Basin Environmental Service Technologies, LLC

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

Effective Solutions

PRELIMINARY SITE INVESTIGATION REPORT
and
REMEDIATION/CLOSURE REQUEST

Closed

PLAINS MARKETING, L.P. (231735)
Langley Pump Station Site
Lea County, New Mexico
Plains EMS # 2005-00079
UNIT E (SW/NW), Section 28, Township 25S, Range 37E
Latitude, Longitude 32°, 06', 17.2" North, 103°, 10', 21.9" West

Prepared For:

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

Prepared By:
Basin Environmental Service Technologies, LLC
P. O. Box 301
Lovington, New Mexico 88260

27 April 2006

Ken Dutton
Basin Environmental Service Technologies, LLC

facility - pPAC0612426460
incident - nPAC0612426603
application - pPAC0612427319

TABLE OF CONTENTS

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the Langley Pump Station on 28 March 2005. The strainer on the Langley Pump Station pipeline pump was replaced and the impacted soil was excavated and stockpiled on a 6-mil poly liner adjacent to the excavation. The Langley Pump Station and Plains Pipeline right-of-way are located on land owned by Mr. John M. Owens.

This site is located in Unit E (SW/NW), Section 28, Township 25 South, Range 37 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site latitude is 32°, 06', 17.2" North and the site longitude is 103°, 10', 21.9" West. The site is characterized by a pump station and right-of-way for the pipeline in a pasture utilized for cattle grazing. The visible surface stained area includes the release point and flow path covering an area approximately 70 feet long by 35 feet wide at the release point and 115 feet long by 4 to 6 feet wide down an unimproved pasture road. An estimated 20 barrels of crude oil were released from the Plains Pipeline and 10 barrels were recovered.

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

Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1 was verbally notified of the release on 29 March 2005. A NMOCD C-141 was prepared and delivered to Mr. Larry Johnson on 06 April 2005.

SUMMARY OF FIELD ACTIVITIES

On 28 March 2005, Basin mobilized to the Langley Pump Station release to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. After repairing the pipeline release by replacing the strainer on the pipeline pump, excavation of the impacted soil was accomplished (see Figure 2, Excavation Site Map). The release point and visually stained area were manually and mechanically excavated to approximately 70 feet long by 35 feet wide at the release point and 115 feet long by 4 to 6 feet wide down an unimproved pasture road ranging from approximately 1 to 3 feet below ground surface (bgs). Approximately 600 cubic yards of excavated soil were placed on a 6-mil poly liner adjacent to the excavation for future remedial action.

On 12 April 2005, confirmation soil samples were collected from the floor and walls of the excavated area (see Figure 3, Excavation Site Map – Soil Sampling Locations). Soil samples were collected and field screened with a Photoionization Detector (PID), calibrated 12 April 2005. The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) (see Table 1, Soil

Chemistry). Laboratory results of the eleven (11) soil samples collected from the floor and walls of the excavation indicated that BTEX and TPH-GRO/DRO constituent concentrations were either below NMOCD regulatory standards or not detected above laboratory method detection limits and no further excavation activities were required.

In May 2005, the excavated impacted soils were divided into equal grid cells of approximately 200 cubic yards per cell. Blending of the impacted soils was initiated and confirmation soil samples were collected from each grid on 23 May 2005. Soil samples were collected and field screened with a PID. The three (3) soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Laboratory results indicated that constituent concentrations of BTEX and TPH-GRO/DRO on Grid 1and 2 cell soil samples were below NMOCD regulatory standards and Grid 3 exceeded NMOCD regulatory standards for concentrations of TPH-GRO/DRO. Further blending of Grid 3 was accomplished and a confirmation soil sample was collected 14 June 2005. Laboratory results on the Grid 3 cell soil sample indicated that constituent concentrations of BTEX and TPH-GRO/DRO were below NMOCD regulatory standards or not detected above laboratory method detection limits.

NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed no groundwater depth information for that section. However, Section 29 in the same Township and Range contains groundwater information revealing an average depth to groundwater of 219 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 0 –9, which sets the remediation levels at:

Benzene:	10 ppm
BTEX:	50 ppm
TPH:	5000 ppm

DISTRIBUTION OF HYDROCARBONS IN THE USATURATED ZONE

The release point and flow path areas were manually and mechanically excavated to a depth ranging from approximately 1 to 3 feet bgs and no visual evidence of crude oil impact was evident on the floor or sidewalls of the excavation. PID readings indicated slight detectable concentrations of Volatile Organic Compounds (VOC) remained on the floor and walls of the excavation. Approximately 600 cubic yards of impacted soil was excavated and stockpiled adjacent to the excavation on a 6-ml poly liner.

Eleven (11) confirmation soil samples were collected from the excavation on 12 April 2005; field screened with a PID and were analyzed for concentrations of BTEX and TPH-GRO/DRO. Laboratory data sheets and chain-of-custody forms are attached as Appendix B. Analytical results indicated that constituent concentrations of detectable BTEX were below NMOCD regulatory standards on three (3) confirmation soil samples and not detected above laboratory method detection limits on the remaining eight (8) confirmation soil samples. Laboratory results on the eleven (11) confirmation soil samples indicated constituent concentrations of TPH-GRO/DRO were detected, but were below NMOCD regulatory standards.

On 23 May 2005, three (3) confirmation soil samples were collected from the grid cells and analyzed for detectable concentrations of BTEX and TPH-GRO/DRO. Analytical results indicated that constituent concentrations of BTEX and TPH-GRO/DRO were below NMOCD regulatory standards for the three (3) soil samples with the exception of Grid Cell 3, which exceed exceeded NMOCD regulatory standards for concentrations of TPH-GRO/DRO at 5870 mg/kg. Additional blending of Grid Cell 3 was accomplished and the laboratory results from the soil sample collected 14 June 2005 indicated that concentrations of BTEX were below laboratory method detections limits and detectable TPH-GRO/DRO concentrations were below NMOCD regulatory standards.

CLOSURE REQUEST

Approximately 600 cubic yards of impacted soil was excavated and stockpiled on-site resulting from the emergency response and excavation of the release point and flow path. Based on the analytical results, which indicated the native soils from the walls and floor of the excavation were below NMOCD regulatory standards, and the stockpiled material soil sample results for grid cells were below the 5000 mg/kg TPH concentration closure requirements, backfilling of the release point and flow path was initiated and completed in July 2005.

Based on the remedial activities conducted and laboratory results for the Langley Pump Station release site, Basin recommends Plains submit this report to the NMOCD and request closure of the Langley Pump Station release site in accordance with the *NMOCD Guidelines for Remediation of Leaks, Spills and Release, 1993.*

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Preliminary Investigation Report and Work 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 by 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: Daniel Bryant
Plains All American
3705 East Highway 158
Midland, Texas 79706
dmbryant@paalp.com

Copy 3: Mr. Larry Johnson
New Mexico Oil Conservation Division
Francis Drive
Hobbs, New Mexico 88240
LWJohnson@state.nm.us

