1R-41

Basin Environmental Service Technologies, LLC

P. O. Box 301 Lovington, New Mexico 88260 rjohnson@basinenv.com Office: (505) 396-2378 Fax: (505) 396-1429



SOIL REMEDIATION and CLOSURE REQUEST

PLAINS MARKETING, L.P. Lea Station 8" Loop Line Lea County, New Mexico Plains EMS # 2005-00078 UNIT H (SE ¼, NE ¼), Section 17, Township 22S, Range 37E Latitude 32°, 23['], 42.1["] North, Longitude 103°, 10['], 43.6["] West

Prepared For:

Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002



Prepared By: Basin Environmental Service Technologies, LLC

July 27, 2005

Basin Environmental Service Technologies, LLC

TABLE OF CONTENTS

Introduction	1
Summary of Field Activities	1
New Mexico Oil Conservation Division (NMOCD) Soil Classification	2
Distribution of Hydrocarbons in the Unsaturated Zone	2
Recommendations for Remediation	2
QA/QC Procedures Soil Sampling Decontamination of Equipment Laboratory Protocol	3 3 3 3
Limitations	3
Distribution	5

Tables

Figures

- Figure 1: Site Location Map
- Figure 2: Site Map
- Figure 3: Digital Photos

Appendices

- Appendix A: New Mexico Office of the State Engineer Water Well Database Report
- Appendix B: Environmental Laboratory of Texas Analytical Results
- Appendix C: Request Approval for Backfill of Excavation

Appendix D: NMOCD C-141

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), responded and clamped the pipeline release for Plains Marketing, L.P. (Plains), located on the Lea Station 8" Loop Line Pipeline on March 28, 2005. The impacted soils were excavated and temporarily stockpiled on a poly liner.

This site is located in Unit H (SE ¼, NE ¼), Section 17, Township 22 South, Range 37 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site is located at latitude 32°, 23, 42.1° North and longitude 103°, 10, 43.6° West. The site is characterized by a right-of-way for the pipeline in an undulating sand dune pasture utilized for cattle grazing. The visible surface stained area includes the release point covering an area approximately 45 feet long by 58 feet wide. Approximately 6 barrels of crude oil were released from the Plains Pipeline and 1 barrel was recovered.

An Emergency One-Call was initiated March 28, 2005 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

The affected land is owned by the Millard Deck Estates. Mr. Tim Walters, Executor, Bank of America in Midland, Texas was notified of the release and subsequent remedial actions. The ranch foreman, Mr. Larry Strain, was notified and has made numerous visits to the release site. Mr. Strain was briefed on the continuing actions and is satisfied with the information he has been provided. Mr. Leo "Flap" Sims, Environmental Coordinator for the Millard Deck Estates, was also notified on the release and concurred with the remedial actions that have been proposed and completed.

Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1, was verbally notified of the release on March 28, 2005. A C-141 form, dated March 31, 2005 was completed by Plains and submitted to the NMOCD, Hobbs, New Mexico Office (see Appendix D, NMOCD C-141).

SUMMARY OF FIELD ACTIVITIES

On March 28, 2005, Basin responded to a pipeline release located on the Lea Station 8" Loop Line Pipeline to clamp and contain the crude oil pipeline release under the direction of Plains operations personnel.

The release point and flow path were excavated removing impacted soils to dimensions approximately 45 feet long by 58 feet wide and 1.5 to 8 feet below ground surface (bgs) (see Figure 2, Site Map). All excavated soils were placed on a poly liner for future remedial action. On March 28, 2005 excavation of the visually stained area on the caliche lease road adjacent to the pipeline right-of-way was accomplished and confirmation soil samples were collected for

laboratory analysis. Following the collection of the confirmation soil samples, the caliche lease road was backfilled for safety concerns. The visually stained flow path was excavated and conformation samples were collected and delivered to the laboratory for analysis on April 13, 2005. The confirmation soil samples collected were screened with a Photoionization Detector (PID), (see Figure 2, Site Map) and soil screening results indicated no detectable Volatile Organic Compounds (VOC) existed. All selected soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Laboratory results of the confirmation soil samples indicate that the walls and floor of the excavated area are below NMOCD regulatory standards (see Table 1, Soil Chemistry Table).

A request for backfilling the excavation was proposed to Mr. Larry Johnson, NMOCD Hobbs Office on May 16, 2005 and verbally approved (Appendix C Request Approval for Backfill of Excavation). Mr. Leo "Flap" Sims, Environmental Coordinator for the Millard Deck Estates concurred with the request for backfilling the excavation. Backfill material was obtained from the Millard Deck Estates.

NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed no groundwater depth information for section 17. However, section 9 in the same Township and Range contains groundwater information revealing an average depth to groundwater of 90 feet bgs. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of 10 - 19, which sets the remediation levels at:

Benzene: 10 ppm

BTEX: 50 ppm

TPH: 1000 ppm

DISTRIBUTION OF HYDROCARBONS IN THE UNSATURATED ZONE

The release point and flow path areas were excavated to depths of approximately 1.5 feet bgs to 8 feet bgs (see figure 2 site map) and no visual evidence of crude oil impact was evident on the floor or sidewalls following the completion of the excavation. PID readings indicated no detectable concentrations of Volatile Organic Compounds (VOC) remained on the floor or sidewalls of the excavation. Confirmation soil samples were collected from the excavation on March 28, 2005 and April 13, 2005; and were analyzed for concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix B).

Analytical results indicated detectable BTEX concentrations were below NMOCD regulatory standards for the Release Point Bottom and West Excavation East Side Wall (S/W) soil samples at a depth of 6 and 4 feet bgs, respectively. Analytical results indicated BTEX concentrations were not detected above the laboratory detection limits for the remaining confirmation soil samples. Analytical results indicated detectable TPH concentrations were below NMOCD regulatory standards for Release Point South S/W, West Excavation Bench and West Excavation North S/W at a depth of 3, 4 and 4 feet bgs, respectively. Analytical results indicated TPH concentrations were not detected above the laboratory detection limits on the remaining confirmation soil samples.

RECOMMENDATIONS FOR REMEDIATION/CLOSURE

Approximately 324 cubic yards of impacted soil was excavated and stockpiled onsite resulting from the emergency response. The impacted soil was transported to the Plains Lea Station Landfarm (LSLF). A permit (NMOCD Form C-138) was obtained from the NMOCD for the trucking of the contaminated soils to LSLF. A request for backfilling the exaction was proposed to Mr. Larry Johnson, NMOCD Hobbs Office on May 16, 2005 and verbally approved (Appendix C Request Approval for Backfill of Excavation). The backfill material was obtained from the landowner Millard Deck Estate, and the excavation was contoured to match the original rangeland grade surrounding the site and will be reseeded this fall with the landowners approved grass seed.

Based on the results of the remediation activities conducted, Basin, on behalf of Plains, requests that the NMOCD consider this site as eligible for closure under the *New Mexico Oil Conservation Division Guidelines for Remediation of Leaks, Spills and Releases (1993).* If the NMOCD concurs with this recommendation, please provide Plains with a letter stating no further action is required.

QA/QC PROCEDURES

Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Odessa, Texas for BTEX, TPH analyses using the methods described below. Soil samples were analyzed for BTEX, TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

Decontamination Of Equipment

Cleaning of the sampling equipment will be the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment will be cleaned with Liqui-Nox[®] detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures will be either transmitted with the laboratory reports or are on file at the laboratory.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Soil Remediation and Closure Request Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and Plains Marketing, L.P.

