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | WIRC                                  | NWRNTAT P                                       |                                                                                                                  |                  |                 |
| PHONE (305) 394-3481   N2   2585     PHONE (305) 394-3481   P.O. BOX 989   EUNICE. NEW MEXICO 88231     COMPANY NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                                       | TATE APPROVED LAND                              | FARM                                                                                                             |                  |                 |
| P.O. BOX 969<br>EURICE, NEW MEXICO 88231                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <u>∃</u> P,⊨           | 0                                     | PHONE (505) 394-348                             | 1                                                                                                                | N2               | 2585            |
| COMPANY NAME   Eutit     COMPANY REPRESENTATIVE NAME   Standin     COMPANY REPRESENTATIVE NAME   Standin     LEASE NAME   Standin     SEC TOWNSHIP - RANGE OR LOCATION   Standin     DRIVER'S SIGNATURE   Standin     COPY OF MATERIAL AND QUANTITY   Standin     COPY OF ANALYSIS ATTACHED:   YES     COPY OF ANALYSIS ATTACHED:   YES     COPY OF ANALYSIS ATTACHED:   YES     NAME OF ATTENDANT ON DUTY   Dage     DATE ACCEPTED   (C + (L +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |                                       | P.O. BOX 969                                    | -                                                                                                                |                  |                 |
| COMPANY NAME   Eat     COMPANY REPRESENTATIVE NAME   Immli Illerandim     LEASE NAME   Standin Intel TB     SEC. • TOWNSHIP - RANGE OR LOCATION   Standin Intel TB     DRIVER'S SIGNATURE   Intel TB     DRIVER'S SIGNATURE   Intel TB     DRIVER'S SIGNATURE   Intel TB     DRIVER'S SIGNATURE   Intel TB     EXEMPT WASTE FROM OIL & GAS PRODUCTION   EXEMPT WASTE FROM OIL & GAS PRODUCTION     OTHER   EXPLAIN     COPY OF ANALYSIS ATTACHED: YES   NO     CELL NO.   12     COMMENTS:   Intel TB     NAME OF ATTENDANT ON DUTY   DOGUL // 2004 // 2004     DATE ACCEPTED   6 * 6 * 6 * 7 * 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1111                   |                                       | EUNICE, NEW MEXICO 88                           | 231                                                                                                              |                  |                 |
| COMPANY NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                                       | •                                               |                                                                                                                  | ;                |                 |
| COMPANY REPRESENTATIVE NAME <u>JANAN TO 6503</u><br>LEASE NAME <u>Standart TO 6503</u><br>SEC. TOWNSHIP - RANGE OR LOCATION <u>Lec 33</u> TOS R 326<br>TRUCKING COMPANY NAME <u>FF</u><br>DRIVER'S SIGNATURE <u>Metter</u><br>TYPE OF MATERIAL AND QUANTITY <u>Institution and Standart Standart Ways</u> <u>TO as</u><br>EXEMPT WASTE FROM OIL & GAS PRODUCTION <u>EXPLAIN</u><br>OTHER <u>EXPLAIN</u><br>COPY OF ANALYSIS ATTACHED: YES <u>NO</u><br>CELL NO. <u>12</u><br>COMMENTS: <u>COMMENTS</u><br>NAME OF ATTENDANT ON DUTY <u>LOGGE KOMME</u><br>DATE ACCEPTED <u>676 (3)</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | ott                                   |                                                 |                                                                                                                  | ·                |                 |
| LEASE NAME   Standa Late TB   6503     SEC. TOWNSHIP - RANGE OR LOCATION   State 33   T755   R 326     TRUCKING COMPANY NAME   State 33   T755   R 326     DRIVER'S SIGNATURE   State 33   T755   R 326     TYPE OF MATERIAL AND QUANTITY   State 34   State 37   T755   R 326     TYPE OF MATERIAL AND QUANTITY   State 34   State 37   T755   R 326     COPY OF ANALYSIS ATTACHED:   YES   NO   Cell NO.   12     COMMENTS:   COMMENTS:   State 34   Comments:     NAME OF ATTENDANT ON DUTY   YOGH   YOGH   YOGH     DATE ACCEPTED   Get (3)   T   T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | COMPANY REPRESENTATIV  | ENAME Pran                            | R Herrander                                     |                                                                                                                  |                  |                 |
| EC. TOWNSHIP - RANGE OR LOCATION   Ide 33   T755   R 326     TRUCKING COMPANY NAME   Ide 1   Ide 1   Ide 1     DRIVER'S SIGNATURE   Ide 1   Ide 1   Ide 1     DRIVER'S SIGNATURE   Ide 1   Ide 1   Ide 1     TYPE OF MATERIAL AND QUANTITY   Ide 1   Ide 1   Ide 1     OTHER   EXEMPT WASTE FROM OIL & GAS PRODUCTION   Ide 1   Ide 1     OTHER   EXPLAIN   EXPLAIN   Ide 1     COPY OF ANALYSIS ATTACHED:   YES   NO   Ide 1     CELL NO.   12   Ide 1   Ide 1     COMMENTS:   Ide 1   Ide 1   Ide 1     NAME OF ATTENDANT ON DUTY   Ide 1   Ide 1   Ide 1     DATE ACCEPTED   Ide 1   Ide 1   Ide 1   Ide 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LEASE NAME State       | 1.12 TB                               | 6503                                            |                                                                                                                  |                  |                 |
| Color Tormonia Trade of Long   Trucking company name   Trucking company   Trucking company   Trucking company <td>SEC . TOWNSHIP . BANGE</td> <td></td> <td>2 33 T755 R3</td> <td>37E</td> <td></td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SEC . TOWNSHIP . BANGE |                                       | 2 33 T755 R3                                    | 37E                                                                                                              |                  |                 |
| THOURING COMPANY NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | ـــــــــــــــــــــــــــــــــــــ |                                                 |                                                                                                                  |                  |                 |
| DRIVER'S SIGNATORE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DOIVED'S SIGNATURE     | 1F                                    |                                                 |                                                                                                                  |                  |                 |