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

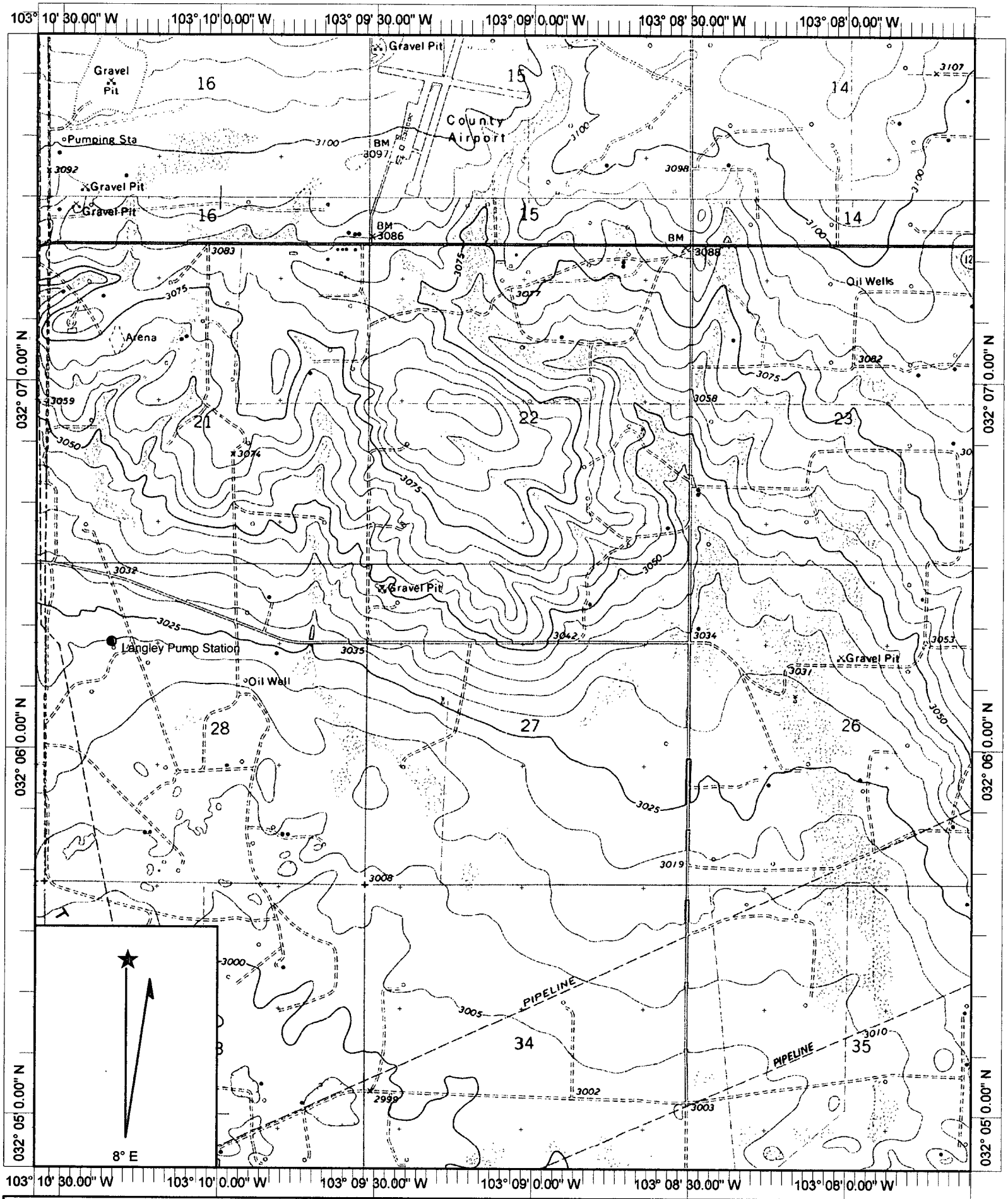
Copy 3

TABLE 1

SOIL CHEMISTRY

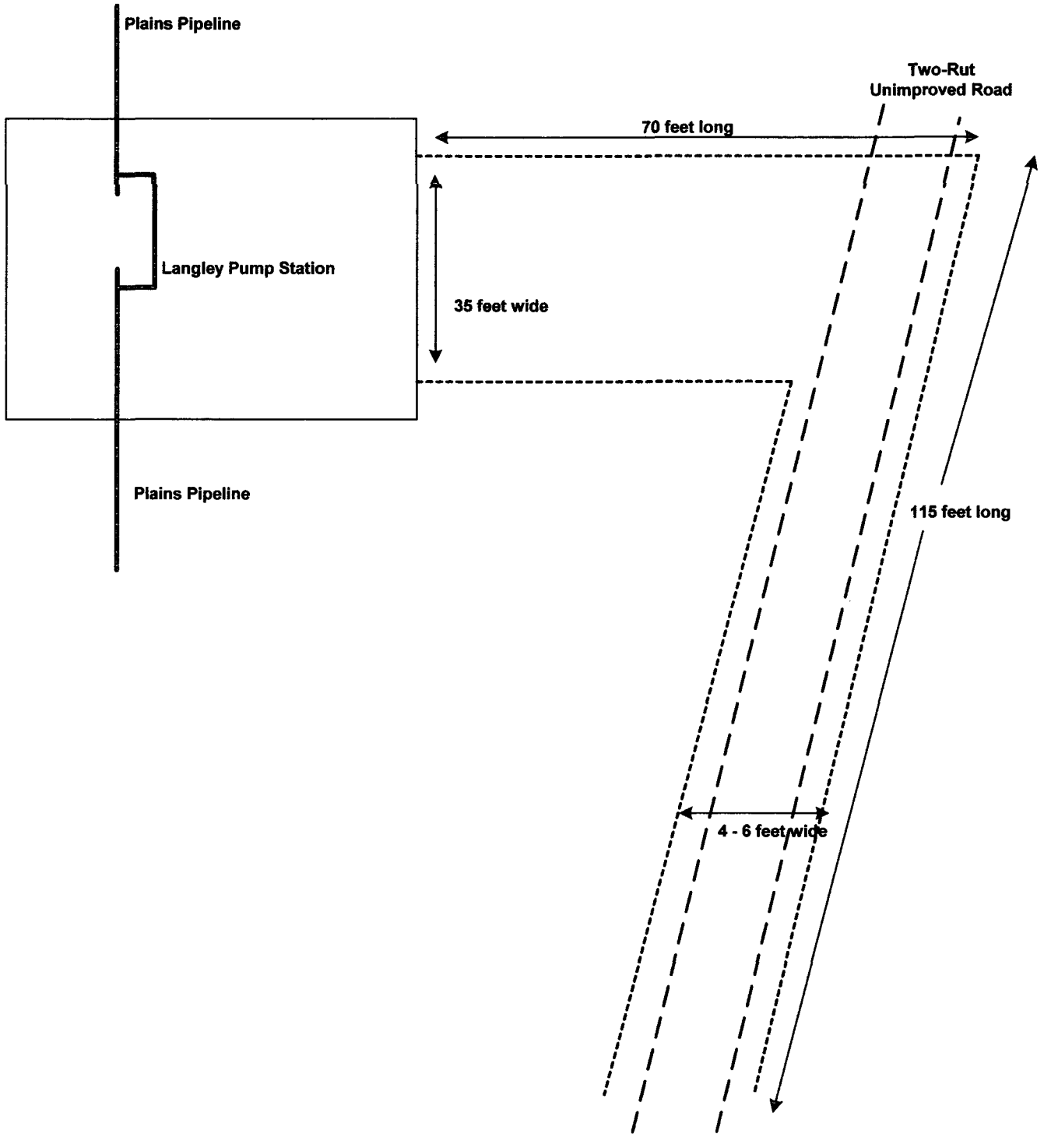
PLAINS MARKETING, L.P.
LANGLEY PUMP STATION
LEA COUNTY, NEW MEXICO
EMS: 2005-00079

SAMPLE LOCATION	SAMPLE DEPTH	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL	300.0
			BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P-XYLENES (mg/kg)	O-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	CHLORIDE (mg/kg)
Stockpile		04/12/05	0.062	2.11	4.33	13.2	5.72	3300	13000	16300	
Flowpath Road North	1' bgs	04/12/05	<0.025	<0.025	0.026	0.083	0.029	<10	32.5	32.5	
Flowpath North	1' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	75.7	1760	1840	
Flowpath North N/SW	1' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	190	190	
Flowpath Road South	1' bgs	04/12/05	<0.025	0.035	0.042	0.106	0.033	<10	44	44	
Flowpath Road Middle	1' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	12	12	
Flowpath North E/SW	1.5' bgs	04/12/05	<0.025	<0.025	0.04	0.113	0.044	265	2590	2860	
East Excv Bottom	3' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	166	166	79.8
East Excv E/SW	1.5' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	158	158	
East Excv N/SW	1.5' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	49	49	
East Excv W/SW	1.5' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10	61.4	61.4	
East Excv S/Sw	1.5' bgs	04/12/05	<0.025	<0.025	<0.025	<0.025	<0.025	18.8	711	730	
Grid 1	1' bgs	05/23/05	<0.025	0.028	0.043	0.193	0.039	502	3830	4330	
Grid 2	1' bgs	05/23/05	<0.025	<0.025	<0.025	0.050	0.044	433	4120	4550	
Grid 3	1' bgs	05/23/05	<0.025	<0.025	<0.025	0.038	<0.025	541	5330	5870	
Grid 3	1' bgs	06/14/05	<0.025	<0.025	<0.025	<0.025	<0.025	180	2660	2840	
NMOCD CRITERIA			**10**	**TOTAL BTEX 50**						**5000**	



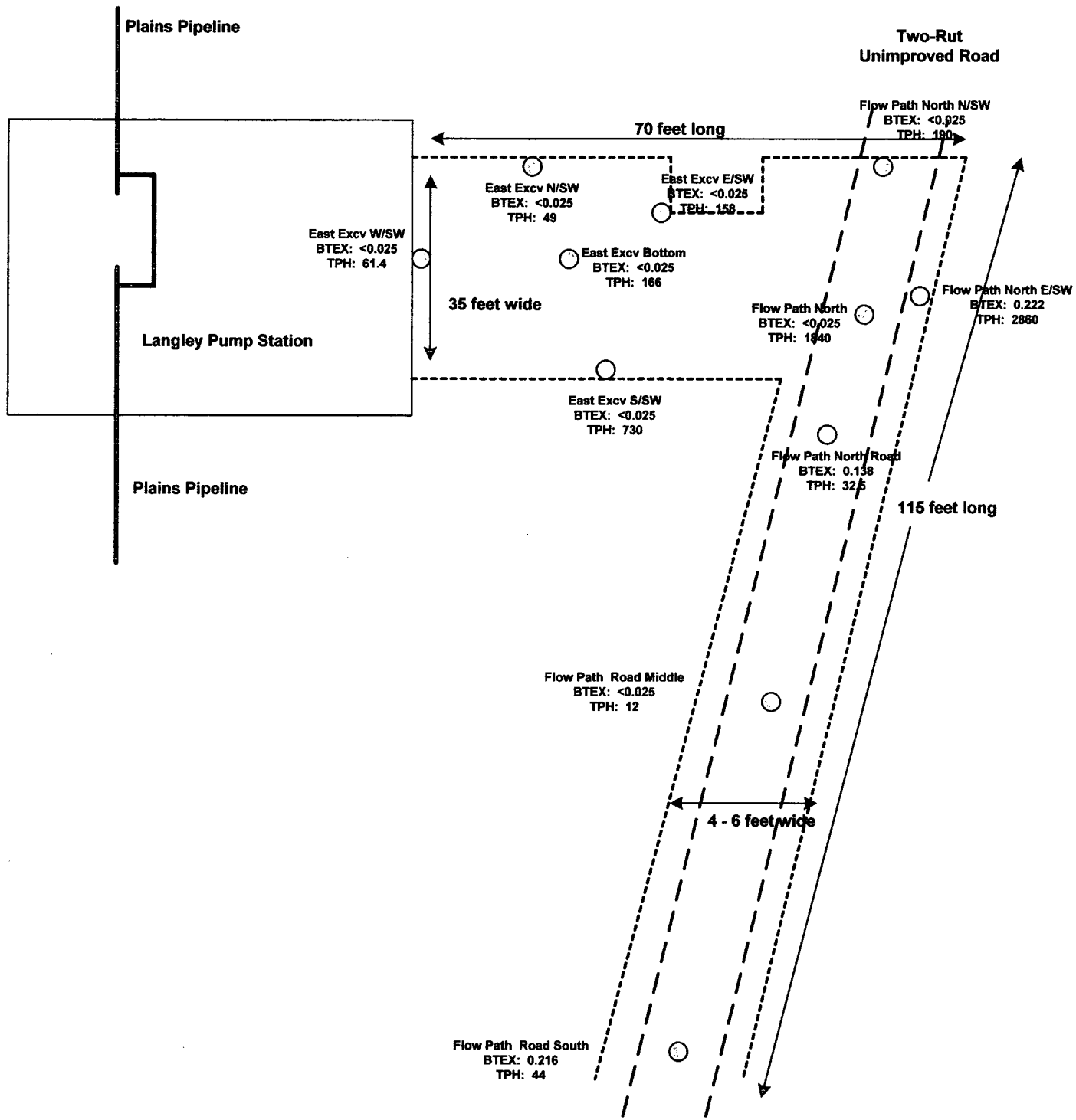
Name: JAL
Date: 4/29/2006
Scale: 1 inch equals 2000 feet