DISTRIBUTION

- Copy 1: Jeff Dann Plains All American 333 Clay Street Suite 1600 Houston, Texas 77002 jpdann@paalp.com Copy 2: Camille Reynolds Plains All American 3112 West US 82 Lovington, New Mexico 88260 cjreynolds@paalp.com
- Copy 3: Mr. Larry Johnson New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240 Larry.Johnson@state.nm.us

Copy 4: Basin Environmental Service Technologies LLC P. O. Box 301 Lovington, New Mexico 88260 rjohnson@basinenv.com

Сору



Tables 1Soil Chemistry Table

TABLE 1

SOIL CHEMISTRY

PLAINS MARKETING, L.P. LEA STATION 8" LOOP LINE LEA COUNTY, NEW MEXICO EMS: 2005-00078

SAMPLE	SAMPLE	SAMPLE		METHOD: E	PA SW 846-	8021B, 5030		METHO	D: 8015M	TOTAL	300.0
LOCATION	DEPTH	DATE	BENZENE	TOLUENE	ETHYL-	M,P-	O-XYLENE	GRO	DRO	TPH	CHLORIDE
	(Below				BENZENE	XYLENES					
	normal surface										
	depth)										
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Road Backfill	6" bgs	03/28/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Road East S/W	1.5' bgs	03/28/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Road West S/W	1.5' bgs	03/28/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Road Bottom	2.5' bgs	03/28/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Release Point East S/W	3' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Release Point South S/W	3' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	39.6	39.6	
Release Point West S/W	3' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
Release Point Bottom	6' bgs	04/13/05	<0.025	0.064	0.035	0.059	<0.025	<10	<10	<10	
Release Point North S/W	3' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
North Wall	3' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
West Excv East S/W	4' bgs	04/13/05	<0.025	<0.025	0.032	0.047	<0.025	<10	<10	<10	
West Excv West S/W	4' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	17.5
West Excv Btm 8'	8' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
West Excv South S/W	4' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<10	
West Excv Bnch	4' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	40.4	40.4	
West Excv North S/W	4' bgs	04/13/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	26.9	26.9	
NMOCD Criteria			10		TOTAL	BTEX 50				100	











• • • •











Appendix A New Mexico Office of the State Engineer Water Well Database Report

New Mexico Office of the State Engineer	Page 1 c
New Mexico Office of the State Engineer Well Reports and Downloads	
Township: 22S Range: 37E Sections: 8,20,7,9,19,21	
NAD27 X: Y: Zone: Search Radius:	
County: Basin: Number: Suffix:	
Owner Name: (First) (Last) Non-Domestic Omestic All	
Well / Surface Data Report Avg Depth to Water Report Water Column Report	
Clear Form WATERS Menu Help	
Ban Tws Rng Sec Zone X Y Wells Min Max Avg CF 22S 37E 09 2 85 94 90 CF 22S 37E 21 1 65 65 65 Record Count: 3	

Appendix B Environmental Laboratory of Texas Analytical Results



Analytical Report

Prepared for:

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

Project: Lea Station 8inch Loopline Project Number: EMS: 2005-00078 Location: Lea County, NM

Lab Order Number: 5C30016

Report Date: 04/05/05

Plains All American EH & S	Project:	Lea Station 8inch Loopline]	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2005-00078		Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds		04/05/05 10:19

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Matrix	Date Sampled	Date Received
5C30016-01	Soil	03/28/05 16:30	03/30/05 15:53
5C30016-02	Soil	03/28/05 16:40	03/30/05 15:53
5C30016-03	Soil	03/28/05 16:45	03/30/05 15:53
5C30016-04	Soil	03/28/05 16:55	03/30/05 15:53
	5C30016-01 5C30016-02 5C30016-03	5C30016-01 Soil 5C30016-02 Soil 5C30016-03 Soil	5C30016-01 Soil 03/28/05 16:30 5C30016-02 Soil 03/28/05 16:40 5C30016-03 Soil 03/28/05 16:45

Plains All American EH & S	Project:	Lea Station 8inch Loopline	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2005-00078	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	04/05/05 10:19

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No
Road Backfill (5C30016-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC53114	03/30/05	03/31/05	EPA 8021B	
Toluene	ND	0.0250	"				"	•	
Ethylbenzene	ND	0.0250	"	"	"	*	*	"	
Xylene (p/m)	ND	0.0250				"	•	"	
Xylene (0)	ND	0.0250				14	"		
Surrogate: a,a,a-Trifluorotoluene		117 %	80-1	120	"	"	"	н	
Surrogate: 4-Bromofluorobenzene		86.7%	80-)	120	"	"	"	n	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED50106	03/30/05	03/31/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	*	"		•	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"		"		"		
Surrogate: 1-Chlorooctane		79.4 %	67.6-	-140	"	"	"	"	
Surrogate: 1-Chlorooctadecane		81.8 %	70-1	130	n	H	"	"	
Road East S/W (5C30016-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC53114	03/30/05	03/31/05	EPA 8021B	
Toluene	ND	0.0250		"		"	"	"	
Ethylbenzene	ND	0.0250	"	н	н	"		"	
Xylene (p/m)	ND	0.0250		**	и	"	"	"	
Xylene (o)	ND	0.0250		"	"	**	"	n	
Surrogate: a,a,a-Trifluorotoluene		119 %	80-,	120	"	"	"	н	
Surrogate: 4-Bromofluorobenzene		85.4 %	80-1	120	"	"	"	н	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED50106	03/30/05	03/31/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	и	"	•		ч	
Total Hydrocarbon C6-C35	ND	10.0	"	**	"	•	н	"	
Surrogate: 1-Chlorooctane		78.4 %	67.6-	140	H	"	"	н	
Surrogate: 1-Chlorooctadecane		78.8 %	70-1	130	"	"	#	"	
Road West S/W (5C30016-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC53114	03/30/05	03/31/05	EPA 8021B	
foluene	ND	0.0250	"	"	н		"	u	
Ethylbenzene	ND	0.0250	"		n	15	"	"	
Kylene (p/m)	ND	0.0250	"		"				
Kylene (o)	ND	0.0250	**	"	4	•	n	"	
Surrogate: a,a,a-Trifluorotoluene		114 %	80-1	20	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		82.4 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED50106	03/30/05	03/31/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		•	"	"			
fotal Hydrocarbon C6-C35	ND	10.0	"			"		н	

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.

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project: Lea Station 8inch Loopline Project Number: EMS: 2005-00078 Project Manager: Camille Reynolds						Fax: (432) 687 Reported 04/05/05 10		
		Or Environ	ganics b	-) V G C			· · · · · · · · · · · · · · · · · · ·		
Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Road West S/W (5C30016-03) Soil										
Surrogate: 1-Chlorooctane		75.8 %	67.6-	-140	ED50106	03/30/05	03/31/05	EPA 8015M		
Surrogate: 1-Chlorooctadecane		76.0 %	70-1	130	"	17	"	n		
Road Bottom (5C30016-04) Soil										
Benzene	ND	0.0250	mg/kg dry	25	EC53114	03/30/05	03/31/05	EPA 8021B		
Toluene	ND	0.0250	**	"	n	"	"	*		
Ethylbenzene	ND	0.0250	**	۲		"	"	"		
Xylene (p/m)	ND	0.0250	•	"		H	"	17		
Xylene (o)	ND	0.0250	"	"	н	"	n	n		
Surrogate: a,a,a-Trifluorotoluene		105 %	80-,	120	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		82.4 %	80	120	"	n	"	#		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED50106	03/30/05	03/31/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	*	"	"	"	*			
Total Hydrocarbon C6-C35	ND	10.0	и		*	"	"	**		
Surrogate: 1-Chlorooctane		86.4 %	67.6-	-140	"	"	"	"		
Surrogate: 1-Chlorooctadecane		83.4 %	70	130	"	"	"	"		

Plains All American EH & S	Project: Lea Station 8inch Loopline	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2005-00078	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/05/05 10:19
	· · · · · · · · · · · · · · · · · · ·	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

	·	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Road Backfill (5C30016-01) Soil									
% Moisture	5.0	0.1	%	1	EC53112	03/30/05	03/31/05	% calculation	
Road East S/W (5C30016-02) Soil		·····							
% Moisture	5.8	0.1	%	1	EC53112	03/30/05	03/31/05	% calculation	
Road West S/W (5C30016-03) Soil									
% Moisture	6.9	0.1	%	1	EC53112	03/30/05	03/31/05	% calculation	
Road Bottom (5C30016-04) Soil									
% Moisture	11.7	0.1	%	1	EC53112	03/30/05	03/31/05	% calculation	

