OCD

Larson & Associates, Inc.
Environmental Consultants

July 15, 2006

VIA EMAIL: dmbryant@paalp.com

Mr. Daniel Bryant
Environmental Specialist
Plains All American Pipeline, L.P.
3705 East Hwy 158
P.O. Box 3119
Midland, Texas 79702

OCD 1RP-888

Re: Final Remediation Report, Plains All American Pipeline, L.P., Anadarko Langlie Mattix Penrose Unit ("LMPU") Pipeline Pump Leak, Unit Letter P (SE/4, SE/4), Section 29, Township 22 South, Range 37 East, Lea County, New Mexico

Dear Mr. Bryant:

This letter presents the remedial actions of a pipeline pump leak ("Site") at the Anadarko Langlie Mattix Penrose Unit ("LMPU") in unit letter P ("SE/4, SE/4"), Section 29, Township 22 South and Range 37 East, Lea County, New Mexico. The leak occurred on January 6, 2004, and involved approximately 200 barrels ("bbl") of crude oil. The latitude and longitude for Site is North 32° 21' 23.5" and West 103° 10' 37.2", respectively. The Site location and topography is depicted on Figure 1.

Chronology

On January 6, 2004, Plains notified the New Mexico Conservation Division ("OCD") and submitted form C-141 on January 7, 2004. An investigation was conducted between March 21, 2005 and July 25, 2005, that included collecting soil samples from direct-push and machine-drilled borings, laboratory analysis of the samples and preparation of a report titled, "Investigation Summary and Work Plan for Remediation activities, Plains Pipeline, L.P., Anadarko Langley Mattix Penrose Unit Spill, Unit Letter P (SE/4, SE/4), Section 29, Township 22 South, Range 37 East, Lea County, New Mexico, October 10, 2005".

On November 15, 2005, Plains personnel discussed the investigation results and remediation work plan with Mr. Larry Johnson of the OCD, District I office located in Hobbs, New Mexico, at which time the OCD approved the work plan. Appendix A presents Form C-141.

Remedial Actions

Remedial actions were performed at the Site in May and June 2006, and involved excavating and blending approximately 1,500 cubic yards of contaminated soil to achieve

the OCD recommended remediation action levels ("RRAL") for benzene, BTEX (sum of benzene, toluene, ethyl benzene and xylene) and total petroleum hydrocarbons (TPH). The RRAL were calculated using criteria published by the OCD ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993") and include the following:

Ranking Criteria	Result	Ranking Score
Depth-to-Groundwater	50 – 100 feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Horizontal Feet	0
	Total Score:	**10**

The following RRAL are assigned to the Site based on the total ranking score (10):

Benzene: **10 mg/Kg**
BTEX: **50 mg/Kg**
TPH: **1,000 mg/Kg**

Basin Environmental Service, Inc., based in Lovington, New Mexico, excavated soil from the Site from approximately 2 to 9 feet below ground surface ("bgs"). The main excavation measured approximately 60 x 85 feet and a smaller area, measuring approximately 30 x 40 feet, was excavated northwest of the main excavation. Additional contamination was discovered near the east side of the Site and OCD was notified. The OCD personnel concurred that the contamination was the result of leaks from a PVC flow line that was used by a previous lease operator, and OCD required no further excavation. Figure 2 presents a Site drawing.

On May 30, 2006 and June 1, 2006, LA personnel collected confirmation samples from the sides and bottom of the excavation. The bottom samples were collected at four (4) locations from about 5 to 10 feet bgs. The side samples were collected at four (4) locations from ground surface to about 9 feet bgs. The samples were placed in 4-ounce glass containers, labeled, chilled in an ice chest, delivered under chain of custody control to Environmental Lab of Texas, Inc. ("ELTI"), which analyzed the samples for total petroleum hydrocarbons ("TPH") using method SW-846 8015 for gasoline range organics ("GRO") and diesel range organics ("DRO"), and chloride by method SW-846-300. Duplicate samples were collected and analyzed for headspace vapors using a photoionization detector ("PID") calibrated to 100 parts per million ("ppm") isobutylene. No PID readings exceeded 100 ppm, therefore, the laboratory analyzed no samples for BTEX. Table 1 presents a summary of the field and laboratory analysis of the confirmation samples. Appendix B presents the laboratory reports.

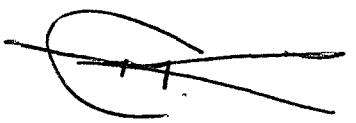
Referring to Table 1, the TPH was below 1,000 mg/Kg in all samples except SS-6, which was collected from the east side of the excavation where contamination was discovered from the PVC flow line. Chloride ranged from 17.1 mg/Kg to 70.8 mg/Kg.

The contaminated soil was blended in 2 piles (east and west) until TPH was near or below the RRAL (1,000 mg/Kg). The final TPH concentration in the blended soil was 922.1 mg/Kg (East) and 1003.1 mg/Kg (West). Benzene and BTEX were below the RRAL and chloride ranged from 16.1 mg/Kg to 36 mg/Kg. The blended soil was returned to the excavation and the Site was graded to control run on and run off. Table 2 presents a summary of laboratory analysis of the blended soil. Appendix C presents photographs.

LA recommends that Plains submit this report to the OCD as documentation that the spill was successfully remediated and request closure for the Site. Please contact me at (432) 687-0901 or email mark@laenvironmental.com if you have questions.

Sincerely,

Larson and Associates, Inc.



Mark J. Larson, P.G., C.P.G., C.G.W.P.
Sr. Project Manager/President

Enclosures

cc: Jeff Dann

Table 1: Summary of Laboratory Analysis of Remediation Confirmation Soil Samples
Plains All American Pipeline, L.P., Langlie Mattix Penrose Unit ("LMPSU") Pipeline Pump
UL-P, Section 29, Township 22 South, Range 37 East
Lea County, New Mexico

Soil Sample	Sample Depth (Feet BGS)	Sample Location	Sample Date	PID (ppm)	GRO C6-C12 (mg/kg)	DRO >C12-C28 (mg/kg)	DRO >C28-C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)
RRAL								**1000**	
SS-1	6	North Bottom	5/30/2006	2.9	<10	<10	<10	<30	17.9
SS-2	5	South Bottom	5/30/2006	5.5	<10	14.6	<10	14.6	14.7
SS-3	0 - 9	North Side	6/1/2006	7.3	<10	42.5	<10	42.5	34.2
SS-4	0 - 8	West Side	6/1/2006	8	<10	<10	<10	<30	35.4
SS-5	0 - 9	South Side	6/1/2006	9.7	<10	<10	<10	<30	34.7
*SS-6	0 - 9	East Side	6/1/2006	12.4	111	2,970	332	3,413	70.8
SS-7	9	West Bottom	6/1/2006	11.3	<10	48.3	<10	48.3	38.5
SS-8	10	East Bottom	6/1/2006	14.1	<10	21.2	<10	21.2	17.1

Notes: Analysis performed by Environmental Lab of Texas, I. Ltd., Odessa, Texas

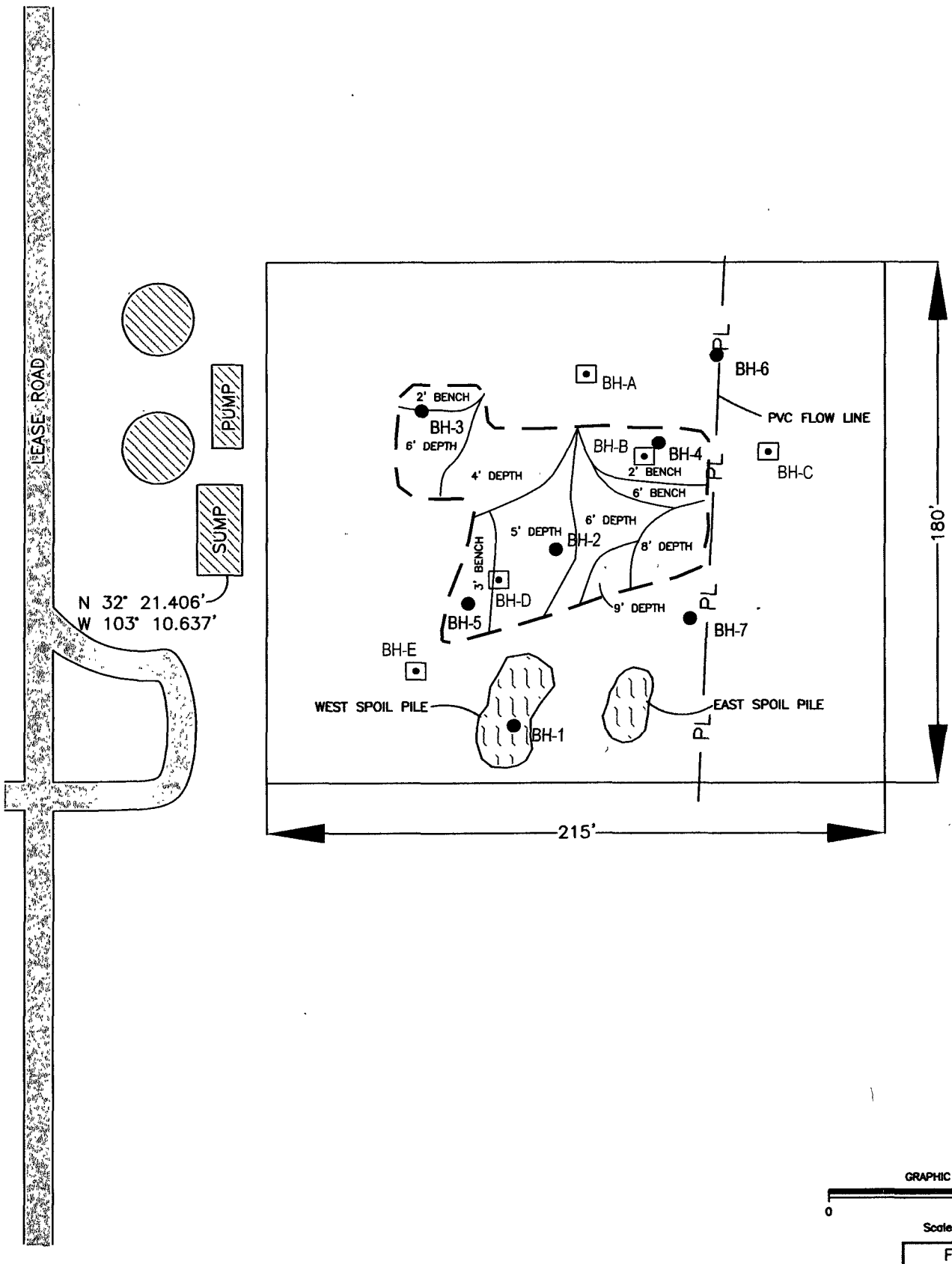
1. BGS: Sample depth in feet below ground surface
2. TPH: Total petroleum hydrocarbons (Sum of DRO + GRO)
3. mg/kg: Milligrams per kilogram
4. <: Below method detection limit
5. PID: Photoionization detector
6. ppm: Parts per million
7. *: Represents contamination from PVC flow line