Location: 032° 06' 23.80" N 103° 09' 05.37" W
Caption: Figure 1, Site Location Map
Plains Marketing, L. P.
Langley Pump Station



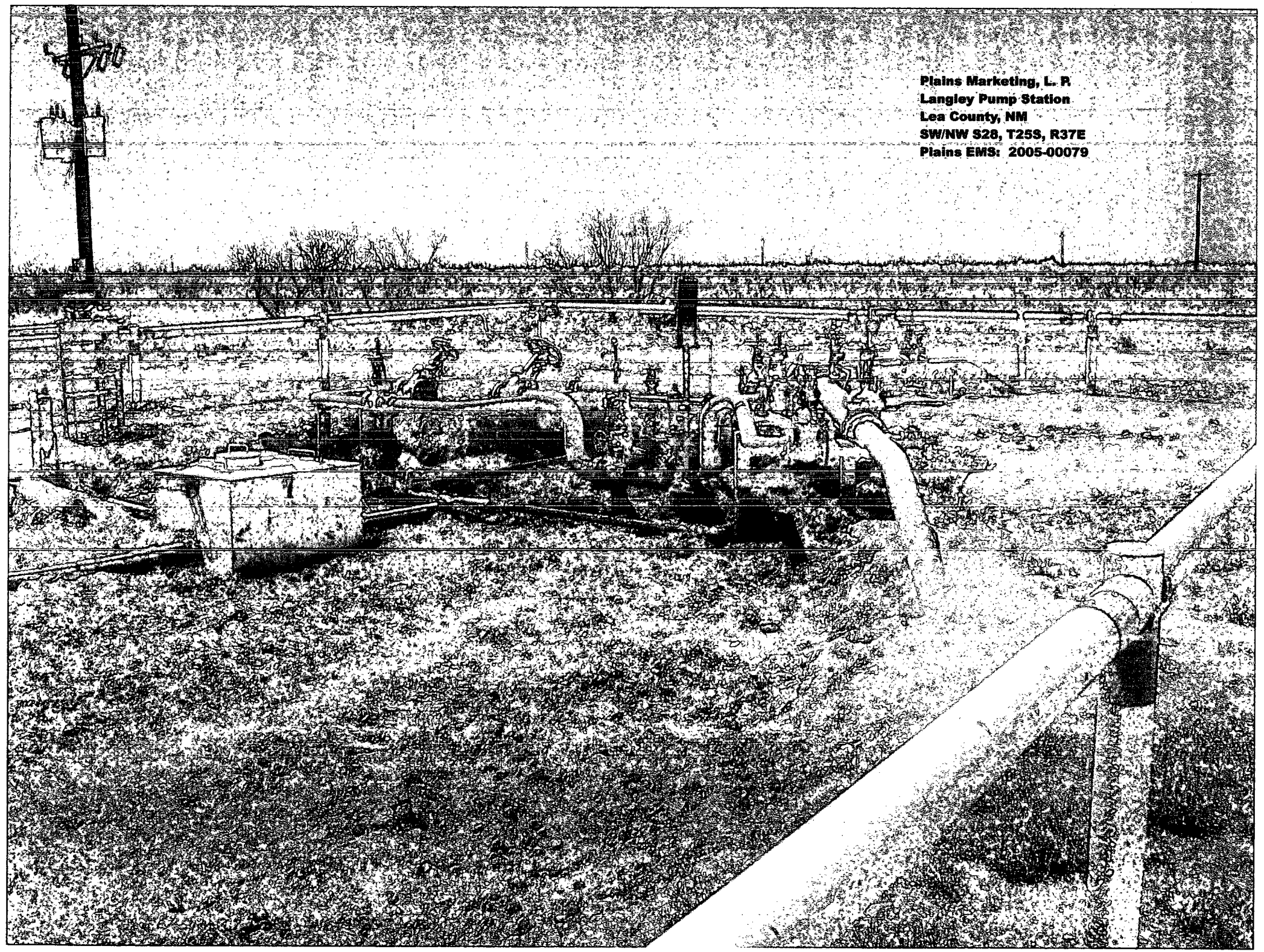
Plains Marketing, L. P.
Langley Pump Station Site
Lea County, New Mexico
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079

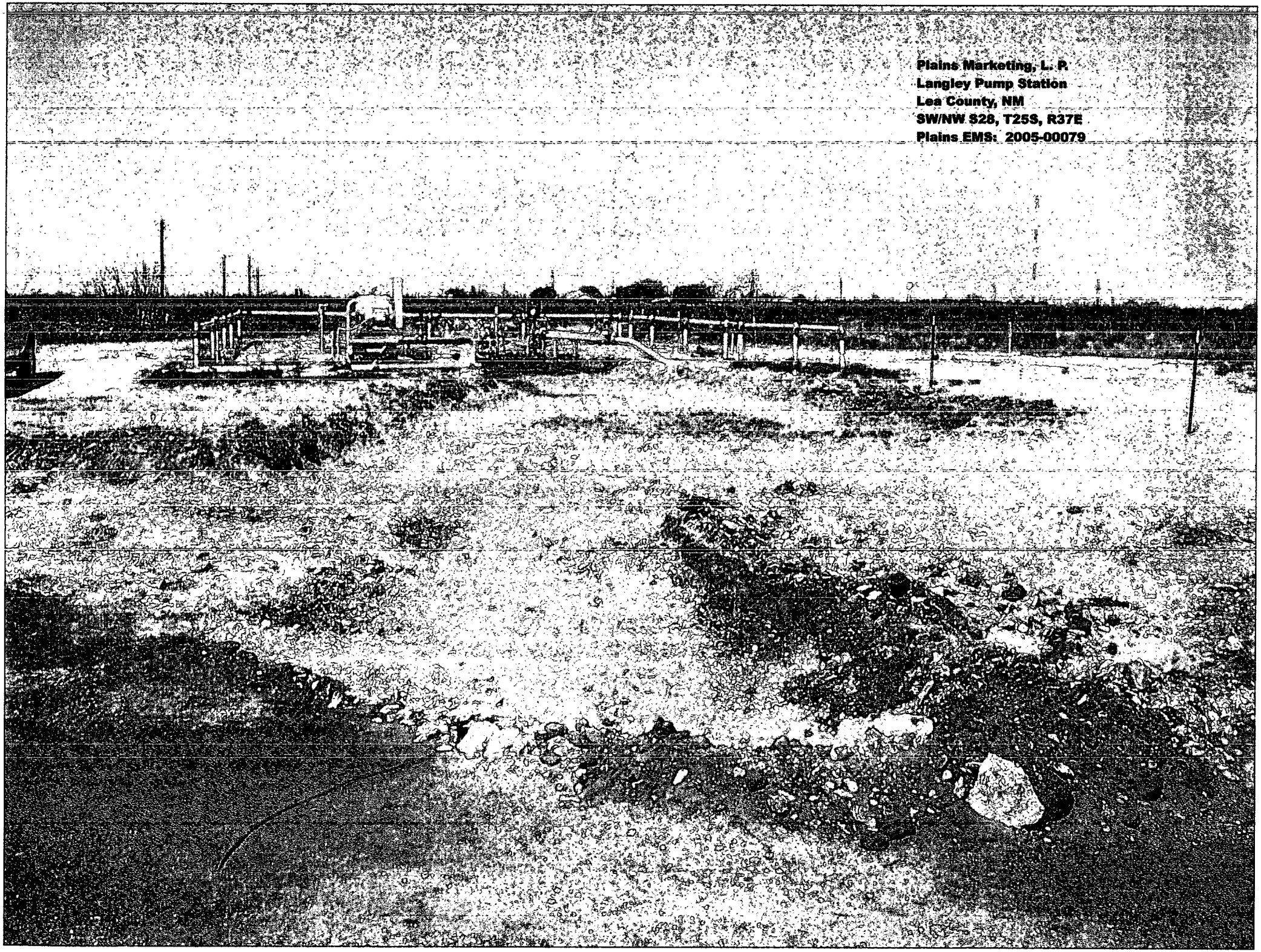
DESCRIPTION	Figure 2 Excavation Site Map
DRAWN BY	Basin Environmental Services kad