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

Plains All American EH & S		P	roject: Le	a Station 8inc	h Loopline				Fax: (432)	687-491		
1301 S. County Road 1150			5	4S: 2005-000					Reported:			
Midland TX, 79706-4476	Project Manager: Camille Reynolds									5 10:19		
	O	rganics by	, GC - Q	Quality Co	ontrol							
		Environn	n <mark>ental I</mark>	ab of Te	tas							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Note		
Batch EC53114 - EPA 5030C (GC)						· · · · · · · ·			····· <u>···</u> ···			
Blank (EC53114-BLK1)	=			Prepared &	Analyzed	: 03/30/05						
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	106		ug/kg	100		106	80-120		**************************************			
Surrogate: 4-Bromofluorobenzene	82.7		"	100		82.7	80-120					
LCS (EC53114-BS1)				Prepared &	. Analyzed	: 03/30/05						
Benzene	94.8		ug/kg	100		94.8	80-120					
Toluene	103			100		103	80-120					
Ethylbenzene	107			100		107	80-120					
Xylene (p/m)	239		"	200		120	80-120					
Xylene (o)	117		n	100		117	80-120					
Surrogate: a,a,a-Trifluorotoluene	116		"	100		116	80-120					
Surrogate: 4-Bromofluorobenzene	109		"	100		109	80-120					
Calibration Check (EC53114-CCV1)				Prepared: ()3/30/05 A	nalyzed: 03	3/31/05					
Benzene	96.4		ug/kg	100		96.4	80-120					
Toluene	100			100		100	80-120					
Ethylbenzene	99.1		"	100		99.1	80-120					
Xylene (p/m)	221			200		110	80-120					
Xylene (o)	109		"	100		109	80-120					
Surrogate: a,a,a-Trifluorotoluene	120		"	100		120	80-120					
Surrogate: 4-Bromofluorobenzene	86.4		N	100		86.4	80-120					
Matrix Spike (EC53114-MS1)		rce: 5C30016				nalyzed: 03				··· •		
Benzene	97.4		ug/kg	100	ND	97.4	80-120					
Toluene	105			100	ND	105	80-120					
Ethylbenzene	113			100	ND	113	80-120					
Xylene (p/m)	238			200	ND	119	80-120					
Xylene (o)	113		"	100	ND	113	80-120					
Surrogate: a,a,a-Trifluorotoluene	112		"	100		112	80-120					
Surrogate: 4-Bromofluorobenzene	118		n	100		118	80-120					

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

Plains All American EH & S		Р	roject: Lea	Station 8inc	h Loopline				Fax: (432)	687-4914
1301 S. County Road 1150			5	S: 2005-000					Repo	rted:
Midland TX, 79706-4476				nille Reynol					04/05/05	5 10:19
	O	rganics by	_	•						
		Environn	nental L	ab of Te	LAS					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC53114 - EPA 5030C (GC)			· · · · · · · · · · · · · · · · · · ·							
Matrix Spike Dup (EC53114-MSD1)	Sou	rce: 5C30016	-03	Prepared: (3/30/05 A	nalyzed: 03	/31/05			
Benzene	96.4		ug/kg	100	ND	96.4	80-120	1.03	20	
Toluene	103		**	100	ND	103	80-120	1.92	20	
Ethylbenzene	107		**	100	ND	107	80-120	5.45	20	
Xylene (p/m)	237		**	200	ND	118	80-120	0.844	20	
Xylene (o)	117			100	ND	117	80-120	3.48	20	
Surrogate: a,a,a-Trifluorotoluene	116	_	"	100		116	80-120			_
Surrogate: 4-Bromofluorobenzene	116		"	100		116	80-120			
Blank (ED50106-BLK1)				Prepared: ()3/30/05 A	nalyzed: 03	31/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0								
Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND ND									
Total Hydrocarbon C6-C35		10.0	" " mg/kg	50.0		74.4	67.6-140			
	ND	10.0	*	50.0 50.0		74.4 71.6	67.6-140 70-130			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane	ND 37.2	10.0	" " mg/kg	50.0)3/30/05 A	71.6	70-130			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50196-BS1)	ND 37.2	10.0	" " mg/kg	50.0)3/30/05 A	71.6	70-130			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane	ND 37.2 35.8	10.0 10.0	" " mg/kg "	50.0 Prepared: ()3/30/05 A	71.6 nalyzed: 03	70-130 8/31/05			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35	ND 37.2 35.8 414	10.0 10.0 10.0	" " mg/kg "	50.0 Prepared: (500)3/30/05 A	71.6 nalyzed: 03 82.8	70-130 3/31/05 76.3-104			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50196-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND 37.2 35.8 414 493	10.0 10.0 10.0 10.0 10.0	" " <i>mg/kg</i> " mg/kg wet	50.0 Prepared: (500 500)3/30/05 A	71.6 nalyzed: 03 82.8 98.6	70-130 3/31/05 76.3-104 76.1-118			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12	ND 37.2 35.8 414 493 907	10.0 10.0 10.0 10.0 10.0	" " " mg/kg wet "	50.0 Prepared: (500 500 1000)3/30/05 A	71.6 nalyzed: 03 82.8 98.6 90.7	70-130 8/31/05 76.3-104 76.1-118 81.8-105			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane	ND 37.2 35.8 414 493 907 38.9	10.0 10.0 10.0 10.0 10.0	" " " mg/kg wet "	50.0 Prepared: (500 500 1000 50.0 50.0)3/30/05 A)3/30/05 A	71.6 nalyzed: 03 82.8 98.6 90.7 77.8 73.0	70-130 3/31/05 76.3-104 76.1-118 81.8-105 67.6-140 70-130			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane Calibration Check (ED50106-CCV1)	ND 37.2 35.8 414 493 907 38.9	10.0 10.0 10.0 10.0 10.0	" " " mg/kg wet "	50.0 Prepared: (500 500 1000 50.0 50.0		71.6 nalyzed: 03 82.8 98.6 90.7 77.8 73.0	70-130 3/31/05 76.3-104 76.1-118 81.8-105 67.6-140 70-130			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane Calibration Check (ED50106-CCV1) Gasoline Range Organics C6-C12	ND 37.2 35.8 414 493 907 38.9 36.5	10.0 10.0 10.0 10.0 10.0	" " " mg/kg wet " " " " " " " "	50.0 Prepared: (500 500 1000 50.0 50.0 50.0 Prepared: (71.6 nalyzed: 03 82.8 98.6 90.7 77.8 73.0 nalyzed: 03	70-130 3/31/05 76.3-104 76.1-118 81.8-105 67.6-140 70-130 3/31/05			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctane Calibration Check (ED50106-CCV1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35	ND 37.2 35.8 414 493 907 38.9 36.5 476	10.0 10.0 10.0 10.0 10.0	" " mg/kg " " " " " " " " " " " " " " " "	50.0 Prepared: (500 500 1000 50.0 50.0 Prepared: (500		71.6 nalyzed: 03 82.8 98.6 90.7 77.8 73.0 nalyzed: 03 95.2	70-130 3/31/05 76.3-104 76.1-118 81.8-105 67.6-140 70-130 3/31/05 80-120			
Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (ED50106-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane	ND 37.2 35.8 414 493 907 38.9 36.5 476 523	10.0 10.0 10.0 10.0 10.0	" " mg/kg " " " " " " " " " " " " " " " "	50.0 Prepared: (500 500 1000 50.0 50.0 Prepared: (500 500		71.6 nalyzed: 03 82.8 98.6 90.7 77.8 73.0 nalyzed: 03 95.2 105	70-130 3/31/05 76.3-104 76.1-118 81.8-105 67.6-140 70-130 3/31/05 80-120 80-120			

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.

Plains All American EH & S	Project: Lea Station 8inch Loopline	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2005-00078	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/05/05 10:19

Organics by GC - Quality Control

Environmental Lab of Texas

			Reporting		Spike	Source		%REC		RPD	
Analyte	Res	sult	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch ED50106 - Solvent Extraction (GC)

Matrix Spike (ED50106-MS1)	Sourc	e: 5C30014	-03	Prepared: 0	3/30/05 A	nalyzed: 0	3/31/05		
Gasoline Range Organics C6-C12	503	10.0	mg/kg dry	527	ND	95.4	75.9-114		
Diesel Range Organics >C12-C35	559	10.0	41	527	ND	106	85.3-122		
Total Hydrocarbon C6-C35	1060	10.0	**	1050	ND	101	84.4-115		
Surrogate: 1-Chlorooctane	49.2		mg/kg	50.0		98.4	67.6-140		
Surrogate: 1-Chlorooctadecane	40.5		"	50.0		81.0	70-130		
Matrix Spike Dup (ED50106-MSD1)	Sourc	e: 5C30014	03	Prepared: 0	3/30/05 A	nalyzed: 0	3/31/05		
Gasoline Range Organics C6-C12	519	10.0	mg/kg dry	527	ND	98.5	75.9-114	3.13	10.4
Diesel Range Organics >C12-C35	561	10.0	**	527	ND	106	85.3-122	0.357	10.4
Total Hydrocarbon C6-C35	1080	10.0	"	1050	ND	103	84.4-115	1.87	7.6
Surrogate: 1-Chlorooctane	49.0		mg/kg	50.0		98.0	67.6-140	······	
Surrogate: 1-Chlorooctadecane	40.8		"	50.0		81.6	70-130		

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.