Table 2: Summary of Laboratory Analysis of Soil Samples from Spoil Piles
Plains All American Pipeline, L.P., Langlie Mattix Penrose Unit ("LMPSU") Pipeline Pump
UL-P, Section 29, Township 22 South, Range 37 East, Lea County, New Mexico

Sample Number	Spoil Pile	Sample Date	PID (ppm)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO C6-C12 (mg/kg)	DRO >C12-C28 (mg/kg)	DRO >C28-C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)
RRAL				**10**	**50**				**1000**	
Spoil 1	East	05/30/2006	> 4,000	<0.025	1.1979	339	1,270	89.5	1,698.5	16.9
Spoil 2	East	05/30/2006	> 4,000	<0.025	1.3922	393	2,190	234	2,817	16.8
Spoil 3	West	06/01/2006	589	<0.025	1.1435	312	1,080	83.9	1,475.9	16.1
Spoil 4	West	06/01/2006	583	<0.025	1.7786	65.5	147	<10	212.5	36
Spoil 5	East	06/05/2006	391	---	---	92.8	676	175	943.8	13.8
Spoil 6	West	06/05/2006	>4,000	---	---	255	1490	340	2085	17.5
Spoil 7	East	06/05/2006	1,285	---	---	227	1510	331	2068	16.7
Spoil 8	East	06/06/2006	1,505	---	---	150	971	173	1294	14.7
Spoil 9	West	06/08/2006	--	---	---	103	978	136	1217	---
Spoil 10	West	06/08/2006	--	---	---	141	1480	264	1885	---
Spoil 11	East	06/08/2006	--	---	---	51.6	710	123	884.6	---
Spoil 12	East	06/14/2006	--	---	---	65.8	799	57.3	922.1	---
Spoil 13	West	06/16/2006	--	---	---	72.7	847	83.4	1003.1	---

Notes: Analysis performed by Environmental Lab of Texas, I. Ltd., Odessa, Texas

1. BGS: Sample depth in feet below ground surface
2. TPH: Total petroleum hydrocarbons (Sum of DRO + GRO)
3. mg/kg: Milligrams per kilogram
4. <: Below method detection limit
5. PID: Photoionization detector
6. ppm: Parts per million
7. ---: No data available
8. >: Over detection limit



LEGEND

- ● – GEOPROBE BORING LOCATION
- ⊡ – SOIL BORING LOCATIONS, (7/25/05)
- — — – EXCAVATION AREA

GRAPHIC SCALE IN FEET

0 50' 100'

Scale: 1" = 50'

FIGURE 2

LEA COUNTY, NEW MEXICO

PLAINS ALL AMERICAN PIPELINE L. P.
ANADARKO PENROSE # 1
SE/4, SE/4
SECTION 29, T-22-S, R-37-E

SITE DETAILS

DATE 07-10-06
NAME: SJA
FILE: 5-0103

Larson & Associates, inc.
Environmental Consultants

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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6E30006

Report Date: 06/06/06

Plains All American EH & S	Project: Anadarko Penrose #1	Fax. (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/06/06 12 07

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-1 (6E30006-01) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EF60112	06/01/06	06/01/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*80.6 %*	*70-130*		"	"	"	"	
SS-2 (6E30006-02) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60112	06/01/06	06/01/06	EPA 8015M	
Carbon Ranges C12-C28	**14.6**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**14.6**	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*80 6 %*	*70-130*		"	"	"	"	
Spoil 1 (6E30006-03) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EF60302	06/03/06	06/05/06	EPA 8021B	
Toluene	**0.0399**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.195**	0 0250	"	"	"	"	"	"	
Xylene (p/m)	**0.700**	0 0250	"	"	"	"	"	"	
Xylene (o)	**0.263**	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*148 %*	*80-120*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**339**	10.0	mg/kg dry	1	EF60112	06/01/06	06/01/06	EPA 8015M	
Carbon Ranges C12-C28	**1270**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**89.5**	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1700**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*94.8 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/06/06 12 07

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 2 (6E30006-04) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EF60302	06/03/06	06/05/06	EPA 8021B	
Toluene	**0.0832**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.211**	0 0250	"	"	"	"	"	"	
Xylene (p/m)	**0.829**	0 0250	"	"	"	"	"	"	
Xylene (o)	**0.269**	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*147 %*	*80-120*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**393**	10 0	mg/kg dry	1	EF60112	06/01/06	06/01/06	EPA 8015M	
Carbon Ranges C12-C28	**2190**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**234**	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**2820**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		"	"	"	"	
Surrogate. 1-Chlorooctadecane		*106 %*	*70-130*		"	"	"	"	

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Plains All American EH & S	Project. Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/06/06 12 07

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-1 (6E30006-01) Soil									
Chloride	**17.9**	5 00	mg/kg	10	EE63107	05/31/06	05/31/06	EPA 300 0	
% Moisture	**9.1**	0 1	%	1	EE63102	05/30/06	05/31/06	% calculation	
SS-2 (6E30006-02) Soil									
Chloride	**14.7**	5 00	mg/kg	10	EE63107	05/31/06	05/31/06	EPA 300 0	
% Moisture	**7.4**	0 1	%	1	EE63102	05/30/06	05/31/06	% calculation	
Spoil 1 (6E30006-03) Soil									
Chloride	**16.9**	5.00	mg/kg	10	EE63107	05/31/06	05/31/06	EPA 300.0	
% Moisture	**9.2**	0.1	%	1	EE63102	05/30/06	05/31/06	% calculation	
Spoil 2 (6E30006-04) Soil									
Chloride	**16.8**	5 00	mg/kg	10	EE63107	05/31/06	05/31/06	EPA 300 0	
% Moisture	**2.8**	0.1	%	1	EE63102	05/30/06	05/31/06	% calculation	

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Plains All American EH & S	Project: Anadarko Penrose #1	Fax. (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/06/06 12 07

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 EF60112 - Solvent Extraction (GC)										
Blank (EF60112-BLK1)				Prepared 06/01/06 Analyzed 06/02/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate. 1-Chlorooctane	*45 4*		*mg/kg*	*50.0*		*90.8*	*70-130*			
Surrogate 1-Chlorooctadecane	*43 5*		*"*	*50 0*		*87.0*	*70-130*			
LCS (EF60112-BS1)				Prepared. 06/01/06 Analyzed 06/02/06						
Carbon Ranges C6-C12	551	10.0	mg/kg wet	500		110	75-125			
Carbon Ranges C12-C28	562	10.0	"	500		112	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0 00			75-125			
Total Hydrocarbon nC6-nC35	1110	10.0	"	1000		111	75-125			
Surrogate: 1-Chlorooctane	*53 0*		*mg/kg*	*50.0*		*106*	*70-130*			
Surrogate. 1-Chlorooctadecane	*44 6*		*"*	*50.0*		*89 2*	*70-130*			
Calibration Check (EF60112-CCV1)				Prepared 06/01/06 Analyzed: 06/02/06						
Carbon Ranges C6-C12	297		mg/kg wet	250		119	80-120			
Carbon Ranges C12-C28	298		"	250		119	80-120			
Total Hydrocarbon nC6-nC35	594		"	500		119	80-120			
Surrogate. 1-Chlorooctane	*64 0*		*mg/kg*	*50 0*		*128*	*70-130*			
Surrogate 1-Chlorooctadecane	*63 7*		*"*	*50 0*		*127*	*70-130*			
Matrix Spike (EF60112-MS1)	**Source: 6E30006-01**			Prepared 06/01/06 Analyzed 06/02/06						
Carbon Ranges C6-C12	573	10 0	mg/kg dry	550	ND	104	75-125			
Carbon Ranges C12-C28	566	10 0	"	550	ND	103	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbon nC6-nC35	1140	10 0	"	1100	ND	104	75-125			
Surrogate. 1-Chlorooctane	*59 3*		*mg/kg*	*50 0*		*119*	*70-130*			
Surrogate. 1-Chlorooctadecane	*47 9*		*"*	*50 0*		*95 8*	*70-130*			

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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 EF60112 - Solvent Extraction (GC)										
Matrix Spike Dup (EF60112-MSD1)	**Source: 6E30006-01**			Prepared 06/01/06 Analyzed 06/02/06						
Carbon Ranges C6-C12	573	10 0	mg/kg dry	550	ND	104	75-125	0.00	20	
Carbon Ranges C12-C28	565	10 0	"	550	ND	103	75-125	0 177	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbon nC6-nC35	1140	10 0	"	1100	ND	104	75-125	0 00	20	
Surrogate. 1-Chlorooctane	*59 2*		*mg/kg*	*50 0*		*118*	*70-130*			
Surrogate. 1-Chlorooctadecane	*47.5*		*"*	*50 0*		*95.0*	*70-130*			
Batch EF60302 - EPA 5030C (GC)										
Blank (EF60302-BLK1)				Prepared 06/03/06 Analyzed 06/05/06						
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	*36 8*		*ug/kg*	*40.0*		*92 0*	*80-120*			
Surrogate. 4-Bromofluorobenzene	*36 9*		*"*	*40 0*		*92 2*	*80-120*			
LCS (EF60302-BS1)				Prepared. 06/03/06 Analyzed 06/05/06						
Benzene	1 05	0 0250	mg/kg wet	1 25		84 0	80-120			
Toluene	1 02	0 0250	"	1 25		81 6	80-120			
Ethylbenzene	1 05	0 0250	"	1 25		84 0	80-120			
Xylene (p/m)	2 27	0.0250	"	2 50		90 8	80-120			
Xylene (o)	1 11	0 0250	"	1 25		88 8	80-120			
Surrogate a,a,a-Trifluorotoluene	*38 7*		*ug/kg*	*40 0*		*96 8*	*80-120*			
Surrogate. 4-Bromofluorobenzene	*40.1*		*"*	*40.0*		*100*	*80-120*			

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager. Daniel Bryant	06/06/06 12 07

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 EF60302 - EPA 5030C (GC)										
Calibration Check (EF60302-CCV1)				Prepared 06/03/06 Analyzed 06/06/06						
Benzene	40 8		ug/kg	50 0		81 6	80-120			
Toluene	40 2		"	50 0		80 4	80-120			
Ethylbenzene	44 3		"	50 0		88 6	80-120			
Xylene (p/m)	90 4		"	100		90 4	80-120			
Xylene (o)	45 9		"	50 0		91 8	80-120			
Surrogate a,a,a-Trifluorotoluene	*36 2*		*"*	*40 0*		*90 5*	*80-120*			
Surrogate· 4-Bromofluorobenzene	*40 4*		*"*	*40 0*		*101*	*80-120*			
Matrix Spike (EF60302-MS1)	**Source: 6E31001-01**			Prepared 06/03/06 Analyzed. 06/05/06						
Benzene	1 04	0 0250	mg/kg dry	1 28	ND	81.2	80-120			
Toluene	1 02	0.0250	"	1 28	ND	79 7	80-120			S-07
Ethylbenzene	1 27	0.0250	"	1 28	ND	99.2	80-120			
Xylene (p/m)	2 18	0 0250	"	2.55	ND	85 5	80-120			
Xylene (o)	1.06	0 0250	"	1.28	ND	82 8	80-120			
Surrogate a,a,a-Trifluorotoluene	*38 0*		*ug/kg*	*40.0*		*95 0*	*80-120*			
Surrogate· 4-Bromofluorobenzene	*45 4*		*"*	*40 0*		*114*	*80-120*			
Matrix Spike Dup (EF60302-MSD1)	**Source: 6E31001-01**			Prepared 06/03/06 Analyzed 06/05/06						
Benzene	1 03	0.0250	mg/kg dry	1 28	ND	80.5	80-120	0 866	20	
Toluene	1 03	0.0250	"	1 28	ND	80 5	80-120	0 999	20	
Ethylbenzene	1 33	0 0250	"	1 28	ND	104	80-120	4 72	20	
Xylene (p/m)	2 29	0 0250	"	2 55	ND	89 8	80-120	4 91	20	
Xylene (o)	1 13	0 0250	"	1 28	ND	88 3	80-120	6 43	20	
Surrogate a,a,a-Trifluorotoluene	*36 2*		*ug/kg*	*40 0*		*90 5*	*80-120*			
Surrogate 4-Bromofluorobenzene	*40 8*		*"*	*40 0*		*102*	*80-120*			

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/06/06 12 07

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 EE63102 - General Preparation (Prep)										
Blank (EE63102-BLK1)				Prepared 05/30/06 Analyzed 05/31/06						
% Solids	100		%							
Duplicate (EE63102-DUP1)		**Source: 6E26011-01**		Prepared 05/30/06 Analyzed: 05/31/06						
% Solids	96 4		%		96 5			0 104	20	
Batch EE63107 - Water Extraction										
Blank (EE63107-BLK1)				Prepared & Analyzed 05/31/06						
Chloride	ND	0.500	mg/kg							
LCS (EE63107-BS1)				Prepared & Analyzed 05/31/06						
Chloride	10.0	0 500	mg/kg	10.0		100	80-120			
Calibration Check (EE63107-CCV1)				Prepared & Analyzed 05/31/06						
Chloride	10 1		mg/L	10.0		101	80-120			
Duplicate (EE63107-DUP1)		**Source: 6E26015-01**		Prepared & Analyzed 05/31/06						
Chloride	320	10 0	mg/kg		304			5 13	20	
Duplicate (EE63107-DUP2)		**Source: 6E30005-01**		Prepared & Analyzed 05/31/06						
Chloride	672	10.0	mg/kg		659			1 95	20	
Matrix Spike (EE63107-MS1)		**Source: 6E26015-01**		Prepared & Analyzed 05/31/06						
Chloride	573	10 0	mg/kg	200	304	134	80-120			S-07
Matrix Spike (EE63107-MS2)		**Source: 6E30005-01**		Prepared & Analyzed: 05/31/06						
Chloride	845	10 0	mg/kg	200	659	93 0	80-120			

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OSI #01-01-04

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Plains
SITE MANAGER: Cindy Crain
PROJECT NO.: 5-0103
PROJECT NAME: Anadarko Penrose #1
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015m	BTEX	Chlorides	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/30/06	1230		X		SS-1	1	X		X	106E300006-01	
	1245				SS-2						-02
	1240				Spoil 1			X			03
	1235				Spoil 2			X			-04

SAMPLED BY: (Signature) DATE: 5/30/06 TIME: 1300
RELINQUISHED BY: (Signature) DATE: 5/30/06 TIME: 1635
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:
RECEIVED BY: (Signature) DATE: TIME:
SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS: ☆ Direct bill Plains Daniel Bryant
TURNAROUND TIME NEEDED

RECEIVING LABORATORY: ELOT
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 5/30/06 TIME: 4:35

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED: 6.0 4oz glass
LA CONTACT PERSON:
SAMPLE TYPE:

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

lient: Larson/Plains

ate/Time: 5/30/06 4:35

rder #: 6E30006

nitials: CK

Sample Receipt Checklist

emperature of container/cooler?	Yes	No	6.0 C
hipping container/cooler in good condition?	Yes	No	
ustody Seals intact on shipping container/cooler?	Yes	No	Not present
ustody Seals intact on sample bottles?	Yes	No	Not present
hain of custody present?	Yes	No	
ample Instructions complete on Chain of Custody?	Yes	No	
hain of Custody signed when relinquished and received?	Yes	No	
hain of custody agrees with sample label(s)	Yes	No	ID on jar
ontainer labels legible and intact?	Yes	No	
ample Matrix and properties same as on chain of custody?	Yes	No	
amples in proper container/bottle?	Yes	No	
amples properly preserved?	Yes	No	
ample bottles intact?	Yes	No	
reservations documented on Chain of Custody?	Yes	No	
ontainers documented on Chain of Custody?	Yes	No	
ufficient sample amount for indicated test?	Yes	No	
ll samples received within sufficient hold time?	Yes	No	
/OC 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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F02008

Report Date: 06/05/06

Plains All American EH & S	Project Anadarko Penrose #1	Fax. (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14 12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-3	6F02008-01	Soil	06/01/06 12 45	06/02/06 09 45
SS-4	6F02008-02	Soil	06/01/06 12.50	06/02/06 09 45
SS-5	6F02008-03	Soil	06/01/06 12 53	06/02/06 09 45
SS-6	6F02008-04	Soil	06/01/06 12 55	06/02/06 09 45
SS-7	6F02008-05	Soil	06/01/06 12 57	06/02/06 09 45
SS-8	6F02008-06	Soil	06/01/06 13 00	06/02/06 09 45
Spoil 3	6F02008-07	Soil	06/01/06 13 05	06/02/06 09 45
Spoil 4	6F02008-08	Soil	06/01/06 13 07	06/02/06 09 45

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/05/06 14 12

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-3 (6F02008-01) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**42.5**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**42.5**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.6 %*	*70-130*		"	"	"	"	
SS-4 (6F02008-02) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*79.6 %*	*70-130*		"	"	"	"	
SS-5 (6F02008-03) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*97.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*88.4 %*	*70-130*		"	"	"	"	
SS-6 (6F02008-04) Soil									
Carbon Ranges C6-C12	**111**	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**2970**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**332**	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**3410**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*126 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project. Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14.12

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-7 (6F02008-05) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**48.3**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**48.3**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*85.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*72.8 %*	*70-130*		"	"	"	"	
SS-8 (6F02008-06) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**21.2**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**21.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.6 %*	*70-130*		"	"	"	"	
Spoil 3 (6F02008-07) Soil									
Carbon Ranges C6-C12	**312**	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**1080**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**83.9**	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1480**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*88.2 %*	*70-130*		"	"	"	"	
Spoil 4 (6F02008-08) Soil									
Carbon Ranges C6-C12	**65.5**	10.0	mg/kg dry	1	EF60219	06/02/06	06/05/06	EPA 8015M	
Carbon Ranges C12-C28	**147**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**212**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*98.0 %*	*70-130*		"	"	"	"	
Surrogate. 1-Chlorooctadecane		*88.8 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14.12

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-3 (6F02008-01) Soil									
Chloride	**34.2**	5 00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**28.2**	0.1	%	1	EF60502	06/02/06	06/06/06	% calculation	
SS-4 (6F02008-02) Soil									
Chloride	**35.4**	5 00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**31.6**	0 1	%	1	EF60502	06/02/06	06/06/06	% calculation	
SS-5 (6F02008-03) Soil									
Chloride	**34.7**	5.00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**32.1**	0 1	%	1	EF60502	06/02/06	06/06/06	% calculation	
SS-6 (6F02008-04) Soil									
Chloride	**70.8**	10 0	mg/kg	20	EF60307	06/02/06	06/02/06	EPA 300.0	
% Moisture	**0.9**	0 1	%	1	EF60502	06/02/06	06/06/06	% calculation	
SS-7 (6F02008-05) Soil									
Chloride	**38.5**	5 00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**28.3**	0.1	%	1	EF60502	06/02/06	06/06/06	% calculation	
SS-8 (6F02008-06) Soil									
Chloride	**17.1**	5 00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**10.2**	0.1	%	1	EF60502	06/02/06	06/06/06	% calculation	
Spoil 3 (6F02008-07) Soil									
Chloride	**16.1**	5.00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**2.5**	0.1	%	1	EF60502	06/02/06	06/06/06	% calculation	
Spoil 4 (6F02008-08) Soil									
Chloride	**36.0**	5.00	mg/kg	10	EF60307	06/02/06	06/02/06	EPA 300 0	
% Moisture	**25.6**	0 1	%	1	EF60502	06/02/06	06/06/06	% calculation	

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14.12

Volatile Organic Compounds by EPA Method 8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 3 (6F02008-07) Soil									
Benzene	ND	25 0	ug/kg dry	25	EF60303	06/03/06	06/03/06	EPA 8260B	
Toluene	**J [13.1]**	25 0	"	"	"	"	"	"	J
Ethylbenzene	**30.4**	25 0	"	"	"	"	"	"	
Xylene (p/m)	**264**	25 0	"	"	"	"	"	"	
Xylene (o)	**836**	25 0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*115 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.0 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*82.8 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.4 %*	*65-140*		"	"	"	"	
Spoil 4 (6F02008-08) Soil									
Benzene	ND	25 0	ug/kg dry	25	EF60303	06/03/06	06/04/06	EPA 8260B	
Toluene	**40.1**	25 0	"	"	"	"	"	"	
Ethylbenzene	**44.5**	25 0	"	"	"	"	"	"	
Xylene (p/m)	**464**	25.0	"	"	"	"	"	"	
Xylene (o)	**1230**	25.0	"	"	"	"	"	"	
Surrogate. Dibromofluoromethane		*111 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84.4 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*86.4 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.4 %*	*65-140*		"	"	"	"	

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 EF60219 - Solvent Extraction (GC)										
Blank (EF60219-BLK1)				Prepared. 06/02/06 Analyzed. 06/05/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate 1-Chlorooctane	*45 4*		*mg/kg*	*50 0*		*90 8*	*70-130*			
Surrogate 1-Chlorooctadecane	*46 5*		*"*	*50 0*		*93 0*	*70-130*			
LCS (EF60219-BS1)				Prepared 06/02/06 Analyzed 06/05/06						
Carbon Ranges C6-C12	567	10.0	mg/kg wet	500		113	75-125			
Carbon Ranges C12-C28	554	10 0	"	500		111	75-125			
Total Hydrocarbon nC6-nC35	1120	10 0	"	1000		112	75-125			
Surrogate 1-Chlorooctane	*58 5*		*mg/kg*	*50 0*		*117*	*70-130*			
Surrogate. 1-Chlorooctadecane	*52 7*		*"*	*50 0*		*105*	*70-130*			
Calibration Check (EF60219-CCV1)				Prepared 06/02/06 Analyzed 06/05/06						
Carbon Ranges C6-C12	290		mg/kg	250		116	80-120			
Carbon Ranges C12-C28	294		"	250		118	80-120			
Total Hydrocarbon nC6-nC35	584		"	500		117	80-120			
Surrogate 1-Chlorooctane	*57.9*		*"*	*50 0*		*116*	*70-130*			
Surrogate 1-Chlorooctadecane	*58.2*		*"*	*50 0*		*116*	*70-130*			
Matrix Spike (EF60219-MS1)	**Source: 6F02008-01**			Prepared 06/02/06 Analyzed 06/05/06						
Carbon Ranges C6-C12	734	10 0	mg/kg dry	696	ND	105	75-125			
Carbon Ranges C12-C28	728	10 0	"	696	42 5	98 5	75-125			
Total Hydrocarbon nC6-nC35	1460	10 0	"	1390	42 5	102	75-125			
Surrogate 1-Chlorooctane	*55 6*		*mg/kg*	*50 0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.3*		*"*	*50 0*		*94.6*	*70-130*			

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14.12

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 EF60219 - Solvent Extraction (GC)										
Matrix Spike Dup (EF60219-MSD1)	**Source: 6F02008-01**			Prepared 06/02/06 Analyzed 06/05/06						
Carbon Ranges C6-C12	724	10 0	mg/kg dry	696	ND	104	75-125	1.37	20	
Carbon Ranges C12-C28	734	10 0	"	696	42.5	99 4	75-125	0 821	20	
Total Hydrocarbon nC6-nC35	1460	10.0	"	1390	42 5	102	75-125	0 00	20	
Surrogate 1-Chlorooctane	*55 0*		*mg/kg*	*50 0*		*110*	*70-130*			
Surrogate 1-Chlorooctadecane	*46 4*		*"*	*50 0*		*92 8*	*70-130*			

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax. (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager. Daniel Bryant	06/05/06 14 12

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 EF60307 - Water Extraction										
Blank (EF60307-BLK1)				Prepared & Analyzed: 02/03/06						
Chloride	ND	0 500	mg/kg							
LCS (EF60307-BS1)				Prepared & Analyzed 02/03/06						
Chloride	9 29		mg/L	10.0		92 9	80-120			
Calibration Check (EF60307-CCV1)				Prepared & Analyzed 02/03/06						
Chloride	10 0		mg/L	10 0		100	80-120			
Duplicate (EF60307-DUP1)		**Source: 6F01018-01**		Prepared & Analyzed 02/03/06						
Chloride	3500	50 0	mg/kg		3620			3.37	20	
Duplicate (EF60307-DUP2)		**Source: 6F01016-03**		Prepared & Analyzed 02/03/06						
Chloride	2120	50.0	mg/kg		2050			3 36	20	
Matrix Spike (EF60307-MS1)		**Source: 6F01018-01**		Prepared & Analyzed 02/03/06						
Chloride	4960	50 0	mg/kg	1000	3620	134	80-120			S-07
Matrix Spike (EF60307-MS2)		**Source: 6F01016-03**		Prepared & Analyzed. 02/03/06						
Chloride	3270	50.0	mg/kg	1000	2050	122	80-120			S-07
Batch EF60502 - General Preparation (Prep)										
Duplicate (EF60502-DUP1)		**Source: 6F02008-01**		Prepared 06/02/06 Analyzed 06/06/06						
% Solids	73 2		%		71 8			1 93	20	
Duplicate (EF60502-DUP2)		**Source: 6F02010-01**		Prepared 06/02/06 Analyzed 06/06/06						
% Solids	98 8		%		98 7			0 101	20	

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S. County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14 12

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 EF60502 - General Preparation (Prep)										
Duplicate (EF60502-DUP3)	**Source: 6F01016-01**			Prepared 06/02/06 Analyzed 06/06/06						
% Solids	99 9		%		99 9			0 00	20	

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60303 - EPA 5030C (GCMS)										
Blank (EF60303-BLK1)				Prepared 06/02/06 Analyzed 06/03/06						
Benzene	ND	25 0	ug/kg wet							
Toluene	ND	25 0	"							
Ethylbenzene	ND	25 0	"							
Xylene (p/m)	ND	25 0	"							
Xylene (o)	ND	25 0	"							
Surrogate Dibromofluoromethane	*62.9*		*ug/kg*	*50 0*		*126*	*68-129*			
Surrogate 1,2-Dichloroethane-d4	*53 4*		*"*	*50 0*		*107*	*72-132*			
Surrogate Toluene-d8	*49 9*		*"*	*50.0*		*99 8*	*74-118*			
Surrogate 4-Bromofluorobenzene	*42 0*		*"*	*50 0*		*84 0*	*65-140*			
LCS (EF60303-BS1)				Prepared 06/02/06 Analyzed 06/03/06						
Benzene	575	25.0	ug/kg wet	625		92 0	70-130			
Toluene	607	25.0	"	625		97 1	70-130			
Ethylbenzene	662	25 0	"	625		106	70-130			
Xylene (p/m)	1210	25 0	"	1250		96.8	70-130			
Xylene (o)	643	25 0	"	625		103	70-130			
Surrogate Dibromofluoromethane	*48 1*		*ug/kg*	*50 0*		*96 2*	*68-129*			
Surrogate 1,2-Dichloroethane-d4	*42 2*		*"*	*50 0*		*84 4*	*72-132*			
Surrogate Toluene-d8	*43 5*		*"*	*50 0*		*87.0*	*74-118*			
Surrogate 4-Bromofluorobenzene	*38 4*		*"*	*50 0*		*76.8*	*65-140*			
Calibration Check (EF60303-CCV1)				Prepared 06/02/06 Analyzed. 06/03/06						
Toluene	46 9		ug/kg	50 0		93.8	70-130			
Ethylbenzene	40 2		"	50 0		80 4	70-130			
Surrogate Dibromofluoromethane	*48 2*		*"*	*50 0*		*96.4*	*68-129*			
Surrogate 1,2-Dichloroethane-d4	*41 6*		*"*	*50 0*		*83 2*	*72-132*			
Surrogate Toluene-d8	*45 1*		*"*	*50 0*		*90 2*	*74-118*			
Surrogate 4-Bromofluorobenzene	*38 7*		*"*	*50 0*		*77 4*	*65-140*			

Plains All American EH & S	Project: Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/05/06 14:12

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60303 - EPA 5030C (GCMS)										
Matrix Spike (EF60303-MS1)	**Source: 6F01014-02**			Prepared: 06/02/06 Analyzed: 06/05/06						
Benzene	639	25.0	ug/kg dry	667	ND	95.8	80-120			
Toluene	678	25.0	"	667	ND	102	80-120			
Ethylbenzene	738	25.0	"	667	ND	111	80-120			
Xylene (p/m)	1350	25.0	"	1330	ND	102	80-120			
Xylene (o)	714	25.0	"	667	ND	107	80-120			
Surrogate: Dibromofluoromethane	*48.4*		*ug/kg*	*50.0*		*96.8*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*42.5*		*"*	*50.0*		*85.0*	*72-132*			
Surrogate: Toluene-d8	*44.0*		*"*	*50.0*		*88.0*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*41.1*		*"*	*50.0*		*82.2*	*65-140*			
Matrix Spike Dup (EF60303-MSD1)	**Source: 6F01014-02**			Prepared: 06/02/06 Analyzed: 06/05/06						
Benzene	620	25.0	ug/kg dry	667	ND	93.0	80-120	2.97	20	
Toluene	659	25.0	"	667	ND	98.8	80-120	3.19	20	
Ethylbenzene	726	25.0	"	667	ND	109	80-120	1.82	20	
Xylene (p/m)	1330	25.0	"	1330	ND	100	80-120	1.98	20	
Xylene (o)	701	25.0	"	667	ND	105	80-120	1.89	20	
Surrogate: Dibromofluoromethane	*45.4*		*ug/kg*	*50.0*		*90.8*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*41.3*		*"*	*50.0*		*82.6*	*72-132*			
Surrogate: Toluene-d8	*42.8*		*"*	*50.0*		*85.6*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*40.1*		*"*	*50.0*		*80.2*	*65-140*			

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Plains All American EH & S	Project. Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/05/06 14 12

Notes and Definitions

S-07	Recovery outside Laboratory historical or method prescribed limits
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: 6/5/2006

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.

per Cindy

CLIENT NAME: Plains	SITE MANAGER: Cindy Crain	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER	CHAIN—OF—CUSTODY RECORD
PROJECT NO.: 05I 01-01-04	PROJECT NAME: Anadarko Penrose		TPH 8015M / Chlorides / BTEX 8021B	Larson & Associates, Inc. Environmental Consultants Fax: 432-687-0456 432-687-0901 507 N. Marienfeld, Ste. 202 • Midland, TX 79701
PAGE 1 OF 1	LAB. PO #			

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	TPH 8015M	Chlorides	BTEX 8021B	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
6/1/04	1245		✓		SS-3	1	✓	✓		04F02008-01	
"	1250		✓		SS-4	1	✓	✓			-02
"	1253		✓		SS-5	1	✓	✓			-03
"	1255		✓		SS-6	1	✓	✓			-04
"	1257		✓		SS-7	1	✓	✓			-05
"	1300		✓		SS-8	1	✓	✓			-06
"	1305		✓		Spoil 3	1	✓	✓	✓		-07
"	1307		✓		Spoil 4	1	✓	✓	✓		-08

SAMPLED BY: (Signature)	DATE: 6/1/04 TIME: 1307	RELINQUISHED BY: (Signature)	DATE: 6/2/04 TIME: 0930	RECEIVED BY: (Signature)	DATE: TIME:
Cindy Crain		Cindy Crain			
RELINQUISHED BY: (Signature)	DATE: TIME:	RECEIVED BY: (Signature)	DATE: TIME:	SAMPLE SHIPPED BY: (Circle)	
				FEDEX BUS AIRBILL #:	
				HAND DELIVERED UPS OTHER:	

COMMENTS:

TURNAROUND TIME NEEDED

RECEIVING LABORATORY: ELOT
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Carin Kelly
DATE: 6/2/04 TIME: 9:45

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED: w/o labels 4.5°C

Results June 5th ONT Monday

LA CONTACT PERSON: C. Crain

SAMPLE TYPE: Soil

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

Client: Plains

Date/Time: 6/2/06 9:45

Order #: 6F02008

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	4.5 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:

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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F06002

Report Date: 06/07/06

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 14 04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spoil 5	6F06002-01	Soil	06/05/06 12 15	06/05/06 16.15
Spoil 6	6F06002-02	Soil	06/05/06 12 24	06/05/06 16 15
Spoil 7	6F06002-03	Soil	06/05/06 12 30	06/05/06 16 15

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 14 04

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 5 (6F06002-01) Soil									
Carbon Ranges C6-C12	**92.8**	20 0	mg/kg dry	2	EF60610	06/06/06	06/06/06	EPA 8015M	
Carbon Ranges C12-C28	**676**	20 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**175**	20 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**944**	20.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*47.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*53.2 %*	*70-130*		"	"	"	"	*S-06*
Spoil 6 (6F06002-02) Soil									
Carbon Ranges C6-C12	**255**	20.0	mg/kg dry	2	EF60610	06/06/06	06/06/06	EPA 8015M	
Carbon Ranges C12-C28	**1490**	20.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**340**	20 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**2080**	20 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*49.4 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*57.4 %*	*70-130*		"	"	"	"	*S-06*
Spoil 7 (6F06002-03) Soil									
Carbon Ranges C6-C12	**227**	20 0	mg/kg dry	2	EF60610	06/06/06	06/06/06	EPA 8015M	
Carbon Ranges C12-C28	**1510**	20.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**331**	20 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**2070**	20 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*50.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*57.4 %*	*70-130*		"	"	"	"	*S-06*

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Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/07/06 14 04

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 5 (6F06002-01) Soil									
Chloride	**13.8**	5 00	mg/kg	10	EF60702	06/06/06	06/06/06	EPA 300 0	
% Moisture	**2.8**	0 1	%	1	EF60709	06/06/06	06/07/06	% calculation	
Spoil 6 (6F06002-02) Soil									
Chloride	**17.5**	5 00	mg/kg	10	EF60702	06/06/06	06/06/06	EPA 300 0	
% Moisture	**4.4**	0 1	%	1	EF60709	06/06/06	06/07/06	% calculation	
Spoil 7 (6F06002-03) Soil									
Chloride	**16.7**	5 00	mg/kg	10	EF60702	06/06/06	06/06/06	EPA 300 0	
% Moisture	**3.6**	0 1	%	1	EF60709	06/06/06	06/07/06	% calculation	

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S. County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 14.04

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 EF60610 - Solvent Extraction (GC)										
Blank (EF60610-BLK1)				Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbon nC6-nC35	ND	10.0	"							
Surrogate 1-Chlorooctane	*50 8*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate 1-Chlorooctadecane	*55.6*		*"*	*50 0*		*111*	*70-130*			
LCS (EF60610-BS1)				Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	559	10 0	mg/kg wet	500		112	75-125			
Carbon Ranges C12-C28	497	10 0	"	500		99.4	75-125			
Total Hydrocarbon nC6-nC35	1060	10.0	"	1000		106	75-125			
Surrogate. 1-Chlorooctane	*57.0*		*mg/kg*	*50 0*		*114*	*70-130*			
Surrogate. 1-Chlorooctadecane	*53.8*		*"*	*50 0*		*108*	*70-130*			
Calibration Check (EF60610-CCV1)				Prepared 06/06/06 Analyzed 06/07/06						
Carbon Ranges C6-C12	284		mg/kg	250		114	80-120			
Carbon Ranges C12-C28	293		"	250		117	80-120			
Total Hydrocarbon nC6-nC35	577		"	500		115	80-120			
Surrogate 1-Chlorooctane	*53 7*		*"*	*50 0*		*107*	*70-130*			
Surrogate 1-Chlorooctadecane	*57 3*		*"*	*50 0*		*115*	*70-130*			
Matrix Spike (EF60610-MS1)	**Source: 6F06004-01**			Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	121	10.0	mg/kg dry	106	ND	114	75-125			
Carbon Ranges C12-C28	117	10 0	"	106	ND	110	75-125			
Total Hydrocarbon nC6-nC35	238	10 0	"	212	ND	112	75-125			
Surrogate. 1-Chlorooctane	*59 3*		*mg/kg*	*50 0*		*119*	*70-130*			
Surrogate 1-Chlorooctadecane	*63.8*		*"*	*50 0*		*128*	*70-130*			

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Plains All American EH & S	Project: Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/07/06 14 04

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 EF60610 - Solvent Extraction (GC)										
Matrix Spike Dup (EF60610-MSD1)	**Source: 6F06004-01**			Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	121	10 0	mg/kg dry	106	ND	114	75-125	0.00	20	
Carbon Ranges C12-C28	118	10 0	"	106	ND	111	75-125	0.851	20	
Total Hydrocarbon nC6-nC35	239	10 0	"	212	ND	113	75-125	0 419	20	
Surrogate 1-Chlorooctane	*58 5*		*mg/kg*	*50 0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*64 2*		"	*50 0*		*128*	*70-130*			

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

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 EF60702 - Water Extraction										
Blank (EF60702-BLK1)				Prepared & Analyzed 06/06/06						
Chloride	ND	0 500	mg/kg							
LCS (EF60702-BS1)				Prepared & Analyzed 06/06/06						
Chloride	10 5	0 500	mg/kg	10 0		105	80-120			
Calibration Check (EF60702-CCV1)				Prepared & Analyzed 06/06/06						
Chloride	10 8		mg/L	10.0		108	80-120			
Duplicate (EF60702-DUP1)	**Source: 6F06006-02**			Prepared & Analyzed 06/06/06						
Chloride	4280	50.0	mg/kg		4270			0 234	20	
Duplicate (EF60702-DUP2)	**Source: 6F06006-12**			Prepared & Analyzed 06/07/06						
Chloride	11300	200	mg/kg		11300			0 00	20	
Matrix Spike (EF60702-MS1)	**Source: 6F06006-02**			Prepared & Analyzed 06/06/06						
Chloride	5330	50.0	mg/kg	1000	4270	106	80-120			
Matrix Spike (EF60702-MS2)	**Source: 6F06006-12**			Prepared & Analyzed. 06/07/06						
Chloride	17000	200	mg/kg	5000	11300	114	80-120			
Batch EF60709 - General Preparation (Prep)										
Blank (EF60709-BLK1)				Prepared 06/06/06 Analyzed. 06/07/06						
% Solids	100		%							
Duplicate (EF60709-DUP1)	**Source: 6F05012-01**			Prepared 06/06/06 Analyzed 06/07/06						
% Solids	98 9		%		98 8			0 101	20	

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 14 04

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 EF60709 - General Preparation (Prep)										
Duplicate (EF60709-DUP2)	**Source: 6F06004-02**			Prepared 06/06/06 Analyzed 06/07/06						
% Solids	97 9		%		98 9			1 02	20	
Duplicate (EF60709-DUP3)	**Source: 6F06007-01**			Prepared 06/06/06 Analyzed 06/07/06						
% Solids	94 8		%		95 4			0 631	20	
Duplicate (EF60709-DUP4)	**Source: 6F06015-07**			Prepared 06/06/06 Analyzed 06/07/06						
% Solids	83 6		%		86 2			3 06	20	

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

Plains All American EH & S	Project	Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number	OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager:	Daniel Bryant	06/07/06 14 04

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
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: 6/7/2006

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.

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

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Plains

SITE MANAGER: Cindy Crain

PROJECT NO: 5-0103

PROJECT NAME: Anadarko Penrose #1

PAGE 1 OF 1

LAB. PO #

PARAMETERS/METHOD NUMBER

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	TPH 8015m GRO/DRO ext. w/ silica gel cleanup	BTEX 8021B	Chlorides	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/5	1215		X		Spoil 5	1	X	X	X		6F06002-01
↓	1224		↓		Spoil 6	↓	↓	↓	↓		-02
↓	1230		↓		Spoil 7	↓	↓	↓	↓		-03

SAMPLED BY: (Signature) DATE: 6/5/06 TIME: 1245

RELINQUISHED BY: (Signature) DATE: 6/5/06 TIME: 1615

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 6/5/06 TIME: 1615

SAMPLE CONDITION WHEN RECEIVED:
4.5°C Ice/glass RUSH Added 6/6/06 am per Cindy

LA CONTACT PERSON:

SAMPLE TYPE:

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

Client: Plains

Date/Time: 6/5/06 16:15

Order #: 6F06002

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	4.5 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	4 Non jar
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: "Cindy Crain" <cindy@laenvironmental.com>
To: '"Jeanne McMurrey"' <jeanne@elabtexas.com>
Sent: Tuesday, June 06, 2006 2:46 PM
Subject: RE: Report #6E30006 Anadarko Penrose #1

Thank you Jeanne!

On the samples that Steve brought in yesterday (5/5/06) for this project, would you please delete the request for BTEX analysis and run only the TPH and chlorides.

The samples should be Spoil 5, Spoil 6 and Spoil 7.

Thank you,

Cindy K. Crain, P.G.

Larson and Associates, Inc.
507 N. Marienfeld, Ste.202
Midland, TX 79701

office: (432) 687-0901
fax: (432) 687-0456
cell: (432) 556-8665

-----Original Message-----
From: Jeanne McMurrey [mailto:jeanne@elabtexas.com]
Sent: Tuesday, June 06, 2006 1:13 PM
To: Kellie Carter; Daniel M. Bryant; Cindy Crain
Subject: Re: Report #6E30006 Anadarko Penrose #1

Jeanne McMurrey
Environmental Lab of Texas I, Ltd.
12600 West I-20 East
Odessa, Texas 79765
432-563-1800

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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F06024

Report Date: 06/07/06

Plains All American EH & S	Project	Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number.	OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager.	Daniel Bryant	06/07/06 16 45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spoil 8	6F06024-01	Soil	06/06/06 14 05	06/06/06 16·48

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/07/06 16.45

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 8 (6F06024-01) Soil									
Carbon Ranges C6-C12	**150**	10.0	mg/kg dry	1	EF60610	06/06/06	06/07/06	EPA 8015M	
Carbon Ranges C12-C28	**971**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**173**	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1290**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*110 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*135 %*	*70-130*		"	"	"	"	*S-04*

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 16.45

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 8 (6F06024-01) Soil									
Chloride	**14.7**	5 00	mg/kg	10	EF60703	06/06/06	06/07/06	EPA 300 0	
% Moisture	**1.8**	0 1	%	1	EF60711	06/07/06	06/07/06	% 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 EF60610 - Solvent Extraction (GC)										
Blank (EF60610-BLK1)				Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate. 1-Chlorooctane	*50 8*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate· 1-Chlorooctadecane	*55 6*		*"*	*50 0*		*111*	*70-130*			
LCS (EF60610-BS1)				Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	559	10.0	mg/kg wet	500		112	75-125			
Carbon Ranges C12-C28	497	10 0	"	500		99 4	75-125			
Total Hydrocarbon nC6-nC35	1060	10.0	"	1000		106	75-125			
Surrogate 1-Chlorooctane	*57.0*		*mg/kg*	*50 0*		*114*	*70-130*			
Surrogate 1-Chlorooctadecane	*53 8*		*"*	*50.0*		*108*	*70-130*			
Calibration Check (EF60610-CCV1)				Prepared 06/06/06 Analyzed 06/07/06						
Carbon Ranges C6-C12	284		mg/kg	250		114	80-120			
Carbon Ranges C12-C28	293		"	250		117	80-120			
Total Hydrocarbon nC6-nC35	577		"	500		115	80-120			
Surrogate· 1-Chlorooctane	*53 7*		*"*	*50.0*		*107*	*70-130*			
Surrogate· 1-Chlorooctadecane	*57.3*		*"*	*50 0*		*115*	*70-130*			
Matrix Spike (EF60610-MS1)	**Source: 6F06004-01**			Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	121	10 0	mg/kg dry	106	ND	114	75-125			
Carbon Ranges C12-C28	117	10 0	"	106	ND	110	75-125			
Total Hydrocarbon nC6-nC35	238	10 0	"	212	ND	112	75-125			
Surrogate· 1-Chlorooctane	*59 3*		*mg/kg*	*50 0*		*119*	*70-130*			
Surrogate· 1-Chlorooctadecane	*63 8*		*"*	*50.0*		*128*	*70-130*			

Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S. County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/07/06 16 45

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 EF60610 - Solvent Extraction (GC)										
Matrix Spike Dup (EF60610-MSD1)	**Source: 6F06004-01**			Prepared & Analyzed 06/06/06						
Carbon Ranges C6-C12	121	10.0	mg/kg dry	106	ND	114	75-125	0 00	20	
Carbon Ranges C12-C28	118	10 0	"	106	ND	111	75-125	0 851	20	
Total Hydrocarbon nC6-nC35	239	10 0	"	212	ND	113	75-125	0 419	20	
Surrogate: 1-Chlorooctane	*58 5*		*mg/kg*	*50.0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*64 2*		*"*	*50 0*		*128*	*70-130*			

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/07/06 16 45

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 EF60703 - Water Extraction										
Blank (EF60703-BLK1)				Prepared 06/06/06 Analyzed 06/07/06						
Chloride	ND	0 500	mg/kg							
LCS (EF60703-BS1)				Prepared 06/06/06 Analyzed 06/07/06						
Chloride	9 81	0 500	mg/kg	10 0		98 1	80-120			
Calibration Check (EF60703-CCV1)				Prepared 06/06/06 Analyzed 06/07/06						
Chloride	9 44		mg/L	10.0		94 4	80-120			
Duplicate (EF60703-DUP1)		**Source: 6F06024-01**		Prepared 06/06/06 Analyzed 06/07/06						
Chloride	15 4	5 00	mg/kg		14 7			4 65	20	
Duplicate (EF60703-DUP2)		**Source: 6F05013-05**		Prepared 06/06/06 Analyzed 06/07/06						
Chloride	ND	0 500	mg/kg		ND				20	
Matrix Spike (EF60703-MS1)		**Source: 6F06024-01**		Prepared 06/06/06 Analyzed 06/07/06						
Chloride	104	0 500	mg/kg	100	14 7	89.3	80-120			
Matrix Spike (EF60703-MS2)		**Source: 6F05013-05**		Prepared 06/06/06 Analyzed 06/07/06						
Chloride	ND	5.00	mg/kg	200	ND		80-120			

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Plains All American EH & S	Project	Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number	OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager	Daniel Bryant	06/07/06 16.45

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect
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 6/7/2006

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

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Plains
SITE MANAGER: Cindy Crain
PROJECT NO.: 5-0103
PROJECT NAME: Anadarko Penrose #1
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015m	PARAMETERS/METHOD NUMBER: Chlorides	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
6/6/06	1405		X		Spoil 8	1	X	X		126026024-01

SAMPLED BY: (Signature) DATE: 6/6/06 TIME: 1430
RELINQUISHED BY: (Signature) DATE: 6/6 TIME: 1648
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:
RECEIVED BY: (Signature) DATE: TIME:
SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:
TURNAROUND TIME NEEDED
* Rush * 24HRS

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 6/6/06 TIME: 1648

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:
3.0 4oz glass

LA CONTACT PERSON:

SAMPLE TYPE:

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

Client: Plains

Date/Time: 6/6/06 16:48

Order #: 606024

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	ID on jar
Container labels legible and intact?	Yes	No	→ U
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 accumented 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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F08016

Report Date: 06/09/06

Plains All American EH & S	Project	Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number	OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager	Daniel Bryant	06/09/06 16:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spoil 9	6F08016-01	Soil	06/08/06 14 05	06/08/06 16:45
Spoil 10	6F08016-02	Soil	06/08/06 14.10	06/08/06 16 45
Spoil 11	6F08016-03	Soil	06/08/06 14 16	06/08/06 16:45

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

Plains All American EH & S	Project. Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/09/06 16 29

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 9 (6F08016-01) Soil									
Carbon Ranges C6-C12	**103**	10 0	mg/kg dry	1	EF60924	06/09/06	06/09/06	EPA 8015M	
Carbon Ranges C12-C28	**978**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**136**	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1220**	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*98.8 %*	*70-130*		"	"	"	"	
Spoil 10 (6F08016-02) Soil									
Carbon Ranges C6-C12	**141**	10 0	mg/kg dry	1	EF60924	06/09/06	06/09/06	EPA 8015M	
Carbon Ranges C12-C28	**1480**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**264**	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1880**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	
Spoil 11 (6F08016-03) Soil									
Carbon Ranges C6-C12	**51.6**	10 0	mg/kg dry	1	EF60924	06/09/06	06/09/06	EPA 8015M	
Carbon Ranges C12-C28	**710**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**123**	10 0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**885**	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*90 8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.4 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/09/06 16 29