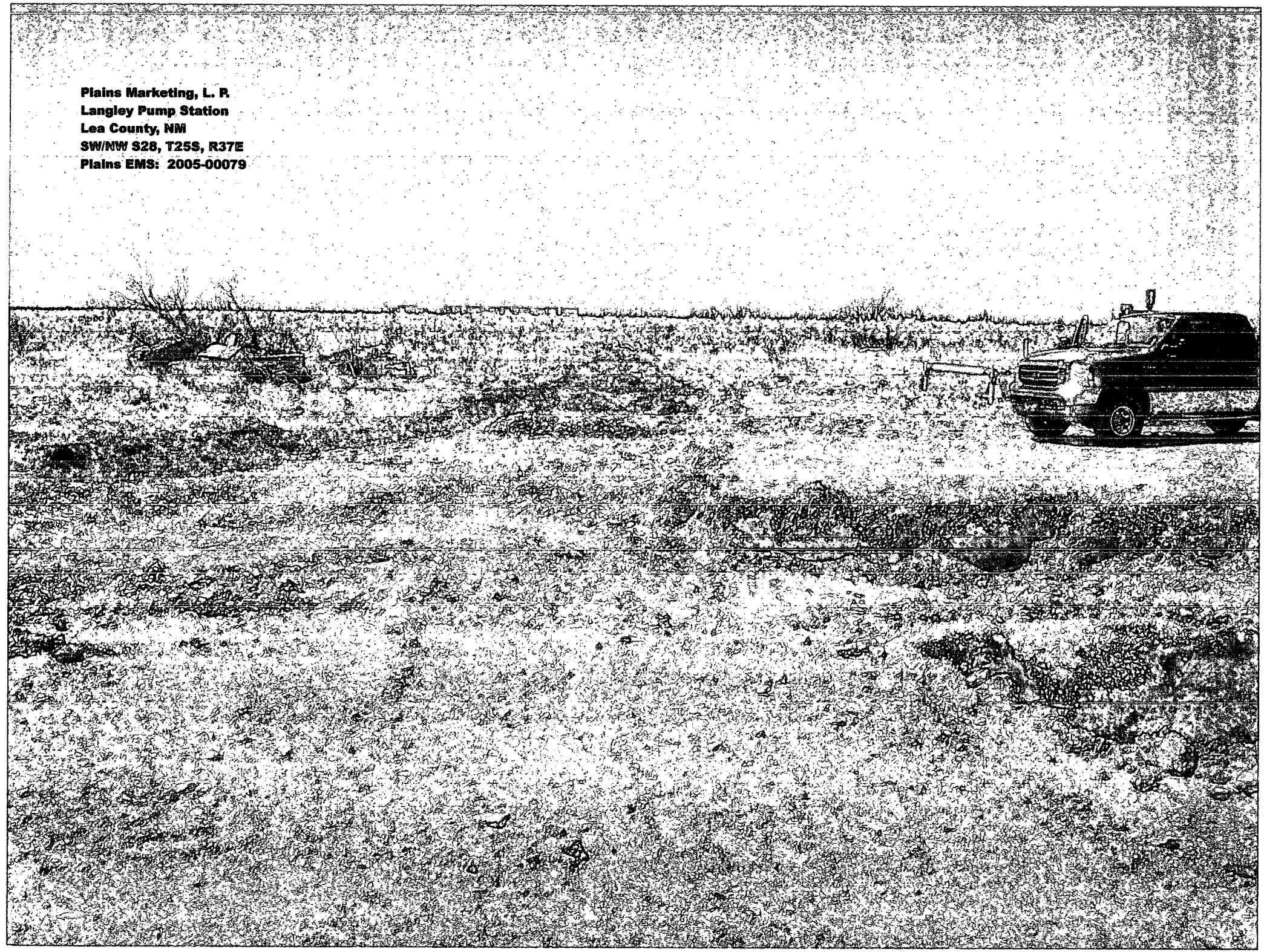
Plains Marketing, L. P.
Langley Pump Station Site
Lea County, New Mexico
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079

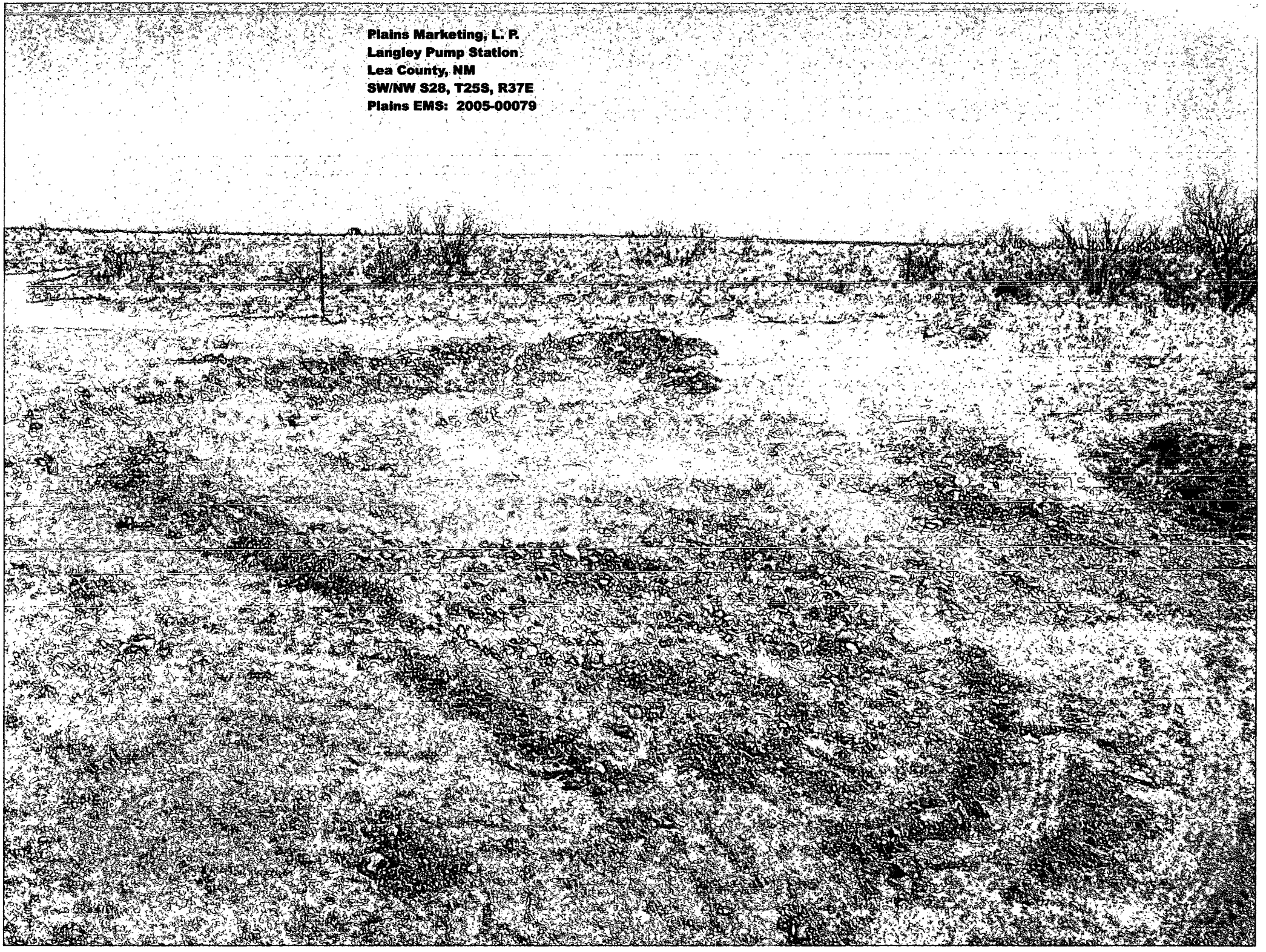
DESCRIPTION
Figure 3 Excavation Site Map- Soil Sampling Locations
DRAWN BY
Basin Environmental Services kad


Plains Marketing, L. P.
Langley Pump Station
Lea County, NM
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079


Plains Marketing, L. P.
Langley Pump Station
Lea County, NM
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079

Plains Marketing, L. P.
Langley Pump Station
Lea County, NM
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079




Plains Marketing, L. P.
Langley Pump Station
Lea County, NM
SW/NW S28, T25S, R37E
Plains EMS: 2005-00079

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections: 28

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

POD / SURFACE DATA REPORT 04/27/2006

DB File Nbr	(acre ft per annum) Use	Diversion	Owner	POD Number	(quarters are Source	(quarters are

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections: 25,26,27,28,29,30

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 04/27/2006

								(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
CP	25S	37E	29				5	187	250	219

Record Count: 5

ENVIRONMENTAL LAB OF
12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Daniel Bryant