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project Nu	mber: EM		78				Fax: (432) Repo 04/05/03	rted:
General	and TX, 79706-4476 Project Manager: Camille Reynolds General Chemistry Parameters by EPA / Standard Methods - Quality Control Environmental Lab of Texas te Reporting Spike Source %REC Limit Units Level Result %REC Limits RPD									
Analyte	Result		Units	•		%REC		RPD	RPD Limit	Notes
Batch EC53112 - General Preparatio	n (Prep)					······································				
Blank (EC53112-BLK1)				Prepared: ()3/30/05 A	nalyzed: 03	/31/05			
% Moisture	ND	0.1	%				· <u> </u>			

%

Prepared: 03/30/05 Analyzed: 03/31/05

0.784

20

12.8

Source: 5C30002-01

0.1

12.7

Environmental Lab of Texas

Duplicate (EC53112-DUP1)

% Moisture

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

Page 8 of 9

Plains All American EH & SProject:Lea Station 8inch LooplineFax: (432) 687-49141301 S. County Road 1150Project Number:EMS: 2005-00078Reported:Midland TX, 79706-4476Project Manager:Camille Reynolds04/05/05 10:19

Notes and Definitions

	DET	Analyte DETECTED
	ND	Analyte NOT DETECTED at or above the reporting limit
	NR	Not Reported
1	dry	Sample results reported on a dry weight basis
	RPD	Relative Percent Difference
	LCS	Laboratory Control Spike
	MS	Matrix Spike
I	Dup	Duplicate
1		

Report Approved By:

Raland K Just

4/5/2005

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

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.

12600 West I-20 East Odessa, Texas 7976		Phone: 91 Fax: 91	5-563-1800 5-563-1713										CHA	un of	- CUS	TOD	Y REC	ORD	AND	ANA	ll ys#	s re(quest	r	
Project Ma	mager:	KEN)	KTTON										-	Pr	oject	Nam	»: <u>L</u>	EA.	\$1	A1	IN	VS	<u>e"/</u>		ž
Company	y Name	BASIN	ENV.	SVCS											Pro	ject i	<u>ب</u>	= /1	s!.	20	øø5	5-0	\$\$\$\$	178	2
Company Ar		. 0, BOX													Proje	ct Los	: 2	EA.	Ø	ou	NT	Y	\$ <i>\$\$</i> NP	1	
		VINGTON		1									-			PO	k:	PF	79	,		7			
Telepho	me No: 150	15) 441-2	124		Fax No	E	65	-] «	39/	2 - 1	417	01	•									-*-***			
Sampler Sig	-	Q.	Dut			. کر					- <u>f</u>		•												
Sampar ay	Hawse:	A en c	t sun o														•••••••••••••••••••••••••••••••••••••••		Analy	ze F	or			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1
																	TCLP:			┢					
	~ ~					·	F	F	reser	vative		Τ	Mat	rix	ğ	T		8	1	Ť,					ļ
2020010				2¢¢5 sampled	mpled	No. of Containers					ecitv)			scity):	80154 J1005	Cations (Ca. Mg. Na. K)	/ CEC	Ag Ba Cd Cr Po Hg	8	BSD30		8			
507 LAB # (lab use only)		FIELD CODE		Date Sa	Time Sampled	No. of Co	lce	4NG	ACH HCH	H ₂ S04	None Other (Specify)	Water	Studge	Solf Other (spe	7PH: 418.1 8015M	Cations (Ca. Mg.	SAR / ESP / CEC	Metals: As Ag Ba	Serrivotatiles	BTEX 6021 85030	ų L	etal Gamma			
01	ROAD	BACKFI	i.L.	28MAR	163%	1	X			\top				x	X				1	X					T
-02	ROAD	EAST SI			1640		\prod													11					
	ROAD	WEST S	ω		1645																				
-04-	ROAD	BOTTOM			1655		*		_											1t					1
						<u> </u>	Ш					1								1			$\downarrow \downarrow$	1	1
						_	$\left - \right $	\square												 		_	$\downarrow \downarrow$	1	1
		 				 	\square						┝─╁		┞╌╿		\downarrow		4	_	┡──┝	- 	┢╌┼		4
					ļ	_	_			+		 			┨┈┥		+		4	_	┞-┞-		╉┈╇		4
			····		ļ	<u> </u>		┝─╄		┿┥		.			┟╌┟	_	+		+	ļ	┝╌┝		┢╌┽		+
Special Instructions:	·····			1	<u>[</u>	<u> </u>																1	$\overline{\mathbb{O}}$		1
															-	T	sinper sibora	ature	Upon	Rec	eipt		5° c	IN .	
Relinquished by	1	Date	Time	Received by:								Da			Time		u.	z qia	e e	و سر	er.	1/2	+5		•
the string land	anna anna anna anna anna anna anna ann	BOMAR	at-175	& daka	dere						R	M	<u>r 0</u>	51/	25	2	-10	cyia	33.0		Sec	1 0	200	ole	Í.

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

Client:	asin	ENV.	
Date/Time:	2/30	05 4:00	
Order #:	5030	_	_
Initials:	· Cl	4	-

Sample Receipt Checklist

Temperature of container/cooler?	I Yes I	No	0.5 0
Shipping container/cooler in good condition?	Bal	No	
Custody Seals intact on shipping container/cooler?		Na	Not present
Custody Seals intact on sample bottles?	C	No	Not present
Chain of custody present?		No	
Sample Instructions complete on Chain of Custody?	Yes,	No	
Chain of Custody signed when relinquished and received?	1735	No	
Chain of custody agrees with sample lace!(s)		No	
Container labels legicle and intact?		No	
Sample Matrix and procerties same as on chain of custody?	Kee I	No	
Samples in proper container/bottle?	FED	No	
Samples properly creserved?	B	Nc	
Sample bottles intact?		No	
Preservations documented on Chain of Custody?	10001	No	
Containers documented on Chain of Custody?	0	No	
Sufficient sample amount for incicated test?	CA	Nc	
All samples received within sufficient hold time?	(2)	Nc	
VOC samples have zero headspace?		No	Not Applicable

Other observations:

Variance Documentation:

Contact	Person:	-
Regardir	ng:	

*

Date:Time: Contacted by:

.

.

.

Corrective Action Taken:



Analytical Report

Prepared for:

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

Project: Lea Station 8inch Loopline Project Number: EMS: 2005-00078 Location: Lea County, NM