| Image: Second State of Material and Control State of Second S |                        | LANTITY CASTON                        | instance 5                                      | loses at 14 un                                                                                                   | · 7/             | 7               |
| EXEMPT WASTE FROM OIL & GAS PRODUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TYPE OF MATERIAL AND Q | JANITY <u>- 19236774</u>              |                                                 | and the states                                                                                                   | <u> </u>         | <b>L</b> Alter  |
| OTHEREXPLAIN<br>COPY OF ANALYSIS ATTACHED: YESNO<br>CELL NO?<br>COMMENTS:<br><br>MAME OF ATTENDANT ON DUTY<br>DATE ACCEPTED<br><br>DATE ACCEPTED<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | EXEMPT WASTE FROM      | A OIL & GAS PRODU                     |                                                 |                                                                                                                  | <u> </u>         | <u></u>         |
| COPY OF ANALYSIS ATTACHED: YES NO<br>CELL NO?<br>COMMENTS:<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | OTHER                  |                                       | EXPLAIN                                         |                                                                                                                  |                  |                 |
| COMMENTS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | COPY OF ANALYSIS ATTAC | HED: YES                              | NO                                              |                                                                                                                  |                  |                 |
| NAME OF ATTENDANT ON DUTY Yogu togut   DATE ACCEPTED 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CELL NO                |                                       |                                                 |                                                                                                                  |                  |                 |
| NAME OF ATTENDANT ON DUTY _ Pogu Paga Paga<br>DATE ACCEPTED _ 6 6 6 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | COMMENTS:              |                                       |                                                 |                                                                                                                  |                  |                 |
| NAME OF ATTENDANT ON DUTY<br>DATE ACCEPTED (J)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                                       |                                                 |                                                                                                                  |                  |                 |
| NAME OF ATTENDANT ON DUTY _ LOGU PUBLIC<br>DATE ACCEPTED _ 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |                                       |                                                 | · · · · · · · · · · · · · · · · · · ·                                                                            |                  |                 |
| NAME OF ATTENDANT ON DUTY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |                                       | 1                                               |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NAME OF ATTENDANT ON   | DUTY LOGG                             | POP al                                          |                                                                                                                  | ················ | <u> </u>        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DATE ACCEPTED          | 103 I O                               |                                                 |                                                                                                                  |                  | <u></u>         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                       |                                                 |                                                                                                                  |                  |                 |
|                             | STATE APPROVED LAND FARM                                         |         | 0500          |
|-----------------------------|------------------------------------------------------------------|---------|---------------|
|                             | PHONE (505) 394-3481<br>P.O. BOX 969<br>EUNICE, NEW MEXICO 88231 | No      | 2586          |
| E-AF                        |                                                                  |         |               |
| COMPANY NAME                | E Frank Herring                                                  |         |               |
| LEASE NAME 5 Katta          | 14 #8 6503                                                       |         |               |
| SEC TOWNSHIP - RANGE OR LO  | CATION <u>Sec 33 T255 R37E</u>                                   |         |               |
|                             | PI,                                                              |         |               |
|                             | stell                                                            |         |               |
| TYPE OF MATERIAL AND QUANTI | ry Contominated soil 5 loods.                                    | at/Zyis | <u>2 vd</u> . |
| EXEMPT WASTE FROM OIL       | & GAS PRODUCTION                                                 |         |               |
| OTHER                       | EXPLAIN                                                          |         |               |
| COPY OF ANALYSIS ATTACHED:  | YES NO                                                           |         |               |
| CELL NO                     |                                                                  |         |               |
| COMMENTS:                   |                                                                  |         |               |
| -                           |                                                                  |         |               |
| <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** 

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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 F#1 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

| Seott | energy |
|-------|--------|

ALC: NAMES OF TAXABLE

Incident Date and NMOCD Notified?

| ~ ~ ~ ~ | E100 | 0.00 | D.8.4 |  |
|---------|------|------|-------|--|

6/05/03-2:45 PM 6/05/03-2:00 PM

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#### Assigned Site Reference 2003-00145

| SITE: Shafter Lak                                                                        | TE: Shafter Lake 8" Assigned Site Reference 2003-00145 |                                                                           |                                       |                                    |                                        |                       |  |            |
|------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------|------------------------------------|----------------------------------------|-----------------------|--|------------|
| Company:                                                                                 | EOTT Energy Pipeline LP                                |                                                                           |                                       |                                    |                                        |                       |  |            |
| Street Address:                                                                          |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |
| Mailing Address:                                                                         | Mailing Address 5805 E. Hwy 80                         |                                                                           |                                       |                                    |                                        |                       |  |            |
| City, State, Zip:                                                                        | Midland, T                                             | X 79702                                                                   | · · · · · · · · · · · · · · · · · · · |                                    |                                        |                       |  |            |
| Representative:                                                                          | Frank Herr                                             | andez                                                                     |                                       |                                    |                                        |                       |  |            |
| Representative Teleph                                                                    | Representative Telephone: 915-638-3799                 |                                                                           |                                       |                                    |                                        |                       |  |            |
| Telephone:                                                                               |                                                        |                                                                           |                                       | ·· · · ·                           |                                        |                       |  |            |
| Fluid volume released                                                                    | (bbls): 250                                            | Recovere                                                                  | ed (bbls); 190                        |                                    |                                        |                       |  |            |
|                                                                                          | >25 bbls: Not                                          | ifv NMOCD ver                                                             | bally within 24 hrs and submit for    | m C-141 within                     | 15 davs.                               |                       |  |            |
| ······································                                                   | 5-25 bbls: Submit form C-                              | 141 within 15 d                                                           | avs (Also applies to unauthorized     | releases of 50-                    | 500 mcf Natural Gas)                   |                       |  |            |
| Leak, Spill, or Pit (LSP                                                                 | ) Name:                                                | 2003-0014                                                                 | 5                                     |                                    |                                        |                       |  |            |
| Source of contamination                                                                  | on:                                                    | Shafter Lai                                                               | e 8" Steel Pipeline                   |                                    |                                        |                       |  |            |
| Land Owner ie BIM                                                                        | ST Fee Other                                           | Joyce Willi                                                               | s                                     |                                    |                                        |                       |  |            |
| LSP Dimensions                                                                           | , ,                                                    | 400-ft X 20                                                               | -<br>-ft (Site diagram Attached       | £)                                 |                                        |                       |  |            |
| I SP Area                                                                                |                                                        | 12 750                                                                    | -ft <sup>2</sup>                      | "/                                 |                                        |                       |  |            |
| Location of Reference                                                                    | Point (RP)                                             | 12,700                                                                    | ···                                   |                                    |                                        |                       |  |            |
| Location distance and                                                                    | direction from RP                                      |                                                                           |                                       |                                    | ······································ |                       |  |            |
| Location distance and                                                                    |                                                        | N32° 05' 04                                                               | 4 92"                                 |                                    |                                        |                       |  |            |
|                                                                                          |                                                        | W103° 09'                                                                 | 34 56"                                |                                    |                                        |                       |  |            |
| Elevation above mean                                                                     | sea level.                                             | 3200                                                                      | -ft amsl                              |                                    |                                        |                       |  |            |
| East from South Section                                                                  | on Line:                                               | 1864                                                                      |                                       |                                    |                                        |                       |  |            |
| Feet from West Section                                                                   | on Line:                                               | 5128                                                                      |                                       |                                    |                                        |                       |  |            |
| Location - Unit and 1/4                                                                  |                                                        | 1                                                                         | NE 1/4 of SE                          | 1/4                                | ······································ |                       |  |            |
| Location - Section:                                                                      |                                                        | 33                                                                        |                                       |                                    | · · ····· · · · · · · · · · · · · · ·  |                       |  |            |
| Location - Township:                                                                     |                                                        | 259                                                                       |                                       |                                    |                                        |                       |  |            |
| Location - Range:                                                                        |                                                        | 230<br>37E                                                                |                                       |                                    |                                        |                       |  |            |
| Surface water body wi                                                                    | thin 1000' radius of Sit                               | <u>0/L</u>                                                                | ^                                     |                                    |                                        |                       |  |            |
| Surface water body wi                                                                    | thin 1000 radius of Sit                                | o.                                                                        | 0                                     |                                    |                                        |                       |  |            |
| Domostic water walls a                                                                   | within 1000 radius of Sit                              | tito:                                                                     | 0                                     |                                    |                                        |                       |  |            |
| Domestic water wells                                                                     | within 1000' radius of S                               | Site:                                                                     | <u>0</u>                              |                                    |                                        |                       |  |            |
| Agricultural water wells                                                                 | within 1000 radius of 3                                | Site:                                                                     | 0                                     |                                    | ·····                                  |                       |  |            |
| Agricultural water well                                                                  | s within 1000' radius of                               | Site:                                                                     | 0                                     |                                    |                                        |                       |  |            |
| Public water supply w                                                                    | s within 1000 radius                                   | of Site:                                                                  | 0                                     |                                    |                                        |                       |  |            |
| Public water supply wells within 1000 radius of Site: 0                                  |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |
| Public water supply we                                                                   | urface to ground water                                 |                                                                           | 200                                   |                                    |                                        |                       |  |            |
| Depth (it) from land st                                                                  | ation (DC):                                            | (DG).                                                                     | 200                                   | • ••••                             |                                        |                       |  |            |
| Depth (ft) or contamination (DC): 10                                                     |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |
| 1 Ground                                                                                 | alei (DG - DC - DIGVV<br>ad Watar                      | ).<br>2 Weili                                                             | 130                                   |                                    | Distance to Surface Water Date         |                       |  |            |
| If Depth to GW <50 fe                                                                    | et: 20 points                                          | lf <1000' fr                                                              | rom water source, or,                 | 3.                                 | Distance to Surface Water Body         |                       |  |            |
| <pre>clim Depth to GVV &lt;50 feet: 20 points </pre>                                     |                                                        | <200' from                                                                | 200' from private domestic water      |                                    | <200 horizontal feet: 20 points        |                       |  |            |
| If Depth to GW 50 to 99 feet: 10 points                                                  |                                                        | source: 20 points                                                         |                                       | 200-100 horizontal feet: 10 points |                                        |                       |  |            |
| If Depth to GW >100 feet: 0 points                                                       |                                                        | If >1000' from water source, or,<br>>200' from private domestic water >10 |                                       | >1000 horizontal feet: 0 points    |                                        |                       |  |            |
|                                                                                          |                                                        |                                                                           |                                       |                                    |                                        | Ground water Score: 0 |  | Wellhead I |
| Site Rank (1+2+3) = 0                                                                    |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |
| Total Site Ranking Score and Accentable Concentrations                                   |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |
| Parameter                                                                                | 20 or >                                                |                                                                           | 10                                    |                                    | 0                                      |                       |  |            |
| Benzene <sup>1</sup>                                                                     | 10 ppm                                                 |                                                                           |                                       |                                    | 10 ppm                                 |                       |  |            |
| BTEX <sup>1</sup>                                                                        | 50 ppm                                                 | 50 ppm                                                                    |                                       |                                    | 50 ppm                                 |                       |  |            |
| ТРН                                                                                      | 100 ppm                                                | 1000 ppm 5000 ppm                                                         |                                       | 5000 ppm                           |                                        |                       |  |            |
| <sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis |                                                        |                                                                           |                                       |                                    |                                        |                       |  |            |









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