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Langley Station

Project Number: 2005-00079

Location: Lea Co., NM

Lab Order Number: 5F16005

Report Date: 06/17/05

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/17/05 18:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Grid 3	5F16005-01	Soil	06/14/05 12:15	06/16/05 14:00

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

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/17/05 18:12

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Grid 3 (5F16005-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF51611	06/16/05	06/16/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**180**	10.0	mg/kg dry	1	EF51606	06/16/05	06/17/05	EPA 8015M	
Diesel Range Organics >C12-C35	**2660**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2840**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*75.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*104 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/17/05 18:12

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Grid 3 (5F16005-01) Soil									
% Moisture	**3.0**	0.1	%	1	EF51605	06/16/05	06/17/05	% calculation	

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

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF51606 - Solvent Extraction (GC)										
Blank (EF51606-BLK1)				Prepared & Analyzed: 06/16/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*51.9*		*mg/kg*	*50.0*		*104*	*70-130*			
Surrogate: 1-Chlorooctadecane	*65.0*		"	*50.0*		*130*	*70-130*			
LCS (EF51606-BS1)				Prepared & Analyzed: 06/16/05						
Gasoline Range Organics C6-C12	457	10.0	mg/kg wet	500		91.4	75-125			
Diesel Range Organics >C12-C35	525	10.0	"	500		105	75-125			
Total Hydrocarbon C6-C35	981	10.0	"	1000		98.1	75-125			
Surrogate: 1-Chlorooctane	*59.9*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.9*		"	*50.0*		*130*	*70-130*			
Calibration Check (EF51606-CCV1)				Prepared: 06/16/05 Analyzed: 06/17/05						
Gasoline Range Organics C6-C12	454		mg/kg	500		90.8	80-120			
Diesel Range Organics >C12-C35	504		"	500		101	80-120			
Total Hydrocarbon C6-C35	958		"	1000		95.8	80-120			
Surrogate: 1-Chlorooctane	*65.0*		*"*	*50.0*		*130*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.4*		*"*	*50.0*		*127*	*70-130*			
Matrix Spike (EF51606-MS1)	**Source: 5F16003-02**			Prepared: 06/16/05 Analyzed: 06/17/05						
Gasoline Range Organics C6-C12	595	10.0	mg/kg dry	574	ND	104	75-125			
Diesel Range Organics >C12-C35	647	10.0	"	574	ND	113	75-125			
Total Hydrocarbon C6-C35	1240	10.0	"	1150	ND	108	75-125			
Surrogate: 1-Chlorooctane	*49.3*		*mg/kg*	*50.0*		*98.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.9*		*"*	*50.0*		*91.8*	*70-130*			
Matrix Spike Dup (EF51606-MSD1)	**Source: 5F16003-02**			Prepared: 06/16/05 Analyzed: 06/17/05						
Gasoline Range Organics C6-C12	578	10.0	mg/kg dry	574	ND	101	75-125	2.90	20	
Diesel Range Organics >C12-C35	632	10.0	"	574	ND	110	75-125	2.35	20	
Total Hydrocarbon C6-C35	1210	10.0	"	1150	ND	105	75-125	2.45	20	
Surrogate: 1-Chlorooctane	*49.4*		*mg/kg*	*50.0*		*98.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.9*		*"*	*50.0*		*91.8*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF51611 - EPA 5030C (GC)										
Blank (EF51611-BLK1)				Prepared & Analyzed: 06/16/05						
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	*80.0*		*ug/kg*	*100*		*80.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*101*		"	*100*		*101*	*80-120*			
LCS (EF51611-BS1)				Prepared & Analyzed: 06/16/05						
Benzene	97.3		ug/kg	100		97.3	80-120			
Toluene	95.8		"	100		95.8	80-120			
Ethylbenzene	95.1		"	100		95.1	80-120			
Xylene (p/m)	216		"	200		108	80-120			
Xylene (o)	102		"	100		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	*96.3*		*"*	*100*		*96.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		*"*	*100*		*114*	*80-120*			
Calibration Check (EF51611-CCV1)				Prepared: 06/16/05 Analyzed: 06/17/05						
Benzene	101		ug/kg	100		101	80-120			
Toluene	97.3		"	100		97.3	80-120			
Ethylbenzene	89.4		"	100		89.4	80-120			
Xylene (p/m)	197		"	200		98.5	80-120			
Xylene (o)	90.0		"	100		90.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*102*		*"*	*100*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*80-120*			
Matrix Spike (EF51611-MS1)	**Source: 5F16006-10**			Prepared: 06/16/05 Analyzed: 06/17/05						
Benzene	98.7		ug/kg	100	ND	98.7	80-120			
Toluene	94.7		"	100	ND	94.7	80-120			
Ethylbenzene	88.2		"	100	ND	88.2	80-120			
Xylene (p/m)	195		"	200	ND	97.5	80-120			
Xylene (o)	93.7		"	100	ND	93.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	*91.1*		*"*	*100*		*91.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF51611 - EPA 5030C (GC)										
Matrix Spike Dup (EF51611-MSD1)	**Source: 5F16006-10**			Prepared: 06/16/05 Analyzed: 06/17/05						
Benzene	94.6		ug/kg	100	ND	94.6	80-120	4.24	20	
Toluene	91.8		"	100	ND	91.8	80-120	3.11	20	
Ethylbenzene	85.8		"	100	ND	85.8	80-120	2.76	20	
Xylene (p/m)	187		"	200	ND	93.5	80-120	4.19	20	
Xylene (o)	89.9		"	100	ND	89.9	80-120	4.14	20	
Surrogate: a,a,a-Trifluorotoluene	*92.6*		*"*	*100*		*92.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*119*		*"*	*100*		*119*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF51605 - General Preparation (Prep)										
Blank (EF51605-BLK1)				Prepared & Analyzed: 06/16/05						
% Moisture	ND	0.1	%							
Duplicate (EF51605-DUP1)		**Source: 5F16001-01**		Prepared & Analyzed: 06/16/05						
% Moisture	9.8	0.1	%		10.1			3.02	20	

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 6/17/2005

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.

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Ken Dutton
Company Name: Basin Environmental
Company Address: P.O. Box 301
City/State/Zip: Lovington NM 88260
Telephone No: (505) 441-2124 Fax No: (505) 396-1429
Sampler Signature: Tracy Blackwood

Project Name: Langlie (Langley) Station
Project #: EMS# 2005-00079
Project Loc: Lea Co. NM
PO #: PAA / D. Bryant

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma			RUSH TAT (Pre-Schedule)	Standard TAT
5 FIC 005		Oct 14/05																												
-01	Grid 3		1215	1	X									X		X							X						X	

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt: 1.0 °C
Laboratory Comments: 402 pm

Relinquished by:	Date	Time	Received by:	Date	Time
Tracy Blackwood	10/15/05	8:15		10/15/05	8:15
	Date	Time	Received by ELOT:	Date	Time
	10/15/05	14:00		10/16/05	14:00

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

Client: Basin / Plains

Date/Time: 6/16/05 14:00

Order #: 5F16005

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	1.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	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?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Daniel Bryant

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Langley Station

Project Number: 2005-00079

Location: Lea County, NM

Lab Order Number: 5E25004

Report Date: 06/01/05

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/01/05 11:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GRID 1	5E25004-01	Soil	05/23/05 11:40	05/25/05 11:25
GRID 2	5E25004-02	Soil	05/23/05 11:55	05/25/05 11:25
GRID 3	5E25004-03	Soil	05/23/05 12:15	05/25/05 11:25

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GRID 1 (5E25004-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52705	05/27/05	05/27/05	EPA 8021B	
Toluene	**0.0280**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0437**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.193**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0397**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**502**	10.0	mg/kg dry	1	EE52514	05/25/05	05/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	**3830**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**4330**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*88.8 %*	*70-130*		"	"	"	"	
GRID 2 (5E25004-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52705	05/27/05	05/27/05	EPA 8021B	
Toluene	**ND**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0243]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0501**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0448**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**433**	10.0	mg/kg dry	1	EE52514	05/25/05	05/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	**4120**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**4550**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*91.4 %*	*70-130*		"	"	"	"	
GRID 3 (5E25004-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE52705	05/27/05	05/27/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0221]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0380**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0191]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*94.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.1 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**541**	10.0	mg/kg dry	1	EE52514	05/25/05	05/28/05	EPA 8015M	
Diesel Range Organics >C12-C35	**5330**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**5870**	10.0	"	"	"	"	"	"	

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/01/05 11:01

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GRID 3 (5E25004-03) Soil									
Surrogate: 1-Chlorooctane		*106 %*		*70-130*	*EE52514*	*05/25/05*	*05/28/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*111 %*		*70-130*	"	"	"	"	

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

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/01/05 11:01

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GRID 1 (5E25004-01) Soil									
% Moisture	**4.1**	0.1	%	1	EE52601	05/25/05	05/26/05	% calculation	
GRID 2 (5E25004-02) Soil									
% Moisture	**2.3**	0.1	%	1	EE52601	05/25/05	05/26/05	% calculation	
GRID 3 (5E25004-03) Soil									
% Moisture	**2.2**	0.1	%	1	EE52601	05/25/05	05/26/05	% calculation	