Lab Order Number: 5D14013

Report Date: 04/21/05

Plains All American EH & S	Project: Lea Station 8inch Loopline	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2005-00078	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/21/05 12:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Release Point East S/W	5D14013-01	Soil	04/13/05 12:00	04/14/05 15:30
Release Point South S/W	5D14013-02	Soil	04/13/05 12:15	04/14/05 15:30
Release Point West S/W	5D14013-03	Soil	04/13/05 12:30	04/14/05 15:30
Release Point Bottom	5D14013-04	Soil	04/13/05 12:45	04/14/05 15:30
Release Point North S/W	5D14013-05	Soil	04/13/05 13:00	04/14/05 15:30
North Wall	5D14013-06	Soil	04/13/05 13:15	04/14/05 15:30
West Excv East S/W	5D14013-07	Soil	04/13/05 13:30	04/14/05 15:30
West Excv West S/W	5D14013-08	Soil	04/13/05 13:45	04/14/05 15:30
West Excv Btm 8'	5D14013-09	Soil	04/13/05 14:00	04/14/05 15:30
West Exev South S/W	5D14013-10	Soil	04/13/05 14:15	04/14/05 15:30
West Excv BN @ H	5D14013-11	Soil	04/13/05 14:30	04/14/05 15:30
West Excv North S/W	5D14013-12	Soil	04/13/05 14:45	04/14/05 15:30
Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Release Point East S/W (5D14013-01) S	Soil								
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B	
Toluene	ND	0.0250		**		۳	"	n	
Ethylbenzene	ND	0.0250		*		*			
Xylene (p/m)	J [0.0212]	0.0250				"	"	"	
Xylene (o)	ND	0.0250		"	•		*	"	
Surrogate: a,a,a-Trifluorotoluene		116 %	80	20	"	"	"	н	
Surrogate: 4-Bromofluorobenzene		82.3 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		"			16	n	
Total Hydrocarbon C6-C35	ND	10.0	**	**		•	"	**	
Surrogate: 1-Chlorooctane		79.4 %	70-1	30	и	"	"	"	
Surrogate: 1-Chlorooctadecane		86.6 %	70	30	"	"	n	"	
Release Point South S/W (5D14013-02)	Soil								
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B	
Toluene	ND	0.0250	"	"		"	п		
Ethylbenzene	ND	0.0250	"	•	"	"	"		
Xylene (p/m)	ND	0.0250	H		"	n	"	"	
Xylene (o)	ND	0.0250		•	"	n	"	*	
Surrogate: a,a,a-Trifluorotoluene		118 %	80-1	20	"	И	#	"	
Surrogate: 4-Bromofluorobenzene		86.6 %	80-1	20	"	и	н	и	
Gasoline Range Organics C6-C12	J [6.97]	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M	
Diesel Range Organics >C12-C35	39.6	10.0	"					•	
Total Hydrocarbon C6-C35	39.6	10.0					"		
Surrogate: 1-Chlorooctane		87.2 %	70-1	30	"	"	н	"	
Surrogate: 1-Chlorooctadecane		92.0 %	70-1	30	*	"	"	"	
Release Point West S/W (5D14013-03)	Soil								
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B	
Foluene	ND	0.0250	"		"	n	"		
Ethylbenzene	ND	0.0250	R	•			"	"	
Xylene (p/m)	ND	0.0250			"	**			
Xylene (o)	ND	0.0250	"			"	Ħ	*	
Surrogate: a,a,a-Trifluorotoluene		118 %	80-1	20	H	H	"	IJ	
Surrogate: 4-Bromofluorobenzene		86.1 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	-	•	"	*	71	*	
Total Hydrocarbon C6-C35	ND	10.0			н		*1	**	

Environmental Lab of Texas

Plains All American EH & S			Project: Lea			e		Fax: (432) 687-4914		
1301 S. County Road 1150 Midland TX, 79706-4476			umber: EM anager: Can					Report 04/21/05		
Wildiand TX, 79700-4470		Project IVI						0421/05	12.54	
			ganics by							
······································		Environ	mental La	ab of Te	xas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not	
Release Point West S/W (5D14013-03)	Soil									
Surrogate: 1-Chlorooctane		81.8 %	70-1.	30	ED51514	04/15/05	04/16/05	EPA 8015M		
Surrogate: 1-Chlorooctadecane		92.0 %	70-1.	30	"	"	"	"		
Release Point Bottom (5D14013-04) So	ji j									
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/19/05	EPA 8021B		
Toluene	0.0647	0.0250	"			"				
Ethylbenzene	0.0359	0.0250	"			11		*		
Xylene (p/m)	0.0597	0.0250	4		"	u	•			
Xylene (0)	J [0.0221]	0.0250	"	"	"	*	"	D		
Surrogate: a,a,a-Trifluorotoluene		119 %	80-1	20	"	"	11	rt .		
Surrogate: 4-Bromofluorobenzene		104 %	80-1.	20	"	"	н	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	"		"	W	•		
Total Hydrocarbon C6-C35	ND	10.0	"	•	"	"		•		
Surrogate: 1-Chlorooctane		83.8 %	70-1.	30	H	"	"	"		
Surrogate: 1-Chlorooctadecane		92.4 %	70-1.	30	"	"	"	"		
Release Point North S/W (5D14013-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B		
Toluene	ND	0.0250	11			n	u.			
Ethylbenzene	ND	0.0250		**			"	19		
Xylene (p/m)	ND	0.0250		"	"	۳	"	••		
Xylene (o)	ND	0.0250	"	54	**	#	••	**		
Surrogate: a,a,a-Trifluorotoluene		115 %	80-1.	20	H	"	#	"		
Surrogate: 4-Bromofluorobenzene		88.2 %	80-1.	20	"	м	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0		"	*	•				
Total Hydrocarbon C6-C35	ND	10.0					"			
Surrogate: 1-Chlorooctane		83.6 %	70-1.	30	н	n	"	"		
Surrogate: 1-Chlorooctadecane		88.8 %	70-1.	20						

Plains All American EH & S		1	Project: Lea	Station 8ir	ich Loopline	•		Fax: (432) 687-4914		
1301 S. County Road 1150		Project N	Reported:							
Midland TX, 79706-4476		Project M	anager: Car	nille Reyno	olds			04/21/05 12:34		
		O	rganics b	y GC						
		Environ	mental L	ab of Te	xas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No	
North Wall (5D14013-06) Soil			0110		Daici	Першео			10	
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B		
Toluene	ND	0.0250	n		"	"		"		
Ethylbenzene	ND	0.0250	м							
Xylene (p/m)	ND	0.0250	н	•		и	•	"		
Xylene (o)	ND	0.0250	*	n 	••	»	*	41		
Surrogate: a,a,a-Trifluorotoluene		117 %	80-1	20	"	"	"	н		
Surrogate: 4-Bromofluorobenzene		84.3 %	80-1	20	"	"	11	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"		•	"		"		
Total Hydrocarbon C6-C35	ND	10.0	n			"	•			
Surrogate: 1-Chlorooctane		84.6 %	70-1	30	"	H	"	"		
Surrogate: 1-Chlorooctadecane		92.8 %	70-1	30	"	"	"	"		
West Excv East S/W (5D14013-07) Soil										
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B		
Тоциеле	ND	0.0250	*1				"	"		
Ethylbenzene	0.0320	0.0250		۲		"		"		
Xylene (p/m)	0.0470	0.0250		**	и	"		н		
Xylene (o)	ND	0.0250	"			"				
Surrogate: a,a,a-Trifluorotoluene		116 %	80-1	20		"	"	#	·	
Surrogate: 4-Bromofluorobenzene		84.5 %	80-1		"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0		1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"			"		м		
Total Hydrocarbon C6-C35	ND	10.0	н	••		"		**		
Surrogate: 1-Chlorooctane		75.6 %	70-1	30		"		н		
Surrogate: 1-Chlorooctadecane		82.0 %	70-1		"	"	"	и		
0		02.0 //	/0-1	50						
West Excv West S/W (5D14013-08) Soil		0.0000								
Benzene	ND		mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B "		
Toluene	ND	0.0250			"	"	"			
Ethylbenzene Verlaget (z/m)	ND	0.0250			-			-		
Xylene (p/m)	ND	0.0250	-	•	"	"				
Xylene (0)	ND	0.0250						n		
Surrogate: a,a,a-Trifluorotoluene		116 %	80-1		"	H	"	"		
Surrogate: 4-Bromofluorobenzene		80.0 %	80-1		"	"	"	"		
Gasoline Range Organics C6-C12	ND		mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0		"		n	41	u		
Total Hydrocarbon C6-C35	ND	10.0	"		"	•	"	*		