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 9 (6F08016-01) Soil									
% Moisture	**0.6**	0 1	%	1	EF60903	06/09/06	06/09/06	% calculation	
Spoil 10 (6F08016-02) Soil									
% Moisture	**0.5**	0 1	%	1	EF60903	06/09/06	06/09/06	% calculation	
Spoil 11 (6F08016-03) Soil									
% Moisture	**0.2**	0 1	%	1	EF60903	06/09/06	06/09/06	% 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 EF60924 - Solvent Extraction (GC)										
Blank (EF60924-BLK1)				Prepared & Analyzed 06/09/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate. 1-Chlorooctane	*52 5*		*mg/kg*	*50 0*		*105*	*70-130*			
Surrogate 1-Chlorooctadecane	*52 1*		*"*	*50 0*		*104*	*70-130*			
LCS (EF60924-BS1)				Prepared & Analyzed 06/09/06						
Carbon Ranges C6-C12	503	10 0	mg/kg wet	500		101	75-125			
Carbon Ranges C12-C28	505	10 0	"	500		101	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0.00			75-125			
Total Hydrocarbon nC6-nC35	1010	10 0	"	1000		101	75-125			
Surrogate 1-Chlorooctane	*53.3*		*mg/kg*	*50 0*		*107*	*70-130*			
Surrogate· 1-Chlorooctadecane	*49.1*		*"*	*50.0*		*98 2*	*70-130*			
Calibration Check (EF60924-CCV1)				Prepared & Analyzed. 06/09/06						
Carbon Ranges C6-C12	275		mg/kg	250		110	80-120			
Carbon Ranges C12-C28	298		"	250		119	80-120			
Total Hydrocarbon nC6-nC35	572		"	500		114	80-120			
Surrogate: 1-Chlorooctane	*48 5*		*"*	*50 0*		*97 0*	*70-130*			
Surrogate. 1-Chlorooctadecane	*46.0*		*"*	*50 0*		*92.0*	*70-130*			
Matrix Spike (EF60924-MS1)	**Source: 6F08005-01**			Prepared & Analyzed. 06/09/06						
Carbon Ranges C6-C12	577	10 0	mg/kg dry	554	ND	104	75-125			
Carbon Ranges C12-C28	587	10 0	"	554	ND	106	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbon nC6-nC35	1160	10 0	"	1110	ND	105	75-125			
Surrogate 1-Chlorooctane	*51.2*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate· 1-Chlorooctadecane	*48 3*		*"*	*50.0*		*96 6*	*70-130*			

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 EF60924 - Solvent Extraction (GC)										
Matrix Spike Dup (EF60924-MSD1)	**Source: 6F08005-01**			Prepared & Analyzed 06/09/06						
Carbon Ranges C6-C12	576	10 0	mg/kg dry	554	ND	104	75-125	0 173	20	
Carbon Ranges C12-C28	589	10 0	"	554	ND	106	75-125	0 340	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbon nC6-nC35	1170	10 0	"	1110	ND	105	75-125	0 858	20	
Surrogate: 1-Chlorooctane	*51 0*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.5*		*"*	*50 0*		*97 0*	*70-130*			

Plains All American EH & S	Project Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager Daniel Bryant	06/09/06 16 29

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 EF60903 - General Preparation (Prep)										
Blank (EF60903-BLK1)				Prepared 06/08/06 Analyzed 06/09/06						
% Moisture	ND	0 1	%							
Duplicate (EF60903-DUP1)		**Source: 6F07014-01**		Prepared 06/08/06 Analyzed 06/09/06						
% Solids	93 9		%		94 3			0 425	20	
Duplicate (EF60903-DUP2)		**Source: 6F07012-06**		Prepared 06/08/06 Analyzed 06/09/06						
% Solids	94 6		%		95 3			0 737	20	
Duplicate (EF60903-DUP3)		**Source: 6F07012-26**		Prepared: 06/08/06 Analyzed 06/09/06						
% Solids	96 7		%		96 6			0 103	20	
Duplicate (EF60903-DUP4)		**Source: 6F08005-01**		Prepared 06/08/06 Analyzed: 06/09/06						
% Solids	87 4		%		90 2			3.15	20	

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	**Reported:**
Midland TX, 79706-4476	Project Manager: Daniel Bryant	06/09/06 16 29

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: 6/9/2006

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.

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Plains

SITE MANAGER: Cindy Crain / MARK

PROJECT NO: 5-0103

PROJECT NAME: Anadarko Pearsall

PAGE 1 OF 1

LAB. PO #

PARAMETERS/METHOD NUMBER

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	TPH 8015m	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I E, FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
6/8/06	1405		X		Spoil 9	1	X	606080116-01	
↓	1410		↓		Spoil 10	↓	↓		-02
↓	1416		↓		Spoil 11	↓	↓		-03

SAMPLED BY: (Signature) DATE: 6/8/06 TIME: 1500

RELINQUISHED BY: (Signature) DATE: 6/8/06 TIME: 1645

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED
* Rush * 24HR

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 6/8/06 TIME: 16:45

SAMPLE CONDITION WHEN RECEIVED:
3.0 4oz glass no labels

LA CONTACT PERSON:

SAMPLE TYPE:

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

Client: Larson

Date/Time: 6/8/00 16:45

Order #: 1ET0806

Initials: CK

Sample Receipt Checklist

	Yes	No	
Temperature of container/cooler?			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	ID on jar
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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F15022

Report Date: 06/19/06

Plains All American EH & S	Project Anadarko Penrose #1	Fax. (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spoil 12	6F15022-01	Soil	06/14/06 06 15	06/15/06 16 38

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S. County Road 1150	Project Number OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 12 (6F15022-01) Soil									
Carbon Ranges C6-C12	**65.8**	10.0	mg/kg dry	1	EF61511	06/15/06	06/16/06	EPA 8015M	
Carbon Ranges C12-C28	**799**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**57.3**	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**922**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*128 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*126 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project. Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 12 (6F15022-01) Soil									
% Moisture	**0.4**	0.1	%	1	EF61710	06/16/06	06/17/06	% 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 EF61511 - Solvent Extraction (GC)										
Blank (EF61511-BLK1)				Prepared: 06/15/06 Analyzed 06/16/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbon nC6-nC35	ND	10.0	"							
Surrogate 1-Chlorooctane	*64.2*		*mg/kg*	*50.0*		*128*	*70-130*			
Surrogate 1-Chlorooctadecane	*64.1*		*"*	*50.0*		*128*	*70-130*			
LCS (EF61511-BS1)				Prepared 06/15/06 Analyzed 06/16/06						
Carbon Ranges C6-C12	515	10.0	mg/kg wet	500		103	75-125			
Carbon Ranges C12-C28	480	10.0	"	500		96.0	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbon nC6-nC35	995	10.0	"	1000		99.5	75-125			
Surrogate 1-Chlorooctane	*60.9*		*mg/kg*	*50.0*		*122*	*70-130*			
Surrogate 1-Chlorooctadecane	*57.0*		*"*	*50.0*		*114*	*70-130*			
Calibration Check (EF61511-CCV1)				Prepared 06/15/06 Analyzed 06/16/06						
Carbon Ranges C6-C12	211		mg/kg	250		84.4	80-120			
Carbon Ranges C12-C28	261		"	250		104	80-120			
Total Hydrocarbon nC6-nC35	472		"	500		94.4	80-120			
Surrogate 1-Chlorooctane	*61.8*		*"*	*50.0*		*124*	*70-130*			
Surrogate. 1-Chlorooctadecane	*58.5*		*"*	*50.0*		*117*	*70-130*			
Matrix Spike (EF61511-MS1)	**Source: 6F14016-01**			Prepared 06/15/06 Analyzed 06/16/06						
Carbon Ranges C6-C12	579	10.0	mg/kg dry	564	6.89	101	75-125			
Carbon Ranges C12-C28	574	10.0	"	564	46.9	93.5	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbon nC6-nC35	1150	10.0	"	1130	46.9	97.6	75-125			
Surrogate 1-Chlorooctane	*62.1*		*mg/kg*	*50.0*		*124*	*70-130*			
Surrogate 1-Chlorooctadecane	*54.1*		*"*	*50.0*		*108*	*70-130*			

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

Project: Anadarko Penrose #1
Project Number: OSI #01-01-04
Project Manager: Daniel Bryant

Fax (432) 687-4914

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 EF61511 - Solvent Extraction (GC)										
Matrix Spike Dup (EF61511-MSD1)	**Source: 6F14016-01**			Prepared 06/15/06 Analyzed 06/16/06						
Carbon Ranges C6-C12	599	10 0	mg/kg dry	564	6 89	105	75-125	3 40	20	
Carbon Ranges C12-C28	592	10.0	"	564	46 9	96 6	75-125	3 09	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbon nC6-nC35	1190	10 0	"	1130	46 9	101	75-125	3 42	20	
Surrogate 1-Chlorooctane	*64 1*		*mg/kg*	*50 0*		*128*	*70-130*			
Surrogate 1-Chlorooctadecane	*54 9*		"	*50.0*		*110*	*70-130*			

Plains All American EH & S	Project: Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	
Midland TX, 79706-4476	Project Manager: Daniel Bryant	

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 EF61710 - General Preparation (Prep)										
Blank (EF61710-BLK1)				Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	ND	0.1	%							
Duplicate (EF61710-DUP1)		**Source: 6F15019-01**		Prepared 06/16/06 Analyzed: 06/17/06						
% Moisture	0.2	0.1	%		0.3			40.0	20	S-08
Duplicate (EF61710-DUP2)		**Source: 6F15019-21**		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	0.9	0.1	%		1.2			28.6	20	S-08
Duplicate (EF61710-DUP3)		**Source: 6F15019-41**		Prepared 06/16/06 Analyzed: 06/17/06						
% Moisture	0.8	0.1	%		0.9			11.8	20	
Duplicate (EF61710-DUP4)		**Source: 6F15019-61**		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	8.8	0.1	%		9.4			6.59	20	
Duplicate (EF61710-DUP5)		**Source: 6F15021-05**		Prepared: 06/16/06 Analyzed: 06/17/06						
% Moisture	6.1	0.1	%		8.1			28.2	20	S-08
Duplicate (EF61710-DUP6)		**Source: 6F16008-01**		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	2.0	0.1	%		2.9			36.7	20	S-08
Duplicate (EF61710-DUP7)		**Source: 6F16010-01**		Prepared 06/16/06 Analyzed: 06/17/06						
% Moisture	1.1	0.1	%		1.1			0.00	20	

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Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

Notes and Definitions

S-08	Value outside Laboratory historical or method prescribed QC limits
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: 6/19/2006

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.

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: PLAINS
SITE MANAGER: MARK LARSON 556-8656
PROJECT NO.: 5-0103
PROJECT NAME: Anadarko Pennse #1
PAGE 1 OF 1
LAB, PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: 8015 TPH	LAB, I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB, COMPOSITE)
6/14	0615		X		Spoil 12	1	X	6F15022-01	RUSH 24HR

Add'l letter/no per BW

SAMPLED BY: (Signature) DATE: 6/14/06 TIME: 0630
RELINQUISHED BY: (Signature) DATE: 6/15/06 TIME: 1638
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:
RECEIVED BY: (Signature) DATE: TIME:
SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:
TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 6/15/06 TIME: 1638

SAMPLE CONDITION WHEN RECEIVED: 4oz glass 4.0
LA CONTACT PERSON:
SAMPLE TYPE:

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

ient. Plains

ate/Time: 10/15/06 16:38

rder #: 10F15022

itials: CK

Sample Receipt Checklist

emperature of container/cooler?	Yes	No	4.0 C
ipping container/cooler in good condition?	Yes	No	
ustody Seals intact on shipping container/cooler?	Yes	No	Not present
ustody Seals intact on sample bottles?	Yes	No	Not present
hain of custody present?	Yes	No	
ample Instructions complete on Chain of Custody?	Yes	No	
hain of Custody signed when relinquished and received?	Yes	No	
hain of custody agrees with sample label(s)	Yes	No	ID on jar
ontainer labels legible and intact?	Yes	No	
ample Matrix and properties same as on chain of custody?	Yes	No	
amples in proper container/bottle?	Yes	No	
amples properly preserved?	Yes	No	
ample bottles intact?	Yes	No	
reservations documented on Chain of Custody?	Yes	No	
ontainers documented on Chain of Custody?	Yes	No	
ufficient sample amount for indicated test?	Yes	No	
ll samples received within sufficient hold time?	Yes	No	
OC samples have zero headspace?	Yes	No	Not Applicable

)ther 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: Anadarko Penrose #1

Project Number: OSI #01-01-04

Location: None Given

Lab Order Number: 6F16013

Report Date: 06/19/06

Plains All American EH & S	Project Anadarko Penrose #1	Fax: (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	
Midland TX, 79706-4476	Project Manager. Daniel Bryant	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spoil 13	6F16013-01	Soil	06/16/06 13 10	06/16/06 16:03

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

Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number: OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 13 (6F16013-01) Soil									
Carbon Ranges C6-C12	**72.7**	20.0	mg/kg dry	2	EF61713	06/17/06	06/18/06	EPA 8015M	
Carbon Ranges C12-C28	**847**	20.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**83.4**	20.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	**1000**	20.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*57.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*64.8 %*	*70-130*		"	"	"	"	*S-06*

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

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04	
Midland TX, 79706-4476	Project Manager Daniel Bryant	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 13 (6F16013-01) Soil									
% Moisture	**ND**	0.1	%	1	EF61710	06/16/06	06/17/06	% calculation	

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

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

Project Anadarko Penrose #1
Project Number. OSI #01-01-04
Project Manager Daniel Bryant

Fax (432) 687-4914

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 EF61713 - Solvent Extraction (GC)										
Blank (EF61713-BLK1)				Prepared 06/17/06 Analyzed 06/18/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate. 1-Chlorooctane	*75 0*		*mg/kg*	*100*		*75 0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*75.0*		*"*	*100*		*75 0*	*70-130*			
LCS (EF61713-BS1)				Prepared. 06/17/06 Analyzed: 06/18/06						
Carbon Ranges C6-C12	566	10 0	mg/kg wet	500		113	75-125			
Carbon Ranges C12-C28	553	10 0	"	500		111	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0.00			75-125			
Total Hydrocarbon nC6-nC35	1120	10 0	"	1000		112	75-125			
Surrogate 1-Chlorooctane	*62 5*		*mg/kg*	*50 0*		*125*	*70-130*			
Surrogate. 1-Chlorooctadecane	*63 8*		*"*	*50 0*		*128*	*70-130*			
Calibration Check (EF61713-CCV1)				Prepared 06/17/06 Analyzed 06/18/06						
Carbon Ranges C6-C12	249		mg/kg	250		99 6	80-120			
Carbon Ranges C12-C28	291		"	250		116	80-120			
Total Hydrocarbon nC6-nC35	540		"	500		108	80-120			
Surrogate: 1-Chlorooctane	*63 6*		*"*	*50 0*		*127*	*70-130*			
Surrogate. 1-Chlorooctadecane	*63.0*		*"*	*50 0*		*126*	*70-130*			
Matrix Spike (EF61713-MS1)	**Source: 6F16012-01**			Prepared: 06/17/06 Analyzed 06/18/06						
Carbon Ranges C6-C12	466	10 0	mg/kg dry	502	ND	92 8	75-125			
Carbon Ranges C12-C28	578	10 0	"	502	188	77.7	75-125			
Carbon Ranges C28-C35	103	10 0	"	0.00	125		75-125			
Total Hydrocarbon nC6-nC35	1150	10.0	"	1000	313	83 7	75-125			
Surrogate. 1-Chlorooctane	*64.2*		*mg/kg*	*50 0*		*128*	*70-130*			
Surrogate. 1-Chlorooctadecane	*63 6*		*"*	*50 0*		*127*	*70-130*			

Plains All American EH & S	Project Anadarko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	
Midland TX, 79706-4476	Project Manager. Daniel Bryant	

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 EF61713 - Solvent Extraction (GC)										
Matrix Spike Dup (EF61713-MSD1)	**Source: 6F16012-01**			Prepared. 06/17/06 Analyzed 06/18/06						
Carbon Ranges C6-C12	469	10 0	mg/kg dry	502	ND	93 4	75-125	0 642	20	
Carbon Ranges C12-C28	589	10 0	"	502	188	79 9	75-125	1 89	20	
Carbon Ranges C28-C35	108	10 0	"	0 00	125		75-125	4 74	20	
Total Hydrocarbon nC6-nC35	1170	10 0	"	1000	313	85 7	75-125	1 72	20	
Surrogate· 1-Chlorooctane	*63 5*		*mg/kg*	*50 0*		*127*	*70-130*			
Surrogate. 1-Chlorooctadecane	*61 3*		"	*50 0*		*123*	*70-130*			

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Plains All American EH & S	Project: Anadarko Penrose #1	Fax (432) 687-4914
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Midland TX, 79706-4476	Project Manager: Daniel Bryant	

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 EF61710 - General Preparation (Prep)										
Blank (EF61710-BLK1)				Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	ND	0.1	%							
Duplicate (EF61710-DUP1)		Source: 6F15019-01		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	0.2	0.1	%		0.3			40.0	20	S-08
Duplicate (EF61710-DUP2)		Source: 6F15019-21		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	0.9	0.1	%		1.2			28.6	20	S-08
Duplicate (EF61710-DUP3)		Source: 6F15019-41		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	0.8	0.1	%		0.9			11.8	20	
Duplicate (EF61710-DUP4)		Source: 6F15019-61		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	8.8	0.1	%		9.4			6.59	20	
Duplicate (EF61710-DUP5)		Source: 6F15021-05		Prepared 06/16/06 Analyzed. 06/17/06						
% Moisture	6.1	0.1	%		8.1			28.2	20	S-08
Duplicate (EF61710-DUP6)		Source: 6F16008-01		Prepared. 06/16/06 Analyzed 06/17/06						
% Moisture	2.0	0.1	%		2.9			36.7	20	S-08
Duplicate (EF61710-DUP7)		Source: 6F16010-01		Prepared 06/16/06 Analyzed 06/17/06						
% Moisture	1.1	0.1	%		1.1			0.00	20	

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Notes and Definitions

S-08	Value outside Laboratory historical or method prescribed QC limits
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
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: 6/19/2006

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

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: MARK LARSON
Company Name: LARSON & ASSOC.
Company Address:
City/State/Zip: Midland, TX
Telephone No: 687-0901 Fax No:
Sampler Signature:
Email:

Project Name: Anadarko Penrose #1
Project #: 5-0103
Project Loc:
PO #: PLAINS

UF1603

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TCLP TOTAL: 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	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M						RUSH TAT (Pre-Schedule) 24 HR	Standard TAT
-9	Spoil 13	6/16/06	1310	1	X											X															X	

Special Instructions:

Sample Containers Intact? Y N
Labels on container? Y N
Custody Seals: Containers / Cooler
Temperature Upon Receipt. 3.0

Laboratory Comments: 4oz glass

Relinquished by:	Date	Time	Received by:	Date	Time
	6/16	1603			
Relinquished by	Date	Time	Received by ELOT:	Date	Time
			Cecil Cole	6/16/06	16:03

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

Client: Plains

Date/Time: 6/16/06 16:08

Order #: 6F1608

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	1 Don jar
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 Apolicable

Other observations:

_____

_____

_____

Variance Documentation:

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

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____