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

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE52514 - Solvent Extraction (GC)										
Blank (EE52514-BLK1)				Prepared: 05/25/05 Analyzed: 05/28/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*38.8*		*mg/kg*	*50.0*		*77.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.9*		*"*	*50.0*		*83.8*	*70-130*			
LCS (EE52514-BS1)				Prepared: 05/25/05 Analyzed: 05/28/05						
Gasoline Range Organics C6-C12	423	10.0	mg/kg wet	500		84.6	75-125			
Diesel Range Organics >C12-C35	596	10.0	"	500		119	75-125			
Total Hydrocarbon C6-C35	1020	10.0	"	1000		102	75-125			
Surrogate: 1-Chlorooctane	*41.2*		*mg/kg*	*50.0*		*82.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.1*		*"*	*50.0*		*80.2*	*70-130*			
Calibration Check (EE52514-CCV1)				Prepared: 05/25/05 Analyzed: 05/27/05						
Gasoline Range Organics C6-C12	490		mg/kg	500		98.0	80-120			
Diesel Range Organics >C12-C35	575		"	500		115	80-120			
Total Hydrocarbon C6-C35	1070		"	1000		107	80-120			
Surrogate: 1-Chlorooctane	*46.2*		*"*	*50.0*		*92.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.6*		*"*	*50.0*		*97.2*	*70-130*			
Matrix Spike (EE52514-MS1)	**Source: 5E27003-02**			Prepared: 05/27/05 Analyzed: 05/28/05						
Gasoline Range Organics C6-C12	443	10.0	mg/kg dry	529	ND	83.7	75-125			
Diesel Range Organics >C12-C35	532	10.0	"	529	18.4	97.1	75-125			
Total Hydrocarbon C6-C35	976	10.0	"	1060	18.4	90.3	75-125			
Surrogate: 1-Chlorooctane	*47.1*		*mg/kg*	*50.0*		*94.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.5*		*"*	*50.0*		*85.0*	*70-130*			
Matrix Spike Dup (EE52514-MSD1)	**Source: 5E27003-02**			Prepared: 05/27/05 Analyzed: 05/28/05						
Gasoline Range Organics C6-C12	450	10.0	mg/kg dry	529	ND	85.1	75-125	1.57	20	
Diesel Range Organics >C12-C35	545	10.0	"	529	18.4	99.5	75-125	2.41	20	
Total Hydrocarbon C6-C35	995	10.0	"	1060	18.4	92.1	75-125	1.93	20	
Surrogate: 1-Chlorooctane	*48.4*		*mg/kg*	*50.0*		*96.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*44.6*		*"*	*50.0*		*89.2*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE52705 - EPA 5030C (GC)										
Blank (EE52705-BLK1)				Prepared & Analyzed: 05/27/05						
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	*91.1*		*ug/kg*	*100*		*91.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.3*		*"*	*100*		*87.3*	*80-120*			
LCS (EE52705-BS1)				Prepared & Analyzed: 05/27/05						
Benzene	99.8		ug/kg	100		99.8	80-120			
Toluene	92.5		"	100		92.5	80-120			
Ethylbenzene	92.9		"	100		92.9	80-120			
Xylene (p/m)	205		"	200		102	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*111*		*"*	*100*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*120*		*"*	*100*		*120*	*80-120*			
Calibration Check (EE52705-CCV1)				Prepared & Analyzed: 05/27/05						
Benzene	97.9		ug/kg	100		97.9	80-120			
Toluene	88.0		"	100		88.0	80-120			
Ethylbenzene	83.3		"	100		83.3	80-120			
Xylene (p/m)	180		"	200		90.0	80-120			
Xylene (o)	84.1		"	100		84.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	*106*		*"*	*100*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*87.3*		*"*	*100*		*87.3*	*80-120*			
Matrix Spike (EE52705-MS1)	**Source: 5E27003-04**			Prepared & Analyzed: 05/27/05						
Benzene	97.1		ug/kg	100	ND	97.1	80-120			
Toluene	90.9		"	100	ND	90.9	80-120			
Ethylbenzene	89.6		"	100	ND	89.6	80-120			
Xylene (p/m)	196		"	200	ND	98.0	80-120			
Xylene (o)	91.3		"	100	ND	91.3	80-120			
Surrogate: a,a,a-Trifluorotoluene	*104*		*"*	*100*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*101*		*"*	*100*		*101*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE52705 - EPA 5030C (GC)										
Matrix Spike Dup (EE52705-MSD1)	**Source: 5E27003-04**		Prepared & Analyzed: 05/27/05							
Benzene	100		ug/kg	100	ND	100	80-120	2.94	20	
Toluene	93.1		"	100	ND	93.1	80-120	2.39	20	
Ethylbenzene	92.8		"	100	ND	92.8	80-120	3.51	20	
Xylene (p/m)	205		"	200	ND	102	80-120	4.00	20	
Xylene (o)	96.4		"	100	ND	96.4	80-120	5.43	20	
Surrogate: a,a,a-Trifluorotoluene	*104*		"	*100*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*104*		"	*100*		*104*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE52601 - General Preparation (Prep)										
Blank (EE52601-BLK1)				Prepared: 05/25/05 Analyzed: 05/26/05						
% Moisture	ND	0.1	%							
Duplicate (EE52601-DUP1)	**Source: 5E24008-01**			Prepared: 05/25/05 Analyzed: 05/26/05						
% Moisture	27.8	0.1	%		27.4			1.45	20	

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 6/1/2005

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.

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: BASIN ENV SVCS
Company Address: P. O. BOX 301
City/State/Zip: LOVINGTON, NM 88260
Telephone No: (505) 441-2124
Fax No: (505) 369-1429
Sampler Signature: Ken Dutton

Project Name: LANGLEY PUMP STATION
Project #: EMS# 2005-00079
Project Loc: LEA COUNTY, NM
PO #: PAA / D. BRYANT

LAB # (lab use only) 35250	FIELD CODE	Date Sampled 2005	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 / 8015M / 1005 / 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma			RUSH TAT (Pre-Schedule)	Standard TAT
-01	GRID 1	23 MAY	1140	1	X									X		X							X							X
-02	GRID 2	23 MAY	1155	1	X									X		X							X							X
-03	GRID 3	23 MAY	1215	1	X									X		X							X							X

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments:
402 par
3.0°C
seal / labels

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	25 May 05	1125			
Relinquished by:	Date	Time	Received by ELQT:	Date	Time
			Cindi Kelly	5/25/05	11:25

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

Client: Basin Env. Svcs.

Date/Time: 5/25/05 11:25

Order #: 5E25004

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	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?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - Date/Time: Contacted by:

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Langley Station

Project Number: 2005-00079

Location: Lea County, NM

Lab Order Number: 5D13007

Report Date: 04/20/05

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/20/05 17:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile	5D13007-01	Soil	04/12/05 10:15	04/13/05 14:04
Flowpath Road North	5D13007-02	Soil	04/12/05 10:30	04/13/05 14:04
Flowpath North	5D13007-03	Soil	04/12/05 10:45	04/13/05 14:04
Flowpath North N/SW	5D13007-04	Soil	04/12/05 10:55	04/13/05 14:04
Flowpath Road South	5D13007-05	Soil	04/12/05 11:15	04/13/05 14:04
Flowpath Road Middle	5D13007-06	Soil	04/12/05 11:30	04/13/05 14:04
Flowpath North E/SW	5D13007-07	Soil	04/12/05 11:45	04/13/05 14:04
East Excv Bottom	5D13007-08	Soil	04/12/05 12:00	04/13/05 14:04
East Excv E/SW	5D13007-09	Soil	04/12/05 12:15	04/13/05 14:04
East Excv N/SW	5D13007-10	Soil	04/12/05 12:30	04/13/05 14:04
East Excv W/SW	5D13007-11	Soil	04/12/05 12:45	04/13/05 14:04
East Excv S/SW	5D13007-12	Soil	04/12/05 13:00	04/13/05 14:04