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 4 of 13

Plains All American EH & S		Ŧ	roject: Lea	Station 8ir	ich Loopline	,		Fax: (432) 687-4914		
1301 S. County Road 1150			umber: EM					Report	ed:	
Midland TX, 79706-4476			anager: Can					04/21/05 12:34		
<u></u>		Or	ganics b	y GC						
		Environ	nental L	ab of Te	xas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No	
West Excv West S/W (5D14013-08) Soil		/ / /								
Surrogate: 1-Chlorooctane		84.2 %	70-1	30	ED51514	04/15/05	04/16/05	EPA 8015M		
Surrogate: 1-Chlorooctadecane		89.0 %	70-1	30	п	H	"	н		
West Excv Btm 8' (5D14013-09) Soil										
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B		
Toluene	ND	0.0250	*		ø	"	"			
Ethylbenzene	ND	0.0250	**	*	*		m	*		
Xylene (p/m)	ND	0.0250	"	н	۳	*		•		
Xylene (o)	ND	0.0250		**		*	"	*		
Surrogate: a,a,a-Trifluorotoluene		116 %	80-1	20	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		83.5 %	80-1	20	"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0			H		n			
Total Hydrocarbon C6-C35	ND	10.0		"	۳					
Surrogate: 1-Chlorooctane		87.8 %	70-1	30	11	н	н	"		
Surrogate: 1-Chlorooctadecane		93.8 %	70-1	30	"	"	11	"		
West Excv South S/W (5D14013-10) Soil										
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B		
Toluene	ND	0.0250		"	**	•		"		
Ethylbenzene	ND	0.0250		"	"	*	"	•		
Xylene (p/m)	ND	0.0250	••	"		łr	"	**		
Xylene (0)	ND	0.0250		"	11		"	14		
Surrogate: a,a,a-Trifluorotoluene		112 %	80-1	20	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		86.1 %	80-1	20	"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	*	-		-	**		
Total Hydrocarbon C6-C35	ND	10.0	"			**	"	•		
Surrogate: 1-Chlorooctane		87.2 %	70-1	30	n	"	"	H		
Surrogate: 1-Chlorooctadecane		96.2 %	70-1	30	"	"	"	"		

Project: Lea Station 8inch Loopline Project Number: EMS: 2005-00078 Project Manager: Camille Reynolds

Reported: 04/21/05 12:34

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
West Excv BN @ H (5D14013-11) Soil								· · · · · · · · · · · · · · · · · · ·	
Benzene	ND	0.0250	mg/kg dry	25	ED51906	04/18/05	04/18/05	EPA 8021B	
Toluene	ND	0.0250	"	*	*				
Ethylbenzene	ND	0.0250	"						
Xylene (p/m)	ND	0.0250	**			*		"	
Xylene (o)	ND	0.0250	*			*	H		
Surrogate: a,a,a-Trifluorotoluene		118 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.9 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	J [9.02]	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M	J
Diesel Range Organics >C12-C35	40.4	10.0	**		"		*	ч	
Total Hydrocarbon C6-C35	40.4	10.0	**	"			11	**	
Surrogate: 1-Chlorooctane		92.4 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		<i>99.0 %</i>	70-1	30	"	"	"	"	
West Excv North S/W (5D14013-12) Soi	1								
Benzene	ND .	0.0250	mg/kg dry	25	ED51906	04/18/05	04/19/05	EPA 8021B	
Toluene	ND	0.0250	"		*	"	**	"	
Ethylbenzene	ND	0.0250	11	"					
Xylene (p/m)	ND	0.0250	n	**	•		n		
Xylene (o)	ND	0.0250	"	**	**	•	"		
Surrogate: a,a,a-Trifluorotoluene		115 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.4 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51514	04/15/05	04/16/05	EPA 8015M	
Diesel Range Organics >C12-C35	26.9	10.0	14			*		"	
Total Hydrocarbon C6-C35	26.9	10.0	"			••	"	**	
Surrogate: 1-Chlorooctane		85.8 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		93.2%	70-1	30	"	"	"	"	

Environmental Lab of Texas

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Release Point East S/W (5D14013-01) Soil		_							
% Moisture	7.9	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
Release Point South S/W (5D14013-02) Soil									
% Moisture	10.9	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
Release Point West S/W (5D14013-03) Soil									
% Moisture	7.2	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
Release Point Bottom (5D14013-04) Soil									
% Moisture	9.6	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
Release Point North S/W (5D14013-05) Soil									
% Moisture	7.3	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
North Wall (5D14013-06) Soil									
% Moisture	3.8	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
West Excv East S/W (5D14013-07) Soil									
% Moisture	13.8	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
West Excv West S/W (5D14013-08) Soil									
Chloride	17.5	5.00	mg/kg	10	ED52011	04/18/05	04/18/05	EPA 300.0	
% Moisture	9.8	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
West Excv Btm 8' (5D14013-09) Soil									
% Moisture	7.3	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
West Excv South S/W (5D14013-10) Soil									
% Moisture	6.7	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	44

Environmental Lab of Texas

Plains All American EH & S	Project:	Lea Station 8inch Loopline	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2005-00078	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	04/21/05 12:34

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
West Excv BN @ H (5D14013-11) Soil									
% Moisture	11.5	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	
West Excv North S/W (5D14013-12) Soil									
% Moisture	6.1	0.1	%	1	ED51901	04/15/05	04/18/05	% calculation	

Environmental Lab of Texas

Plains All American EH & S		P	roject: Lea	Station 8inc	h Loopline				Fax: (432)	687-4914
1301 S. County Road 1150			Reported:							
Midland TX, 79706-4476				S: 2005-000 nille Reynol					04/21/0	5 12:34
	O	rganics by	GC - Q	uality Co	ontrol					
		Environ	nental L	ab of Te	kas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51514 - Solvent Extraction (GC))									
Blank (ED51514-BLK1)				Prepared &	Analyzed:	04/15/05				
Basoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0								
Surrogate: 1-Chlorooctane	38.6		mg/kg	50.0		77.2	70-130			
urrogate: 1-Chlorooctadecane	37.9		"	50.0		75.8	70-130			
LCS (ED51514-BS1)				Prepared &	. Analyzed:	04/15/05				
Basoline Range Organics C6-C12	399	10.0	mg/kg wet	500		79.8	75-125			
Diesel Range Organics >C12-C35	411	10.0		500		82.2	75-125			
Cotal Hydrocarbon C6-C35	810	10.0		1000		81.0	75-125			
Surrogate: 1-Chlorooctane	37.8		mg/kg	50.0		75.6	70-130			
Surrogate: 1-Chlorooctadecane	35.6		"	50.0		71.2	70-130			
Calibration Check (ED51514-CCV1)				Prepared &	Analyzed:	04/15/05				
Gasoline Range Organics C6-C12	492		mg/kg	500		98.4	80-120			
Diesel Range Organics >C12-C35	585			500		117	80-120			
fotal Hydrocarbon C6-C35	1080		u	1000		108	80-120			
Surrogate: 1-Chlorooctane	63.4		"	50.0		127	70-130			
Surrogate: 1-Chlorooctadecane	64.9		"	50.0		130	70-130			
Matrix Spike (ED51514-MS1)	Sou	rce: 5D14013	i-0 1	Prepared: (04/1 5/ 05 A	nalyzed: 04	\$/16/05			
Gasoline Range Organics C6-C12	468	10.0	mg/kg dry	543	ND	86.2	75-125	·		
Diesel Range Organics >C12-C35	613	10.0		543	ND	113	75-125			
Total Hydrocarbon C6-C35	1080	10.0		1090	ND	99.1	75-125			
Surrogate: 1-Chlorooctane	50.6		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	46.9		"	50.0		93.8	70-130			
Matrix Spike Dup (ED51514-MSD1)	Sou	rce: 5D14013	⊢0 1	Prepared: ()4/15/05 A	nalyzed: 04	1/16/05			
Gasoline Range Organics C6-C12	492	10.0	mg/kg dry	543	ND	90.6	75-125	5.00	20	
Diesel Range Organics >C12-C35	600	10.0		543	ND	110	75-125	2.14	20	
Total Hydrocarbon C6-C35	1090	10.0		1090	ND	100	75-125	0.922	20	
urrogate: 1-Chlorooctane	50.9		mg/kg	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	46.8		"	50.0		93.6	70-130			

Plains All American EH & S		F	roject: Lea	Project: Lea Station 8inch Loopline								
1301 S. County Road 1150				S: 2005-000					Repo	rted:		
Midland TX, 79706-4476				nille Reynol					04/21/0	5 12:34		
	0	rganics by	- GC - Q	uality Co	ontrol							
		Environr	nental L	ab of Te	KAS							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch ED51906 - EPA 5030C (GC)												
Blank (ED51906-BLK1)				Prepared &	Analyzed:	04/18/05						
Benzene	ND	0.0250	mg/kg wet									
Foluene	ND	0.0250	"									
Ethylbenzene	ND	0.0250	"									
Xylene (p/m)	ND	0.0250	"									
Xylene (0)	ND	0.0250	H									
Surrogate: a,a,a-Trifluorotoluene	112		ug/kg	100		112	80-120					
Surrogate: 4-Bromofluorobenzene	84.5		"	100		84.5	80-120					
LCS (ED51906-BS1)				Prepared &	Analyzed	04/18/05						
Benzene	97.9		ug/kg	100		97.9	80-120		· ·			
Toluene	103			100		103	80-120					
Ethylbenzene	104			100		104	80-120					
Xylene (p/m)	235			200		118	80-120					
Xylene (o)	108		•	100		108	80-120					
Surrogate: a,a,a-Trifluorotoluene	116		"	100		116	80-120					
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120					
Calibration Check (ED51906-CCV1)				Prepared: ()4/18/05 A	nalyzed: 04	4/19/05					
Benzene	107		ug/kg	100		107	80-120					
Toluene	108			100		108	80-120					
Ethylbenzene	102			100		102	80-120					
Xylene (p/m)	227			200		114	80-120					
Xylene (o)	112			100		112	80-120					
Surrogate: a,a,a-Trifluorotoluene	112		"	100	<u> </u>	112	80-120					
Surrogate: 4-Bromofluorobenzene	93.3		"	100		93.3	80-120					
Matrix Spike (ED51906-MS1)	Sou	arce: 5D1501(-01	Prepared: (04/18/05 A	nalyzed: 04	4/19/05					
Benzene	2440		ug/kg	2500	ND	97.6	80-120					
Toluene	2320			2500	ND	92.8	80-120					
Ethylbenzene	2250			2500	44.3	88.2	80-120					
Xylene (p/m)	5030		"	5000	75.1	99.1	80-120					
Xylene (o)	2500		н	2500	25.4	99.0	80-120					
Surrogate: a,a,a-Trifluorotoluene	113	i.	n	100		113	80-120					
Surrogate: 4-Bromofluorobenzene	86.1		"	100		86.1	80-120					

Environmental Lab of Texas

	Plains All American EH & S	Project:	Lea Station 8inch Loopline	Fax: (432) 687-4914
	1301 S. County Road 1150	Project Number:	EMS: 2005-00078	Reported:
	Midland TX, 79706-4476	Project Manager:	Camille Reynolds	04/21/05 12:34

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 ED51906 - EPA 5030C (GC)

Matrix Spike Dup (ED51906-MSD1)	Source: 5	Prepared: (04/18/05 A	nalyzed: 04	4/19/05			
Benzene	2460	ug/kg	2500	ND	98.4	80-120	0.816	20
Toluene	2540		2500	ND	102	80-120	9.45	20
Ethylbenzene	2580		2500	44.3	101	80-120	13.5	20
Xylene (p/m)	5710		5000	75.1	113	80-120	13.1	20
Xylene (o)	2660	••	2500	25.4	105	80-120	5.88	20
Surrogate: a,a,a-Trifluorotoluene	115	"	100		115	80-120		
Surrogate: 4-Bromofluorobenzene	101	n	100		101	80-120		

Environmental Lab of Texas

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	ounty Road 1150 Project Number: EMS: 2005-00						oopline						
General	Chemistry Para	meters by Environm				is - Qua	lity Con	trol					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes			
Batch ED51901 - General Preparatio	n (Prep)												
Blank (ED51901-BLK1)	(ED51901-BLK1) Prepared: 04/15/05 Analyzed: 04/18/05												
% Moisture	ND	0.1	%										
Duplicate (ED51901-DUP1)	Sou	rce: 5D14013-	01	Prepared: (
% Moisture	9.0	0.1	%	7.9 13.0					20				
Batch ED52011 - Water Extraction													
Blank (ED52011-BLK1)				Prepared 8	Analyzed:	04/18/05							
Chloride	ND	0.500	mg/kg										
LCS (ED52011-BS1)				Prepared &	Analyzed:	04/18/05							
Chloride	10.7	<u> </u>	mg/L	10.0		107	80-120						
Calibration Check (ED52011-CCV1)				Prepared 8	Analyzed:	04/18/05							
Chloride	10.9		mg/L	10.0		109	80-120						
Duplicate (ED52011-DUP1)	Sou	rce: 5D14016-	05	Prepared 8	t Analyzed:	04/18/05							
Chloride	30.8	5.00	mg/kg		35.9			15.3	20				

Environmental Lab of Texas

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

Reported: 04/21/05 12:34

Notes and Definitions

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

Report Approved By:

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

Date:

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.

Raland K Junis

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

Environmental Lab of Texas

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

4/21/2005

Odessa, Texas 797(Fax: 915-563-1713																		-		1	•" I		.
		BUTTON	·····										1	^o roje	st Na	me: 🖌	LE	<u>7</u>	<u>\$7</u>	HT	70	NÖ	5 1		<i>۳۴</i>
Compa	ny Name_ <u>BA</u>	IN ENV S	ves									-		F	rojec	x#	Er	15:	2	.øq	ø5	-Ø	8" / SØØ	<u>7</u> č	<u>.</u>
Company /	Address: P. O.	BOX 301												Pro	iect i	.oc: /	LE	A	Ci	0U	N7	rY,	NI	M	
		NINGTON,	NH 88	260	-						****			·		~		P	A1	7			******	******	
c,g,o	(FAS)	441-2124				 	-1-	Q /							F	у <i>я</i>		.			,,		·	, 407 - 101 - 1	
	····· 3 · 2			Fax No	0	<u>Ø</u> 2	<u>y</u> s	-16	2~]	40	19														
Sampler Si	gnature: <u>Jon</u>	Detton	······································									-		-		و بر الم		*	an aite a				,	-	7
														E		тс				ze Fo	ж. ГТ		PA		1
						Г		Prese	rvativ		T	Ma	trix	- 8	1	TOT	AL:		$\left - \right $	X			3006		
504013			Date Sampled	Time Sampled	No. of Containers	\$	HNO,	Č!	NaOH H ₂ SO,		Arier (Speciry) Mater	iudge	Soft	Other (specify): TOU: 418 1 (soli5M html 10	Mg. Na. K)	Mions (CI, SO4, CO3, HCO3)	BAR / ESP / CEC Manin & An Bri Cal Cristin Un	2	Semivolatiles	etex 802 Basuso	CI	k O.R.M. fotal Gamma	DRIDE		PLISH TAT (Pre-Rchedule
and a fight sociority		eld code ANT <u>ERST</u> S/N				†-×		-	2 1 2				n X					Цž		Б Х	۲ <u>ه</u>	ž f e	14	-+	Ŧ
		ENT SOUTH SU		1215	++	tŕ	4			┝╌┼╴	╈	+	⇮	┤┤	\$ 	╞─┼	-+		┢╾┥	傦	\vdash	+	╋╍╋	-+	+
-53	RILERSE POS	TAT WEST S/W		1230	Ħ	\dagger		┝╍╊╌	+-	╂╌╂╸	\dagger	1	┢╋╋	╉	╈	┠╍╊	-+-					+	+++	-	t
		OINT BOTTOM		1245	Ħ	\ddagger			\uparrow	╂╌╀╸	T	1			\uparrow	† • †	-	1			\Box	+	11	1	T
-05	RELEASE T	DINT NORTHS	(ur	13.50	Π	П					Т			T	T				\square	П	T	T	TT	T	T
-00-	NORTH W	ALL		1315	\Box	Π								Π						\square		Τ		Τ	Γ
		V EAST S/W		1.3305																					L
	WEST EXEV			1345		Ш														Ш			X		L
-09	WEST EXeV	BTM &		1400	Щ	Ш													\square		j		$\downarrow \downarrow$		Ļ
-10	WEST EXEV	SOUTH S/W		1415		H									<u> </u>				\square		1				L
Special Instructions:					-								-				perat	ure U	pon l	Rece	eipt .	د در ۲۰۰۰ مربع	Ø	N	
Relinquished by		Date Time	Received by:		·····							Date		Tin		Labo	nato	ry Co	4mm	ents		ć	0.5	С°, .	
1 1 2	.) .		A								-									· · · · ·					