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile (5D13007-01) Soil									
Benzene	**0.0627**	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	**2.11**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**4.33**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**13.2**	0.0250	"	"	"	"	"	"	
Xylene (o)	**5.72**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*169 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*85.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**3300**	50.0	mg/kg dry	5	ED51302	04/13/05	04/13/05	EPA 8015M	
Diesel Range Organics >C12-C35	**13000**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**16300**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*26.4 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*18.3 %*	*70-130*		"	"	"	"	*S-06*
Flowpath Road North (5D13007-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0268**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0833**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0298**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**J [9.31]**	10.0	mg/kg dry	1	ED51302	04/13/05	04/13/05	EPA 8015M	J
Diesel Range Organics >C12-C35	**32.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**32.5**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.2 %*	*70-130*		"	"	"	"	
Flowpath North (5D13007-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.9 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**75.7**	10.0	mg/kg dry	1	ED51302	04/13/05	04/13/05	EPA 8015M	
Diesel Range Organics >C12-C35	**1760**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**1840**	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Flowpath North (5D13007-03) Soil									
Surrogate: 1-Chlorooctane		*81.8 %*	*70-130*		*ED51302*	*04/13/05*	*04/13/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*88.8 %*	*70-130*		"	"	"	"	
Flowpath North N/SW (5D13007-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**J [6.24]**	10.0	mg/kg dry	1	ED51302	04/13/05	04/13/05	EPA 8015M	J
Diesel Range Organics >C12-C35	**190**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**190**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*77.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*85.2 %*	*70-130*		"	"	"	"	
Flowpath Road South (5D13007-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**44.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**44.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*84.2 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Flowpath Road Middle (5D13007-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.8 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**12.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**12.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*75.8 %*	*70-130*		"	"	"	"	
Flowpath North E/SW (5D13007-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	**J [0.0168]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0405**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.113**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0441**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*119 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**265**	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**2590**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2860**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*92.2 %*	*70-130*		"	"	"	"	
East Excv Bottom (5D13007-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**166**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**166**	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Excv Bottom (5D13007-08) Soil									
Surrogate: 1-Chlorooctane		*85.0 %*	*70-130*		*ED51312*	*04/13/05*	*04/14/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*88.4 %*	*70-130*		"	"	"	"	
East Excv E/SW (5D13007-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.5 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**158**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**158**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*70.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*72.8 %*	*70-130*		"	"	"	"	
East Excv N/SW (5D13007-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/15/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.2 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**49.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**49.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*74.2 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Excv W/SW (5D13007-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.0 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**61.4**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**61.4**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*72.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*72.4 %*	*70-130*		"	"	"	"	
East Excv S/SW (5D13007-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED51501	04/14/05	04/14/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.7 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**18.8**	10.0	mg/kg dry	1	ED51312	04/13/05	04/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**711**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**730**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*80.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*94.8 %*	*70-130*		"	"	"	"	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile (5D13007-01) Soil									
% Moisture	**3.1**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath Road North (5D13007-02) Soil									
% Moisture	**1.9**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath North (5D13007-03) Soil									
% Moisture	**0.6**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath North N/SW (5D13007-04) Soil									
% Moisture	**1.0**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath Road South (5D13007-05) Soil									
% Moisture	**4.4**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath Road Middle (5D13007-06) Soil									
% Moisture	**4.8**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
Flowpath North E/SW (5D13007-07) Soil									
% Moisture	**0.8**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
East Excv Bottom (5D13007-08) Soil									
Chloride	**79.8**	20.0	mg/kg	40	ED52011	04/18/05	04/18/05	EPA 300.0	
% Moisture	**3.8**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
East Excv E/SW (5D13007-09) Soil									
% Moisture	**2.1**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
East Excv N/SW (5D13007-10) Soil									
% Moisture	**2.2**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	

Plains All American EH & S	Project: Langley Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00079	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	04/20/05 17:44

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Excv W/SW (5D13007-11) Soil									
% Moisture	**2.0**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	
East Excv S/SW (5D13007-12) Soil									
% Moisture	**2.1**	0.1	%	1	ED51404	04/13/05	04/14/05	% calculation	

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

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51302 - Solvent Extraction (GC)										
Blank (ED51302-BLK1)				Prepared: 04/13/05 Analyzed: 04/14/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*45.3*		*mg/kg*	*50.0*		*90.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.5*		*"*	*50.0*		*95.0*	*70-130*			
LCS (ED51302-BS1)				Prepared & Analyzed: 04/13/05						
Gasoline Range Organics C6-C12	432	10.0	mg/kg wet	500		86.4	75-125			
Diesel Range Organics >C12-C35	469	10.0	"	500		93.8	75-125			
Total Hydrocarbon C6-C35	901	10.0	"	1000		90.1	75-125			
Surrogate: 1-Chlorooctane	*47.2*		*mg/kg*	*50.0*		*94.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.9*		*"*	*50.0*		*87.8*	*70-130*			
Calibration Check (ED51302-CCV1)				Prepared & Analyzed: 04/13/05						
Gasoline Range Organics C6-C12	465		mg/kg	500		93.0	80-120			
Diesel Range Organics >C12-C35	472		"	500		94.4	80-120			
Total Hydrocarbon C6-C35	937		"	1000		93.7	80-120			
Surrogate: 1-Chlorooctane	*54.6*		*"*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.2*		*"*	*50.0*		*92.4*	*70-130*			
Matrix Spike (ED51302-MS1)	**Source: 5D12005-01**			Prepared & Analyzed: 04/13/05						
Gasoline Range Organics C6-C12	538	10.0	mg/kg dry	586	ND	91.8	75-125			
Diesel Range Organics >C12-C35	615	10.0	"	586	ND	105	75-125			
Total Hydrocarbon C6-C35	1150	10.0	"	1170	ND	98.3	75-125			
Surrogate: 1-Chlorooctane	*48.7*		*mg/kg*	*50.0*		*97.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.5*		*"*	*50.0*		*85.0*	*70-130*			
Matrix Spike Dup (ED51302-MSD1)	**Source: 5D12005-01**			Prepared & Analyzed: 04/13/05						
Gasoline Range Organics C6-C12	533	10.0	mg/kg dry	586	ND	91.0	75-125	0.934	20	
Diesel Range Organics >C12-C35	626	10.0	"	586	ND	107	75-125	1.77	20	
Total Hydrocarbon C6-C35	1160	10.0	"	1170	ND	99.1	75-125	0.866	20	
Surrogate: 1-Chlorooctane	*47.8*		*mg/kg*	*50.0*		*95.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.5*		*"*	*50.0*		*83.0*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51312 - Solvent Extraction (GC)										
Blank (ED51312-BLK1)				Prepared: 04/13/05 Analyzed: 04/14/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*45.3*		*mg/kg*	*50.0*		*90.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.5*		*"*	*50.0*		*95.0*	*70-130*			
LCS (ED51312-BS1)				Prepared & Analyzed: 04/13/05						
Gasoline Range Organics C6-C12	492	10.0	mg/kg wet	500		98.4	75-125			
Diesel Range Organics >C12-C35	458	10.0	"	500		91.6	75-125			
Total Hydrocarbon C6-C35	950	10.0	"	1000		95.0	75-125			
Surrogate: 1-Chlorooctane	*44.2*		*mg/kg*	*50.0*		*88.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.5*		*"*	*50.0*		*87.0*	*70-130*			
Calibration Check (ED51312-CCV1)				Prepared: 04/13/05 Analyzed: 04/14/05						
Gasoline Range Organics C6-C12	448		mg/kg	500		89.6	80-120			
Diesel Range Organics >C12-C35	508		"	500		102	80-120			
Total Hydrocarbon C6-C35	956		"	1000		95.6	80-120			
Surrogate: 1-Chlorooctane	*56.5*		*"*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.7*		*"*	*50.0*		*103*	*70-130*			
Matrix Spike (ED51312-MS1)	**Source: 5D13007-05**			Prepared: 04/13/05 Analyzed: 04/14/05						
Gasoline Range Organics C6-C12	485	10.0	mg/kg dry	523	ND	92.7	75-125			
Diesel Range Organics >C12-C35	540	10.0	"	523	44.0	94.8	75-125			
Total Hydrocarbon C6-C35	1030	10.0	"	1050	44.0	93.9	75-125			
Surrogate: 1-Chlorooctane	*49.8*		*mg/kg*	*50.0*		*99.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.2*		*"*	*50.0*		*90.4*	*70-130*			
Matrix Spike Dup (ED51312-MSD1)	**Source: 5D13007-05**			Prepared: 04/13/05 Analyzed: 04/14/05						
Gasoline Range Organics C6-C12	486	10.0	mg/kg dry	523	ND	92.9	75-125	0.206	20	
Diesel Range Organics >C12-C35	544	10.0	"	523	44.0	95.6	75-125	0.738	20	
Total Hydrocarbon C6-C35	1030	10.0	"	1050	44.0	93.9	75-125	0.00	20	
Surrogate: 1-Chlorooctane	*51.5*		*mg/kg*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.7*		*"*	*50.0*		*93.4*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51501 - EPA 5030C (GC)										
Blank (ED51501-BLK1)				Prepared & Analyzed: 04/14/05						
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	*118*		*ug/kg*	*100*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.8*		"	*100*		*92.8*	*80-120*			
LCS (ED51501-BS1)				Prepared & Analyzed: 04/14/05						
Benzene	104		ug/kg	100		104	80-120			
Toluene	110		"	100		110	80-120			
Ethylbenzene	113		"	100		113	80-120			
Xylene (p/m)	237		"	200		118	80-120			
Xylene (o)	118		"	100		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		*"*	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*105*		*"*	*100*		*105*	*80-120*			
Calibration Check (ED51501-CCV1)				Prepared & Analyzed: 04/14/05						
Benzene	113		ug/kg	100		113	80-120			
Toluene	116		"	100		116	80-120			
Ethylbenzene	107		"	100		107	80-120			
Xylene (p/m)	236		"	200		118	80-120			
Xylene (o)	115		"	100		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*114*		*"*	*100*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*88.3*		*"*	*100*		*88.3*	*80-120*			
Matrix Spike (ED51501-MS1)	**Source: 5D13007-02**			Prepared & Analyzed: 04/14/05						
Benzene	2450		ug/kg	2500	ND	98.0	80-120			
Toluene	2600		"	2500	ND	104	80-120			
Ethylbenzene	2760		"	2500	26.3	109	80-120			
Xylene (p/m)	5990		"	5000	81.7	118	80-120			
Xylene (o)	2990		"	2500	29.2	118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*111*		*"*	*100*		*111*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*105*		*"*	*100*		*105*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51501 - EPA 5030C (GC)										
Matrix Spike Dup (ED51501-MSD1)	**Source: 5D13007-02**			Prepared & Analyzed: 04/14/05						
Benzene	2570		ug/kg	2500	ND	103	80-120	4.98	20	
Toluene	2780		"	2500	ND	111	80-120	6.51	20	
Ethylbenzene	2920		"	2500	26.3	116	80-120	6.22	20	
Xylene (p/m)	6070		"	5000	81.7	120	80-120	1.68	20	
Xylene (o)	3000		"	2500	29.2	119	80-120	0.844	20	
Surrogate: a,a,a-Trifluorotoluene	*117*		"	*100*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*112*		"	*100*		*112*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED51404 - General Preparation (Prep)										
Blank (ED51404-BLK1)				Prepared: 04/13/05 Analyzed: 04/14/05						
% Moisture	ND	0.1	%							
Duplicate (ED51404-DUP1)	**Source: 5D12004-01**			Prepared: 04/13/05 Analyzed: 04/14/05						
% Moisture	6.8	0.1	%		8.2			18.7	20	
Batch ED52011 - Water Extraction										
Blank (ED52011-BLK1)				Prepared & Analyzed: 04/18/05						
Chloride	ND	0.500	mg/kg							
LCS (ED52011-BS1)				Prepared & Analyzed: 04/18/05						
Chloride	10.7		mg/L	10.0		107	80-120			
Calibration Check (ED52011-CCV1)				Prepared & Analyzed: 04/18/05						
Chloride	10.9		mg/L	10.0		109	80-120			
Duplicate (ED52011-DUP1)	**Source: 5D14016-05**			Prepared & Analyzed: 04/18/05						
Chloride	30.8	5.00	mg/kg		35.9			15.3	20	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 4/20/2005

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

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: BASIN ENV SVCS
Company Address: P.O. BOX 301
City/State/Zip: LOVINGTON, NM 88260
Telephone No: (505) 441-2124 Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: LANGLEY STATION
Project #: EMS: 2005-00679
Project Loc: LEA COUNTY, NM
PO #: PAA

5D13007

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1	8015M	1005	1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT
-01	STOCKPILE	12 APR 2005	1015	1	X									X		X										X					X
-02	FLOWPATH ROAD NORTH		1030																												
-03	FLOWPATH NORTH		1045																												
-04	FLOWPATH NORTH N/SW		1055																												
-05	FLOWPATH ROAD SOUTH		1115																												
-06	FLOWPATH ROAD MIDDLE		1130																												
-07	FLOWPATH NORTH E/SW		1145																												
-08	EAST EXCV BOTTOM		1200																		X										
-09	EAST EXCV E/SW		1215																												
-10	EAST EXCV N/SW		1230																												

Special Instructions:
* Add Cl⁻ to # 08 04-14-05 as per attached e-mail

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 2.5 °C
Laboratory Comments: 4oz glass on ice w/seals on container + cooler

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	13 APR 05	0845	Jamie Johnson	4/13/05	0845
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
James Johnson	4/13/05	204	Joann McMurray	4-13-05	1404

2062

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: BASIN ENV SVCS
Company Address: P. O. BOX 301
City/State/Zip: LOVINGTON, NM 88260
Telephone No: (505) 441-2124 Fax No: (505) 396-1429
Sampler Signature: Ken Dutton

Project Name: LANGLEY STATION
Project #: EMS: 2005-00079
Project Loc: LEA COUNTY, NM
PO #: PAA

LAB # (lab use only) 5D13007	FIELD CODE	Date Sampled 2005	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TPH: 418.1 8015M 1005	TOTAL: TPH: 418.1 8015M 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT
-11	EAST EXCV W/SW	12APR	1245	1	X									X		X								X					X
-12	EAST EXCV S/SW	12APR	1300	1	X									X		X								X					X

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 2.5°C
Laboratory Comments: 4oz glass on ice w/seals on containers + cooler

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	13APR	0845	James Johnson	4/13/05	0845
James Johnson	4/13/05	204	Received by ELOT: Jaime Mercuney	4-13-05	1404

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

Client: Plains P/L

Date/Time: 04-13-05 @ 1404

Order #: 5D13007

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	2.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	(Yes)	No	Not present
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	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?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

Jeanne McMurrey

From: "Ken Dutton" <kdutton@basinenv.com>
To: "Jeanne" <jeanne@elabtexas.com>
Sent: Friday, April 15, 2005 4:18 PM
Attach: ATT00016.eml
Subject: Fw: Re: Langley Station

Jeanne:

The Plains EMS Number is 2005-00079.

thxs

Ken
-------Original Message-------
> From: "Ken Dutton" <kdutton@basinenv.com>
> Subject: Re: Langley Station
> Sent: 15 Apr 2005 14:15:52
>
> Jeanne:
>
> Concerning the Langley Station soil sampling COC:
>
> Please add a chloride analysis (EPA 300.1) on the East Excv Bottom soil sample, collected 12 Apr 05, 1200 time sampled. This will result in three (3) analysis, BTEX, TPH & Chloride on that one sample.
>
> Thxs
>
> Ken Dutton
> Basin Env Svcs
> (505) 441-2124
>
>
> -------Original Message-------
> > From: "Jeanne McMurrey" <jeanne@elabtexas.com>
> > Subject: Re: Langley Station
> > Sent: 14 Apr 2005 05:54:36
> > >
> > > Hi Ken,

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Daniel Bryant
Address	3705 E Hwy 158 – Midland, Tx 79706	Telephone No.	(432) 558-5865
Facility Name	Langlie Station	Facility Type	Pipeline

Surface Owner	Mineral Owner	Lease No.
John M Owens		

LOCATION OF RELEASE

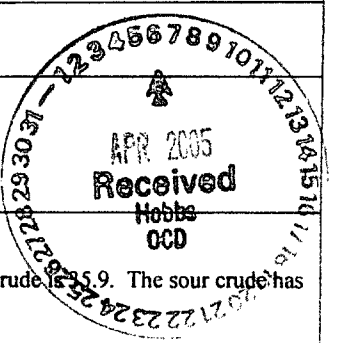
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	28	25S	37E					Lea

Latitude 32° 06' 17.2" **Longitude** 103° 10' 21.9"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 20 BBLS	Volume Recovered 10 BBLS
Source of Release Strainer	Date and Hour of Occurrence 03/28/05 3:00 PM	Date and Hour of Discovery 03/28/05 4:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Message left on phone for Larry Johnson	
By Whom? Daniel Bryant	Date and Hour 03/29/05 09:46 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*



Describe Cause of Problem and Remedial Action Taken.*
Internal Corrosion of Strainer – Strainer on pipeline pump replaced.
Station has a daily through-put of approximately 130 barrels. The incoming pressure is 80 lbs and the gravity of the sour crude is 35.9. The sour crude has an H_2S content of <10 ppm.

Describe Area Affected and Cleanup Action Taken.*
Area of spill is approximately 115' X 70'. Contaminated soil has been picked up and put on plastic.

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

Signature: Daniel Bryant	OIL CONSERVATION DIVISION
Printed Name: Daniel M Bryant	Approved by District Supervisor:
Title: Environmental R/C Specialist	Approval Date: / Expiration Date:
E-mail Address: dmbryant@paalp.com	Conditions of Approval: / Attached ☐
Date: 4/5/05 Phone: (432) 558-5865	

Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ~~XX Final Report~~

Name of Company Plains Marketing, L. P.	Contact Daniel Bryant
Address 3705 E. Hwy 158, Midland, TX 79706	Telephone No. (432) 557-5865
Facility Name Langley Pump Station	Facility Type Pipeline

Surface Owner John M. Owens	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	28	25S	37E					

Latitude 32°, 06', 17.2" North **Longitude** 103°, 10', 21.9"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 20 barrels	Volume Recovered 10 barrels
Source of Release Strainer	Date and Hour of Occurrence 28 March 2005 @ 1500	Date and Hour of Discovery 28 March 2005 @ 1600
Was Immediate Notice Given? XX Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson (message left on phone)	
By Whom? Daniel Bryant	Date and Hour 29 March 2005 @ 0946	
Was a Watercourse Reached? ☐ Yes XX☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

MAY 2006
Received
Hobbs
OCD

Describe Cause of Problem and Remedial Action Taken.* Internal corrosion of the strainer on pipeline pump resulted in a release of crude oil. A new strainer was installed to mitigate the release. Station has a daily through-put of approximately 130 barrels. The incoming pressure is 80 lbs and the gravity of crude is 35.9. The sour crude has an H2S of <10ppm.

Describe Area Affected and Cleanup Action Taken.* The crude oil release site was excavated; the impacted soil placed on a poly-liner adjacent to the excavation, confirmation soil samples were collected from the floor & walls of the excavation. Once the excavation confirmation soil samples were below NMOCD regulatory standards; the stockpiled soils were blended, confirmation soil samples collected, and the site was backfilled with the blended material and contoured to the original rangeland topography.

SEE ATTACHED BASIN ENVIRONMENTAL SERVICE TECHNOLOGIES REMEDIATION/CLOSURE REQUEST, DATED 27 APRIL 2006, WITH ATTACHMENTS FOR DETAILS OF REMEDIAL ACTIVITIES CONDUCTED.

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

Signature: Daniel Bryant	OIL CONSERVATION DIVISION
Printed Name: Daniel M. Bryant	Approved by District Supervisor: Paul Sheely
Title: Remediation Coordinator	Approval Date: 5-3-06 Expiration Date: ENVIRONMENTAL ENGINEER
E-mail Address: dmbryant@paalp.com	Conditions of Approval: Attached ☐
Date: 27 April 2006 Phone: (432) 557-5865	

* Attach Additional Sheets If Necessary