12600 West I-20 Ea Odessa, Texas 797		Phone: 432-563-1800 Fax: 432-563-1713								СН	ain of	CUST	ODY R	ECORD	AND A	NALYSIS I	REQUEST			
	hanager: <u>KEN</u>	, (/								Pro	oject N	ame: ,	I EA	257	A TZI	N 8ª.	Ĺ		
Company Name BASIN ENV SVCS												Proie	ame: <u>LEA STATZON 8* Loo</u> act#: <u>EMS': 2005-0009</u>							
		, BOX 3Ø.	•								F	roject	Loc: 4	EA	Ce	Dan 7 2	ry N			
		INGTON, N.		ற									- 20 #:	ŕ	AA	2				
	A 1	441-2124			(50	5)	396	-1	42	9			· _							
	inature:		to		(er	<u> </u>						•								
	-7)	ver que											TCL		Analyze	For:		_		
					г		reserv	ative		Ма	rix		TOT	L	- T - 1	X				
			2 ØØ 5									1005 1008 K)	8, HCO3)	Metals: As Ag Ba Cd Cr Pb Hg Se Motals: As Ag Ba Cd Cr Pb Hg Se		or 61EX 8260				
5014013			Date Sampled	Time Sampled	No. of Containers				Specify)		specify);	TPH: 418.1 (BOISM)	Anions (Cl, SO4, CO3, HCO3)	AS AG BAC		02000				
LAB # (lab use only)	F	ELD CODE	Date	Time (Na. of	HNO ₃	HCI NaOH	H ₂ SO ₄ None		Water Sludge	Soil Other (spi	TPH: 418 Cations	Anions (Metals: As Ag B	Servivolatile	ACI ACI				
-11	WEST EXE	V BNCH	13APR		+	X					X	x				X III				
-12	WEST EXCV	NORTH S/U	J <u>13 RPR</u>	1445	4	X		┠┈┠╌	┼╂	_	X -	x	╋╋		<u> </u> -)	K		Ь		
					Fł	-		┼╌┼╌	┼╌╋				┼╌┼		┽╂					
													\prod		\mathbb{H}	1				
<u> </u>								┝╍┝╸	┼╌╂			(H)	+	7+	┽╍╋	╺╉╼╂╾╂	╺-╂╍╂╼┩	\vdash		
					+			┟╌╻┠╼╸	t	\mathbb{Z}		r.k.	+		+-+-					
								H					\downarrow							
Special Instructions:				I		1							Sam	le Contr	ainers Ir	ntact?	<u>_</u>	N		
														erature ratory C	•		0.5°C			
Relinquished by:) etta;	Data Time		AC L					V).	Date		Time 1 හැක								
1 18arci V	pyron	Date Time		The second s			 .		.µ⊼*/	74/4) Date		Time	- 4	lozgias	is on	i ce wfs Centairei	seals or	7		

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

0.5

Not present

Not present

Not Applicable

C

Variance / Confective Action i	report	, 06
Client: Plains P/L		
Date/Time: 04 -14-05@1530		
Order #: 5D14013		
Initials: JMM		
Sample Receipt	Chackli	et
Temperature of container/cooler?	Test	No I
Shipping container/cooler in good condition?	Ves	No
Custody Seals intact on shipping container/cooler?	res	No
Custody Seals intact on sample bottles?	(Pes)	No
Chain of custody present?	10793	No I
Sample Instructions complete on Chain of Custody?	Tes	No
Chain of Custody signed when relinquished and received?	res	No
Chain of custody agrees with sample label(s)	Ces	No
Container labels legible and intact?	Cesi	No
Sample Matrix and properties same as on chain of custody?	(See	No
Samples in proper container/bottle?	1 CO	No I
Samples properly preserved?	(res)	No I
Sample bottles intact?	Fes	No 1
Preservations documented on Chain of Custody?	(143)	No
Containers documented on Chain of Custody?	Yes	No
Sufficient sample amount for indicated test?	Ves	No
All samples received within sufficient hold time?	(és)	No
VOC samples have zero headspace?	Yes	No
Other observations:	يومين الروم واليوم المراجع الم	
		<u></u>
Contact Person: Date/Time: Regarding:		
Corrective Action Taken:		

*		

___ Contacted by:

Appendix C Request Approval for Backfill of Excavation

Basin Environmental Service Technologies, LLC

P. O. Box 301 Lovington, New Mexico 88260 kdutton@basinenv.com Office: (505) 396-2378 Fax: (505) 396-1429



16 May 2005

Mr. Larry Johnson New Mexico Oil Conservation Division Hobbs District 1 1625 N. French Drive Hobbs, New Mexico 88240

VERSI 17.05

Re: Request Approval for Backfill of Excavation Plains Marketing, L. P. (C-141, dated 31 Mar 05) Lea Station 8" Loopline Unit H (SE ¼, NE ¼) Section 17, Township 22 South, Range 37 East Lea County, New Mexico

Dear Mr. Johnson:

Basin Environmental Services (Basin), on behalf of Plains Marketing, L. P. (Plains), is submitting this request for approval to backfill the Lea Station 8" Loopline remediation site at the above-referenced location. As indicated on the enclosed Soil Chemistry Table and Sampling Location Site Map, all soil samples are below New Mexico Oil Conservation Division (NMOCD) standards (<100 ppm) for the site. Plains and Millard Deck Estates have reached an agreement to purchase backfill from the Estate. The impacted soil will be transported to the Plains Marketing Lea Station Land Farm. A C-138 will be submitted once your approval is received.

Basin responded and clamped the pipeline release on 28 Mar 05, located on the Lea Station 8" Loopline. The impacted soils were excavated and stockpiled on a poly liner. As reported on the C-141, dated 31 Mar 05, approximately six (6) barrels of crude oil were released and one (1) barrel recovered. Excavation of the visually stained area on the caliche lease road was accomplished and soil samples were collected for laboratory analysis. Once the soil samples were collected, the caliche lease road was backfilled for safety concerns. The visually stained flow path was excavated and confirmation soil samples were collected and delivered to the laboratory for analysis. All soil samples reported total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl-benzene and xylenes (BTEX) concentrations below NMOCD standards and backfilling of the site will begin once your approval is received.

Upon completion of the backfilling activities a Site Remediation Report and Closure Request will be submitted to the Hobbs District 1, NMOCD office.

Should you have any questions or comments, please contact me at (505) 441-2124.

Sincerely,

Ken Dutton Basin Environmental Services

Attachments: Site Map, Sampling Locations Soil Chemistry Table NMOCD C-141 Appendix D NMOCD C-141

1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

State OI New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Form C-141 Revised October 10, 2003

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

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505 **Release Notification and Corrective Action OPERATOR** Final Report x Initial Report Name of Company Plains Marketing, LP **Contact Camille Reynolds** Address 5805 East Hwy. 80, Midland, TX 79706 Telephone No. 505-441-0965 Facility Type 8"Steel Pipeline Facility Name Lea Station 8" Loop Line Surface Owner Millard Deck Estate Mineral Owner Lease No. LOCATION OF RELEASE North/South Line Feet from the East/West Line Unit Letter Township Feet from the County Section Range 22S 37E Lea 17 H Longitude 103° 10' 43.6" Latitude 32° 23' 42.1" NATURE OF RELEASE Type of Release Crude Oil Volume of Release 6 barrels Volume Recovered 1 barrels Source of Release 8" Steel Pipeline Date and Hour of Occurrence Date and Hour of Discovery 3-28-05 @ 08:25 3-28-05 @ 08:00 123458700 If YES, To Whom? Was Immediate Notice Given? Yes 🗌 No 🗋 Not Required Larry Johnson By Whom? Camille Reynolds Date and Hour 3-28-05 @ 11:00 If YES, Volume Impacting the Watercourse. Was a Watercourse Reached? Yes 🛛 No 202 If a Watercourse was Impacted, Describe Fully.* Fine line is an 8 Describe Cause of Problem and Remedial Action Taken.* Internal corrosion of the 8" steel pipeline. Forty-two foot of pipe was repla inch steel transmission pipeline that produces approximately 8,000 to 10,000 barrels of crude oil per day. The pressure on the line is approximately 125 psi and the gravity of the sweet crude oil is 39.2. The sweet crude has an H₂S content of <10 ppm Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 319 ft². 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 ment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other or the environ federal, state, or local laws and/or regulation **OIL CONSERVATION DIVISION** c inolals imile. Signatu Approved by District Supervisor: Printed Name: Camille Reynolds

 Nitle: Remediation Coordinator
 Approval Date:
 Expiration Date:

 E-mail Address: cjreynold@@paalp.com
 Conditions of Approval:
 Attached []

 Date: 3-31-05
 Phone:505-441-0965
 Image: Address of Approval: