

July 15, 2006

#### VIA EMAIL: <u>dmbryant@paalp.com</u>

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



#### 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

Mr. Daniel Bryant July 15, 2006 Page 2

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	<b>Ranking Score</b>		
Depth-to-Groundwater	50 – 100 feet	10		
Wellhead Protection Area	No	0		
Distance to Surface Water	>1000 Horizontal Feet	0		
Body				
	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.

Mr. Daniel Bryant July 15, 2006 Page 3

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 <u>mark@laenvironmental.com</u> 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 SamplesPlains All American Pipeline, L.P., Langlie Mattix Penrose Unit ("LMPSU") Pipeline PumpUL-P, Section 29, Township 22 South, Range 37 East

Lea County, New Mexico

Page 1 of 1

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
<b>SS-7</b>	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

	UL-P, Se	ction 29, To	wnship 22	South, Ra	ange 37 Ea	ast, Lea Co	ounty, Nev	v Mexico	Р	age 1 of 1
					Total		DRO	DRO		
Sample	Spoil	Sample	PID	Benzene	BTEX	GRO	>C12-	>C28-	TPH	
Number	Pile	Date	(ppm)	(mg/kg)	(mg/kg)	C6-C12	C28	C35	C6-C35	Chloride
						(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(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	

 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 Fast Lea County New Mexico

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





# 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										
1301 S County Road 1150		Project N	umber OSI	#01-01-04	ţ			Report	Reported:			
Midland TX, 79706-4476		Project M	anager Dan	uel Bryant				06/06/06	12 07			
		O	ganics b	y GC								
		Environ	mental La	ab of Te	exas							
Analuta	Result	Reporting	Unite	D'1	D ( 1			Malad	Net			
SS-1 (6F30006-01) Soil				Dilution	Batch	Prepared	Analyzed	Method	INOTE			
Gerlan Berrer CC C12		10.0			556110		0.6.101.10.6	CDA 901614				
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF60112	06/01/06	06/01/06	EPA 8015M				
Carbon Kanges C12-C28	ND	10.0			-	~	-					
Carbon Ranges C28-C35	ND	100				"	и					
Total Hydrocarbon nC6-nC35	ND	10 0				"	н					
Surrogate: 1-Chlorooctane		85.4 %	70-1	30	"	н	"	"				
Surrogate: 1-Chlorooctadecane		80.6 %	70-1	30	"	H	"	"				
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	н				"					
Carbon Ranges C28-C35	ND	10 0						"				
Total Hydrocarbon nC6-nC35	14.6	10 0		"	"	"	"					
Surrogate: 1-Chlorooctane		84.2 %	70-1	30	"	"	"	"				
Surrogate: 1-Chlorooctadecane		806%	70-1	30	"	"	"	"				
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	*	"		"		н				
Ethylbenzene	0.195	0 0250	*									
Xylene (p/m)	0.700	0 0250	"	"		Ħ						
Xylene (o)	0.263	0 0250	*									
Surrogate: a,a,a-Trifluorotoluene		84.0 %	80-1	20	"	и	"	"				
Surrogate: 4-Bromofluorobenzene		148 %	80-1	20	"	"	"	"	S-			
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		"		н						
Total Hydrocarbon nC6-nC35	1700	10.0	"	"		"		"				
Surrogate: 1-Chlorooctane		94.6 %	70-1	30	"	"	"	п				
Surrogate: 1-Chlorooctadecane		94.8 %	70-1	30	"	"	"	"				

Environmental Lab of Texas

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

1301 S County Road 1150 Project Number. USI #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	Units	Dilution	Patch	Preparad	Analyzed	Method	Notes
Spoil 2 (6E30006-04) Soil		Calify			Daten	Prepared	Analyzed	Method	INDIES
Benzene	ND	0 0250	mg/kg dry	25	EF60302	06/03/06	06/05/06	EPA 8021B	<u></u>
Toluene	0.0832	0.0250	"	"	н	"	"	"	
Ethylbenzene	0.211	0 0250	H	"	"	"		11	
Xylene (p/m)	0.829	0 0250			"	*			
Xylene (0)	0.269	0 0250	"	"	н		"	*	
Surrogate: a,a,a-Trifluorotoluene		97.2 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		147 %	80-1	20	"	"	"	"	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		н	н	"		*	
Carbon Ranges C28-C35	234	10.0	"	н	"	-		*	
Total Hydrocarbon nC6-nC35	2820	10.0	•			"		"	
Surrogate: 1-Chlorooctane		102 %	70-1	30	"	"		"	
Surrogate. 1-Chlorooctadecane		106 %	70-1	30	"	"	n	"	

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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

		Environn							
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	01	%	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	01	%	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	%	i	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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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

#### Organics by GC - Quality Control

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

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF60112 - Solvent Extraction (GC)										
Blank (EF60112-BLK1)				Prepared (	06/01/06 A	Analyzed <sup>.</sup> 0	6/02/06			
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 · I-Chlorooctadecane	43 5		"	50 0		87.0	70-130			
LCS (EF60112-BS1)				Prepared.	06/01/06 A	Analyzed 0	6/02/06			
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	н	1000		111	75-125			
Surrogate: 1-Chlorooctane	530		mg/kg	50.0		106	70-130			
Surrogate. 1-Chlorooctadecane	44 6		"	50.0		<i>89 2</i>	70-130			
Calibration Check (EF60112-CCV1)				Prepared (	06/01/06 A	Analyzed: 0	6/02/06			
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)	Sou	ırce: 6E30006	-01	Prepared (	06/01/06 A	Analyzed 0	6/02/06			
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	593		mg/kg	50 0		119	70-130			
Summorate I Chlorocostadaoana	479		"	50.0		05.8	70.130			

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Plains All American EH & S		P	roject Ana	darko Penro	ose #1				Fax (432)	687-4914
1301 S County Road 1150		Project N	umber: OS	#01-01-04					Repo	rted:
Midland TX, 79706-4476		Project Ma	nager Dar	nel Bryant					06/06/0	6 12 07
	Or	ganics by	GC-Q	uality Co	ontrol					
		Environr	nental L	ab of Te	xas					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Lunit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF60112 - Solvent Extraction (GC)	I									
Matrix Spike Dup (EF60112-MSD1)	Sour	ce: 6E30006	-01	Prepared (	06/01/06 A	nalyzed 06	5/02/06			
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		п	50 0		95.0	70-130			
Batch EF60302 - EPA 5030C (GC)										
Blank (EF60302-BLK1)				Prepared (	06/03/06 A	nalyzed 06	5/05/06			
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	368		ug/kg	40.0		920	80-120			
Surrogate. 4-Bromofluorobenzene	369		"	40 0		92 2	80-120			
LCS (EF60302-BS1)				Prepared.	06/03/06 A	nalyzed 06	5/05/06			
Benzene	1 05	0 0250	mg/kg wet	1 25		84 0	80-120			
Toluene	1 02	0 0250	"	1 25		816	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		968	80-120			
Surrogate. 4-Bromofluorobenzene	40.1		"	40.0		100	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	06/06/06 12 07

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

**Environmental Lab of Texas** 

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

Batch EF60302 - EPA 5030C (GC)

Calibration Check (EF60302-CCV1)				Prepared (	)6/03/06 A	nalyzed 00	5/06/06			
Benzene	40 8		ug/kg	50 0		816	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		н	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)	Sour	ce: 6E31001	1-01	Prepared (	)6/03/06 A	nalyzed. 00	6/05/06			
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	۳	1 28	ND	99.2	80-120			
Xylene (p/m)	2 18	0 0250	•	2.55	ND	85 5	80-120			
Xylene (0)	1.06	0 0250		1.28	ND	82 8	80-120			
Surrogate a,a,a-Trifluorotoluene	38 0		ug/kg	40.0		950	80-120			
Surrogate: 4-Bromofluorobenzene	45 4		"	40 0		114	80-120			
Matrix Spike Dup (EF60302-MSD1)	Sour	ce: 6E31001	1-01	Prepared (	)6/03/06 A	nalyzed 0	6/05/06			
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	898	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	408		"	40 0		102	80-120			

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Plains All American EH & S		Pr	roject: Ar	nadarko Penro	ose #1				Fax (432) 687-49		
1301 S County Road 1150		Project Nu	mber OS	5I #01-01-04					Reported:		
Midland TX, 79706-4476		Project Mai	nager Da	anıel Bryant					06/06/0	6 12 07	
General	Chemistry Para	meters by	EPA /	Standard	l Methoo	ls - Qua	lity Con	trol			
		Environm	nental I	Lab of Te	xas						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EE63102 - General Preparation	ı (Prep)										
Blank (EE63102-BLK1)				Prepared (	05/30/06 A	nalyzed 05	5/31/06				
% Solids	100		%								
Duplicate (EE63102-DUP1)	Sou	rce: 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 &	2 Analyzed	05/31/06					
Chloride	ND	0.500	mg/kg								
LCS (EE63107-BS1)				Prepared &	k Analyzed	05/31/06					
Chloride	10.0	0 500	mg/kg	10.0		100	80-120				
Calibration Check (EE63107-CCV1)				Prepared &	a Analyzed	05/31/06					
Chloride	10 1		mg/L	10.0		101	80-120				
Duplicate (EE63107-DUP1)	Sou	rce: 6E26015-	-01	Prepared &	k Analyzed	05/31/06					
Chloride	320	10 0	mg/kg		304			5 13	20		
Duplicate (EE63107-DUP2)	Sou	rce: 6E30005-	-01	Prepared &	k Analyzed	05/31/06					
Chloride	672	10.0	mg/kg		659			1 95	20		
Matrix Spike (EE63107-MS1)	Sou	rce: 6E26015-	-01	Prepared &	a Analyzed	05/31/06					
Chloride	573	10 0	mg/kg	200	304	134	80-120			S-0	
Matrix Spike (EE63107-MS2)	Sou	rce: 6E30005-	-01	Prepared &	Analyzed:	05/31/06					
Chloride	845	10 0	mg/kg	200	659	93 0	80-120				

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	SITE MANAGER:		P/	RAMET	RS/ME		R CHA	IN-OF-CUSTODY R
$\frac{PROJECT NO.:}{5-0103}$ PAGE 1 OF 1	Cindy Crain PROJECT NAME: Anadarko Penrose#1	F CONTAINERS	BUISM	x ades				arson & Fax: 432-687- isociates, Inc. Fax: 432-687- 432-687- I. Marienfeid, Ste. 202 • Midland,
11 11 12 12 12 12 12 12 12 12 12 12 12 1	SAMPLE IDENTIFICATION	- NUMBER OI	HOLY	BTE LL			LAB. NUMI (LAB USE	I.D. REMARKS BER (I.E., FILTERED, UNFILTERE PRESERVED, UNFILTERE ONLY) GRAB COMPOSITE
1245 1245	x 55-2 55-2 5peil 1 5peil 2							02 02 04
SAMRIED BX (Signat) rel	DATE: 5130/06 RELINQUIST		( <u>Fignat</u>	ure)		DATE: <u>5730/</u> TIME: <u>1635</u>	RECEIVED B	Y: (Signature) DA TIM
RELINQUISHED BY: (Signatu	Implication         DATE:         RECEIVED B           TIME:         TIME:         TIME:	1: (Signo	ature)	-f TI	RNAROLI		_ SAMPLE SHI _ FEDEX <	IPPED BY: (Circle) BUS AIRBILL #: 7ERED UPS OTHER:
RECEIVING LABORATORY: _ ADDRESS: CITY: CONTACT:	bill Plains Daniel 	RECEIVE	уаг р ву: ( 2/30)	Signature			WHITE - F YELLOW - F I PINK - F GOLD - 0	RECEIVING LAB RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT) PROJECT MANAGER QA/QC COORDINATOR
SAMPLE CONDITION WHEN RECEIV	ED:	LAC	ONTAC	T PERSON			SAMPLE TYP	PE:

-T- 250-10151

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

lient:	Larson/Plains
late/Time:	5/30/010 4.35
)rder #:	4E2006
hitials.	ck

#### Sample Receipt Checklist

emperature of container/cooler?	Yes	No	6.0 C
hipping container/cooler in good condition?	VES	No	
ustody Seals intact on shipping container/cooler?	Yes	Na	Not present
Justody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Tes	No	
ample Instructions complete on Chain of Custody?	SER !	No	
chain of Custody signed when relinquished and received?	18	No	
hain of custody agrees with sample label(s)	(BS)	No	ED ON WILL
Container labels legible and intact?	Yes	No	
ample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	1800	No	· · ·
Eamples properly preserved?	(Jes:	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	83	No	]
Containers documented on Chain of Custody?	TES	No No	
Sufficient sample amount for indicated test?	VES	No	
All samples received within sufficient hold time?	(as)	No	
/OC samples have zero headspace?	1 MES	No	Nct Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		
·		



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# Analytical Report

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

Project: 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
1	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

تحرب المراجع

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 <sup>.</sup> 07	06/02/06 09 45

Page 1 of 12

Plains All American EH & S		Project Anadarko Penrose #1						Fax: (432)	Fax <sup>-</sup> (432) 687-4914		
1301 § County Road 1150		Project N	umber. OSI	#01-01-04				Repor	ted:		
Midland TX, 79706-4476		Project Manager. Daniel Bryant							06/05/06 14 12		
		O	ganics by	GC							
,		Environ	mental La	ab of Te	xas						
	D 1.	Reporting									
	Kesult	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
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	"	"	u	**	"	**			
Carbon Ranges C28-C35	ND	10 0	11	"	۳	"	м				
Total Hydrocarbon nC6-nC35	42.5	10 0		"	11	"	n	и			
Surrogate. 1-Chlorooctane		101 %	70-13	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		95.6 %	70-1.	30	"	"	"	11			
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				-		м			
Total Hydrocarbon nC6-nC35	ND	10.0	"		"	"	*	*			
Surrogate: 1-Chlorooctane		85.2 %	70-1.	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		79.6 %	70-13	30	"	"	"	11			
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	"	"	"	и	**	**			
Carbon Ranges C28-C35	ND	10.0	۳	••	"	м	*				
Total Hydrocarbon nC6-nC35	ND	10 0	"	*		"	н	n			
Surrogate: 1-Chlorooctane		97.2 %	70-1.	30	H	"	"	"			
Surrogate. 1-Chlorooctadecane		88.4 %	70-1.	30	"	"	"	"			
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	n		"	"	"				
Carbon Ranges C28-C35	332	10.0	н ,		"	м	"	*			
Total Hydrocarbon nC6-nC35	3410	10 0	"	"		"	"	r			
Surrogate: 1-Chlorooctane		102 %	70-1.	30	"	"	"	"			
Surrogate: 1-Chlorooctadecane		126 %	70-1.	30	"	"	"	"			

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Plains All American EH & S 1301 S County Road 1150		I Project N	Project. Ana umber OSI	darko Penr #01-01-04	rose #1			Fax (432) Repo	Fax (432) 687-4914 <b>Reported:</b>	
Midland TX, 79706-4476		Project M	anager Dan	iel Bryant				06/05/06	5 14.12	
		Oı	ganics by	GC						
		Environ	mental La	ab of Te	exas					
Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
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	"		"	"	٣	м		
Carbon Ranges C28-C35	ND	10 0	"	۳.	н	"	м			
Total Hydrocarbon nC6-nC35	48.3	10.0	"		"	"	*	*		
Surrogate: 1-Chlorooctane	<u> </u>	85.0 %	70-1.	30	"	"	"	"		
Surrogate: 1-Chlorooctadecane		72.8 %	70-1.	30	"	"	"	"		
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 %	70-1.	30	"	"	"	"	A. A	
Surrogate: 1-Chlorooctadecane		71.6 %	70-1.	30	"	"	n	"		
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	"	**	н		"			
Carbon Ranges C28-C35	83.9	10.0	"	"	"	n	H	*		
Total Hydrocarbon nC6-nC35	1480	10 0	"	"	*	"		п		
Surrogate: 1-Chlorooctane		89.8 %	70-1.	30	"	"	"	"		
Surrogate: 1-Chlorooctadecane		88.2 %	70-1.	30	"	"	"	"		
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	"			"	n	11		
Carbon Ranges C28-C35	ND	10.0	"	"		**				
Total Hydrocarbon nC6-nC35	212	10 0	"	"	н	"	и			
Surrogate: 1-Chlorooctane		98.0 %	70-1.	30	"	"	"	n		
Surrogate. 1-Chlorooctadecane		88.8 %	70-1	30	"	#	"	"		

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

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

· · · · · · · · · · · · · · · · · · ·									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-3 (6F02008-01) Soil				L/IIUU0II			Anaryzeu		
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	01	%	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	01	%	1	EF60502	06/02/06	06/06/06	% calculation	

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

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# ProjectAnadarko Penrose #1Project NumberOSI #01-01-04Project ManagerDaniel Bryant

#### 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	"		н	IT	"		ſ
Ethylbenzene	30.4	25 0	*	"		"	**	**	
Xylene (p/m)	264	25 0	"	"	"	*		Π	
Xylene (0)	836	25 0	ŧr	"	н	17	"	u	
Surrogate: Dibromofluoromethane		115 %	68-1	29	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		88.0 %	72-1	32	"	"	"	"	
Surrogate: Toluene-d8		82.8 %	74-I	18	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.4 %	65-1	40	"	"	"	"	
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	n	-			*	**	
Ethylbenzene	44.5	25 0	w	"	**	"		**	
Xylene (p/m)	464	25.0	"			*			
Xylene (o)	1230	25.0	н		"	"	π		
Surrogate. Dibromofluoromethane		111%	68-1	29	n	"	n –	· ·/	
Surrogate: 1,2-Dichloroethane-d4		84.4 %	72-1	32	"	"	"	"	
Surrogate: Toluene-d8		86.4 %	74-1	18	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.4 %	65-1	40	"	"	"	"	

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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

#### **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 A	nalyzed. 0	6/05/06			
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		908	70-130			
Surrogate 1-Chlorooctadecane	465		"	50 0		930	70-130			
LCS (EF60219-BS1)				Prepared (	06/02/06 A	nalyzed 0	6/05/06			
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 A	nalyzed 0	6/05/06			
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)	Sou	urce: 6F02008	8-01	Prepared	06/02/06 A	nalyzed (	6/05/06			
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			

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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

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

**Environmental Lab of Texas** 

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

#### Batch EF60219 - Solvent Extraction (GC)

Matrix Spike Dup (EF60219-MSD1)	Source	e: 6F02008	6-01	Prepared 0	6/02/06 A	nalyzed 0	5/05/06		
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			500		928	70-130		

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

Plains All American EH & S		Pr	oject Ar	nadarko Penro	ose #1				Fax. (432)	687-4914
1301 S County Road 1150		Project Nu	mber. OS	SI #01-01-04					Repo	rted:
Midland TX, 79706-4476		Project Mai	nager. Da	niel Bryant					06/05/0	6 14 12
General Chemis	stry Para	meters by	EPA /	Standard	Method	ls - Qua	lity Con	trol		
······		Environm	ental I	lab of Tex	kas					·
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)	Sou	rce: 6F01018-	01	Prepared &	Analyzed	02/03/06				
Chloride	3500	50 0	mg/kg		3620			3.37	20	
Duplicate (EF60307-DUP2)	Sou	rce: 6F01016-	03	Prepared & Analyzed 02/03/06						
Chloride	2120	50.0	mg/kg		2050			3 36	20	
Matrix Spike (EF60307-MS1)	Sou	rce: 6F01018-	01	Prepared &	. Analyzed	02/03/06				
Chioride	4960	50 0	mg/kg	1000	3620	134	80-120			S-0
Matrix Spike (EF60307-MS2)	Sou	rce: 6F01016-	03	Prepared &	Analyzed.	02/03/06	21			
Chloride	3270	50.0	mg/kg	1000	2050	122	80-120			S-0
Batch EF60502 - General Preparation (Prep)										
Duplicate (EF60502-DUP1)	Sou	irce: 6F02008-	01	Prepared (	)6/02/06 A	nalyzed 06	5/06/06			
% Solids	73 2		%		718			1 93	20	
Duplicate (EF60502-DUP2)	Sou	rce: 6F02010-	01	Prepared 0	Prepared 06/02/06 Analyzed 06/06/06					
% Solids	98 8		%	`	98 7			0 101	20	

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ns All American EH & S	Project	Anadarko Penrose #1	Fax (432) 687-4914
1 S. County Road 1150	Project Number	OSI #01-01-04	Reported:
lland 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

Batch EF60502 - General Preparation (Prep)										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Dupineute (DI COCCE DOI D)	Source. or or or or or		riepared 00/02/00 milaryzed 00/00/00			
% Solids	99 9	%	99 9	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	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 Lunits	RPD	RPD Limit	Notes
Batch EF60303 - EPA 5030C (GCMS)										
Blank (EF60303-BLK1)				Prepared (	06/02/06 A	nalyzed 06	5/03/06			
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	"	500	107	72-132	
Surrogate <sup>•</sup> Toluene-d8	49 9	п	50.0	99 <i>8</i>	74-118	
Surrogate 4-Bromofluorobenzene	42 0	"	50 0	840	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	2/06 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	416		н	50 0	83 2	72-132	
Surrogate Toluene-d8	45 1		"	50 0	90 2 ·	74-118	

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Surrogate 4-Bromofluorobenzene

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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**

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

#### Batch EF60303 - EPA 5030C (GCMS)

Matrix Spike (EF60303-MS1)	Se	ource: 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 (0)	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		**	500		82.2	65-140			
Matrix Spike Dup (EF60303-MSD1)	Se	ource: 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 (0)	701	25 0	"	667	ND	105	80-120	1 89	20	
Surrogate Dibromofluoromethane	454		ug/kg	50.0		908	68-129			
Surrogate 1,2-Dichloroethane-d4	413		"	50 0		826	72-132			
Surrogate: Toluene-d8	428		"	50.0		85.6	74-118			
Surrogate · 4-Bromofluorobenzene	40 1		"	50.0		80 2	65-140			

Environmental Lab of Texas

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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

Raland K Julis

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.

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Environmental Lab of Texas

Report Approved By:

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

CLIENT	IAME:				SITE MANAGER:			F	ARA	WETERS	S/MET	HOD	NUMBE	R	CHAIN-	-OF	CUSTODY	
	Plain	5			Lindy Cra	in				2		TT			1			
PROJECT	NO.:				PROJECT NAME:	0	ERS	2	4	Re						1 & 🛤		
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PAGE	/ OF	1		LAB.	PO #		- O	80	190	2002					507 N. Mar	ienfeld, Ste. 202 • Midland		
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## Environmental Läb of Texas Variance / Corrective Action Report – Sample Log-In

Client	Plains
Date/Time:	le/2/02 . 9:45
Order #:	10F02008
Initials.	

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#### Sample Receipt Checklist

Variance Documentation: ----

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Temperature of container/cooler?	Yes	No	4.5 C
Shipping container/cooler in good condition?	XED	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?	XES	No	1
Sample Instructions complete on Chain of Custody?	To	No	1
Chain of Custody signed when relinquished and received?	(Tes	No	
Chain of custody agrees with sample label(s)	XES	No	
Container labels legible and intact?	Xaş	No	
Sample Matrix and properties same as on chain of custody?	Hes	No	
Samples in proper container/bottle?	1 Xeş	No	
Samples properly preserved?	1 Kes	I No	1
Sample bottles intact?	Kes	No	
Preservations documented on Chain of Custody?	1 Ass	No No	
Containers documented on Chain of Custody?	Fes	I No	
Sufficient sample amount for indicated test?	¥ 23	No	
All samples received within sufficient hold time?	YES	No	
VOC samples have zero headspace?	Yes	No	Not Apolicable

Other observations:

Centact Person:	Date/Time:	Contacted by:
Regarding:		
Corrective Action Taken:		



## 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
1	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 1301 S County Road 1150 Midland TX, 79706-4476		I Project N Project M	Project Ana umber OSI anager Dan	darko Penn #01-01-04 iel Bryant	rose #1			Fax (432) 6 Report 06/07/06	87-4914 ed: 14 04
		Or	ganics by	GC					
		Environ	nental La	ab of Te	exas				
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	"	"	"	-	"	10	
Total Hydrocarbon nC6-nC35	944	20.0	"	**			п	n	
Surrogate · 1-Chlorooctane		47.2 %	70-130		"	"	"	"	S-00
Surrogate: 1-Chlorooctadecane		53.2 %	70-130		"	"	"	"	S-0
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	۳	"	*	"	•	*	
Carbon Ranges C28-C35	340	20 0	"	"	"	"		*	
Total Hydrocarbon nC6-nC35	2080	20 0	"					"	
Surrogate: 1-Chlorooctane		49.4 %	70-1	30	"	"	n	"	S-0
Surrogate: 1-Chlorooctadecane		57.4 %	70-1	70-130		"	"	"	S-0
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		"	"	17	*		
Surrogate: 1-Chlorooctane		50.0 %	70-1	30	"	"	"	"	S-0
Surrogate · 1-Chlorooctadecane		57.4%	70-1	30	"	"	"	"	S-0

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#### Project Anadarko Penrose #1 Project Number. OSI #01-01-04 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 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	01	%	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	01	%	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	s All American EH & S Project Anadarko Penrose #1								Fax (432) 687-4914			
1301 S. County Road 1150 Mıdland TX, 79706-4476	S. County Road 1150 Project Number OSI #01-01-04 and TX, 79706-4476 Project Manager Daniel Bryant									<b>Reported:</b> 06/07/06 14.04		
			~ ~ ~					- <u></u>				
	0	rganics by	GC - Q	uality Co	ontrol							
		Environn	nental L	ab of Te	kas							
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	н									
Total Hydrocarbon nC6-nC35	ND	10.0	**									
Surrogate 1-Chlorooctane	508		mg/kg	50 0		102	70-130					
Surrogate 1-Chlorooctadecane	55.6		"	50 0		111	70-130					
LCS (EF60610-BS1)				Prepared &	z 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		**	500		108	70-130					
Calibration Check (EF60610-CCV1)				Prepared (	06/06/06 A	nalyzed 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	573		"	50 0		115	70-130					
Matrix Spike (EF60610-MS1)	Sou	ırce: 6F06004	-01	Prepared &	2 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	м	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 <sup>-</sup> (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)	Sour	ce: 6F06004-	01	Prepared 8	k 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			

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70-130

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Surrogate 1-Chlorooctadecane

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Plains All American EH & S		Pr	olect Ar	nadarko Penro	ose #1				Fax (432)	687-4914
1301 S County Road 1150	Project Number. OSI #01-01-04							Repo	rted:	
Midland TX, 79706-4476		Project Mai	nager Da	iniel Bryant					06/07/0	6 14 04
General Chemis	try Para	meters by	EPA /	Standard	Metho	is - Qua	lity Con	trol		
		Environm	ental I	Lab of Te	xas					
		Reporting		Spike	Source	A/DEC	%REC	555	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF60702 - Water Extraction										
Blank (EF60702-BLK1)				Prepared 8	2 Analyzed	06/06/06				
Chloride	ND	0 500	mg/kg							
LCS (EF60702-BS1)				Prepared 8	Analyzed	06/06/06				
Chloride	10 5	0 500	mg/kg	10 0		105	80-120			
Calibration Check (EF60702-CCV1)				Prepared 8	c Analyzed	06/06/06				
Chloride	10 8		mg/L	10.0		108	80-120			
Duplicate (EF60702-DUP1)	Sou	rce: 6F06006-	02	Prepared &	z Analyzed	06/06/06				
Chloride	4280	50.0	mg/kg		4270			0 234	20	
Duplicate (EF60702-DUP2)	Sou	rce: 6F06006-	12	Prepared 8	Analyzed	06/07/06				
Chloride	11300	200	mg/kg		11300			0 00	20	
Matrix Spike (EF60702-MS1)	Sou	rce: 6F06006-	02	Prepared 8	Analyzed	06/06/06				
Chloride	5330	50.0	mg/kg	1000	4270	106	80-120			······
Matrix Spike (EF60702-MS2)	Sou	rce: 6F06006-	12	Prepared 8	z Analyzed	06/07/06				
Chloride	17000	200	mg/kg	5000	11300	114	80-120			
Batch EF60709 - General Preparation (Prep)										
Blank (EF60709-BLK1)				Prepared (	)6/06/06 A	nalyzed. 06	5/07/06			
% Solids	100		%							
Duplicate (EF60709-DUP1)	Sou	rce: 6F05012-	01	Prepared (	)6/06/06 A	nalyzed 06	5/07/06			
% Solids	98 9		%		98 8			0 101	20	

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Environmental Lab of Texas

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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 - Quality Control

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Lumit	Notes
Batch EF60709 - General Preparation (Prep)										
Duplicate (EF60709-DUP2)	Sour	ce: 6F06004-0	2	Prepared 0	6/06/06 A	nalyzed 06	/07/06			
% Solids	97 9		%		98 9			1 02	20	
Duplicate (EF60709-DUP3)	Sour	ce: 6F06007-0	1	Prepared 0	6/06/06 A	nalyzed 06	/07/06			
% Solids	94 8		%		95 4			0 631	20	
Duplicate (EF60709-DUP4)	Sour	ce: 6F06015-0	7	Prepared 0	6/06/06 A	nalyzed 06	/07/06			
% Solids	83 6		%		86 2			3 06	20	

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Plains All American EH & S1301 S County Road 1150Midland TX, 79706-4476Project N			Project Anadarko Penrose #1 Project Number OSI #01-01-04 Project Manager: Daniel Bryant					
L		Notes and De	finitions					
S-06	The recovery of this surrogate is outside control lin matrix interference's	nts due to sample di	lution required from high analyte concentration and/or					
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 Kitus 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.

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CLIENT NAME:	SITE MANAGER:		P	ARA	METER	s/met	THOD	NUME	SER	CHAIN-	-OF0	USTODY R
Plains	Cindy Crain			R.S.					1	1.		
PROJECT NO :	PROJECT NAME:	INER.	ž	300							n & 👘 ates, inc	C. Fax: 432-687-6
5-0103	Anadarko Pervosett	DNTA	10	Cal	5					Environme	ntal Consultan	432-687-
PAGE OF LAB	. PO #	U U U	8	SIV.	<u>, , , , , , , , , , , , , , , , , , , </u>					507 N. Mari	enfeld, Ste	. 202 • Midland, 1
Late Jar	SAMPLE IDENTIFICATION	NUMBER	Hat	Brea	Chli					LAB. I.D. NUMBER (LAB USE ONLY)		REMARKS (I.E., FILTERED, UNFILTERED PRESERVED, UNPRESERVET GRAB, COMPOSITE
5/5 1215 ×	Spoil 5	1	X	×	×						GFOL	002-01
1224	Spoil 6					_			-			-02
V 1230 V	Spoil 7	$+ \checkmark$	V	4	*		+		+		<u> </u>	v -03
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SAMPLED By: (Signature)	DATE OSTOC REDINQUISE	5D BY	l. ISigna	ture)	<b>L</b>		DATE	6/5/		CEIVED BY: (Sign	ature)	DATE
	TIME: 1245		<u></u>				TIME	E: <u>1615</u>				
RELINQUISHED BY: (Signature)		r: (Signa	ature)				DAI	:: :.	5/	AMPLE SHIPPED B	Y: (Circle)	
COMMENTS:			<u> </u>	<u> </u>	TURN	AROUN				and delivered	UPS	OTHER:
							10 11110	- (TELDE	W	HITE - RECEIVI	NG LAB	
RECEIVING LABORATORY:		RECEIVE	D BY:	Signo	utyre)				{ <sup>YI</sup>	llow - Receivi La Aftf	NG LAB (TO R RECEIPT)	BE RETURNED TO
ADDRESS: CITY: CONTACT:	STATE: ZIP: PHONE:	 Date:	U AP	<u>e</u> i 20	Q TIN	Z	6. f.	5	PI G	NK - PROJEC OLD - QA/QC	t Manager Coordinat	R FOR
SAMPLE CONDITION WHEN RECEIVED:	plici Added	LAC	ONTAC	T PER	SON:				s	AMPLE TYPE:		
4.5° loralase	LWDHTper Cindu	1							ĺ			
0				Conception 2								

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

Dhert	Flains	
∋mi∏atsC	6506	16:15
Order#	6F06002	11 0
nitials		

## Sample Receipt Checklist

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Temperature of container/cooler?	Yes	No	4.5 CI
Snipping contener/cooler in good condition?	100	ol4	
Custody Seals intact on shipping container/cooler?	Yes	No	Morpresent
Custody Seals intact on sample bottles?	Yes	No	tot present
Chain of custody present?	YES	No	1
Sample Instructions complete on Chain of Custody?	Kes .	No	1
Chain of Custody signed when relinquished and received?	(ABS)	No	
Chain of custody agrees with sample label(s)	( ED	No	EDON ION!
Container labers legible and intact?	Yas	l No	
Sample Matrix and properties same as on chain of custody?	des	No No	
Samples in proper container/bottle?	1 200	No	
Samples properly preserved?	823	I No	
Sample bottles intact?	195	l No	
Preservations documented on Chain of Custody?	1 YES	l No	
Containers documented on Chain of Custody?	1052	No	
Sufficient sample amount for indicated test?	1000	No	
All samples received within sufficient hold time?	102	No	
VOC samples have zero headspace?	1703	No	Not Applicable

Other observations:

	Variance Document		
Regarding	Date/lime:	Contacted by:	
Corrective Action Taken:			

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#### Jeanne McMurrey

From:	"Cindy Crain" <cindy@laenvironmental.com></cindy@laenvironmental.com>
To:	"Jeanne McMurrey" <jeanne@elabtexas.com></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

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This message has been scanned for viruses and dangerous content by <u>BasinBroadband</u>, and is believed to be clean.

This message has been scanned for viruses and dangerous content by <u>BasinBroadband</u>, and is believed to be clean.



# Analytical Report

Prepared for:

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

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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
1	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	Soul	06/06/06 14 05	06/06/06 16:48

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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

# Organics by GC

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Spoil 8 (6F06024-01) Soil	· · · · · · · · · · · · · · · · · · ·	<u> </u>							]
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		н	"		۲		
Carbon Ranges C28-C35	173	10 0		"		"	"	*	
Total Hydrocarbon nC6-nC35	1290	10 0	"	"				"	
Surrogate: 1-Chlorooctane		110 %	70-1.	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		135 %	70-1	30	"	"	"	"	S-04

Environmental Lab of Texas

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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

# 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	01	%	1	EF60711	06/07/06	06/07/06	% calculation	

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Plains All American EH & S 1301 S County Road 1150 Midland TX, 79706-4476		F Project N Project Ma	Project Ana umber OS anager Dar	adarko Penro I #01-01-04 nel Bryant	ose #1				Fax. (432) Repoi 06/07/06	687-4914 r <b>ted:</b> 5 16.45
	0	rganics by		uality Co	ontrol	<del></del> ,				<u></u>
		Environ	nental L	ab of Tex	kas					
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	17							
Fotal Hydrocarbon nC6-nC35	ND	10 0	"							
Surrogate. 1-Chlorooctane	508		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	538		"	50.0		108	70-130			
Calibration Check (EF60610-CCV1)				Prepared (	)6/06/06 A	nalyzed 06	5/07/06			
Carbon Ranges C6-C12	284		mg/kg	250		114	80-120			
Carbon Ranges C12-C28	293		"	250		117	80-120			
Fotal Hydrocarbon nC6-nC35	577		"	500		115	80-120			
Surrogate · 1-Chlorooctane	537		"	50.0		107	70-130			
Surrogate · 1-Chlorooctadecane	57.3		"	50 0		115	70-130			
Matrix Spike (EF60610-MS1)	Sou	irce: 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	۳	106	ND	110	75-125			
Total Hydrocarbon nC6-nC35	238	10 0	м	212	ND	112	75-125			
Surrogate · 1-Chlorooctane	59 3		mg/kg	50 0		119	70-130			
Surrogate · 1-Chlorooctadecane	638		"	50.0		128	70-130			

Environmental Lab of Texas

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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

# Organics by GC - Quality Control

### **Environmental Lab of Texas**

			opino	Source		/oruse		RPD	
Analyte Result	Lumit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

## Batch EF60610 - Solvent Extraction (GC)

Matrix Spike Dup (EF60610-MSD1)	Source	e: 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		

Environmental Lab of Texas

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Plains All American EH & S		Pr	oject Ar	adarko Peni	rose #1				Fax (432)	687-4914
1301 S County Road 1150		Project Nu	mber. OS	SI #01-01-04	ŧ				Repo	rted:
Midland TX, 79706-4476		Project Mar	nager Da	nıel Bryant					06/07/0	6 16 45
General Ch	emistry Para	meters by	EPA /	Standar	d Meth	ods - Qu	ality Con	trol		
		Environm	lental I	Lad of 16						
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	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)	Sour	-ce: 6F06024-	01	Prepared.	06/06/06	Analyzed	06/0 <b>7</b> /06			
Chloride	15 4	5 00	mg/kg		14 7			4 65	20	
Duplicate (EF60703-DUP2)	Sour	-ce: 6F05013-	05	Prepared	06/06/06	Analyzed.	06/07/06			
Chloride	ND	0 500	mg/kg		ND				, 20	
Matrix Spike (EF60703-MS1)	Sour	-ce: 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)	Sour	·ce: 6F05013-	05	Prepared	06/06/06	Analyzed	06/07/06			
Chloride	ND	5.00	mg/kg	200	ND		80-120			

Environmental Lab of Texas

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Plains All A 1301 S Cou Midland TX	merican EH & S inty Road 1150 (, 79706-4476	Project Project Number Project Manager	Anadarko Penrose #1 OSI #01-01-04 Danıel Bryant	Fax (432) 687-4914 Reported: 06/07/06 16.45
L		Notes and De	finitions	a a can militar da Falda da
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	Matrıx Spike			
Dup	Duplicate			

Report Approved By:

Raland K Juli

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

Date

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CLIENT NAME:		SITE MANAGER:	Crain		P4	ARAN	ETERS	/MET	HOD	NUI	MBEI	R CHAIN	OFC	USTODY R
PROJECT NO .: 5-0103		PROJECT NAME: Anadarko	Penrese #1	ONTAINERS	olsm	les							on & Clates, Inc mental Consultants	• Fax: 432-687 432-687
PAGE OF	LAB.	PO #		С С	ŏ	24						507 N. M	arienfeld, Ste.	202 • Midland,
Oalit Mate	201 - 201 A	Sample identifi	CATION	NUMBER	Hd	CH						LAB. I.D. NUMBER ILAB USE ONI	Y) (I	REMARKS LE., FILTERED, UNFILTER RESERVED, UNPRESERV GRAB COMPOSITE
66/06 1405	X	Spoil 8	······································	i	X	X							leFae	024 - 01
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			1											
			<u> </u>						┝─┤					
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SAMPLED BY: (Signatu	re]	DATE: <u>6</u> TIME: <u>1</u>	6/06 RELINQUISH	0_8Y:	Signat	ure)				E: <u>6/</u> NE: <u>/6</u>	4 <u>8</u>	_  Received by: (Si	gnature)	
RELINQUISHED BY: (SIC	;nature)	DATE:	RECEIVED BY	(Signa	ture)				DAT	ΓΕ: ν.ς.		SAMPLE SHIPPE	D BY: (Circle)	
COMMENTS:		1 0 Y II.			·		TURN	AROUN		E NEE	DED	HAND DELIVERE	D <u>UPS</u>	OTHER:
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	RY:	CTATE	k		) BY: () Li j	Signaf		e	1	<u>.</u>		LA A PINK - PRO.	FTER RECEIPT) IECT MANAGER	
			(		e/C	ēfo	0 TIM	E:(	).[le	:48		GOLD - QA/C	DC COORDINAT	)r
SAMPLE CONDITION WHEN I	RECEIVED:	l		LA CC	NTAC	T PERS	ON:					SAMPLE TYPE:		
3.0	402	<u>608</u>		Alter and the second			ar to the sector							

# Environmental Lab of Texas Variance / Corrective Action Report - Sample Log-In Plains Chera 10F06020 Order # CK-

Initials

# Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	50 01
Shipping container/cooler in good condition?	Xes	No	
Custody Seals intact on shipping container/cooler?	Yas	No	tol present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Xes.	No	1
Sample Instructions complete on Chain of Custody?	Xes	No	
Chain of Custody signed when relinquished and received?	123	No	
Chain of custody agrees with sample label(s)	1 65	No	ID on Gari
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	(Ces	No No	
Samplas in proper container/bottle?	1 255	No No	
Samples properly preserved?	Yes	l No	
Sample bolties intact?	YED	I No	
Preservations documented on Chain of Custody?	1 200	I No	
Containers accumented on Chain of Custody?	1725	l No	
Sufficient sample amount for indicated test?	735	No	
All samples received within sufficient hold time?	1 725	No	
VOC samples have zero headspace?	1 Kos	No	Not Applicable

Other observations:

# Variance Documentation:

Contect-Person:	Date/Fime	<u> </u>	Contacted by:	
Regarding:			,	· · · · · · · · · · · · · · · · · · ·

Corrective Action Taken:



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# Analytical Report

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

Project: 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
Ì	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 <sup>.</sup> 45

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Plains All American EH & S 1301 S County Road 1150 Midland TX, 79706-4476		I Project N Project M	Project. Anac umber. OSI anager Dani	larko Penr #01-01-04 el Bryant	ose #1			Fax (432) 6 Report 06/09/06	(432) 687-4914 <b>Reported:</b> 6/09/06 16 29 d Note	
		Oı	ganics by	GC						
		Environ	mental La	b of Te	exas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
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	"		"	"		н		
Surrogate: 1-Chlorooctane		93.6 %	70-13	30	"	"	"	"		
Surrogate: 1-Chlorooctadecane		98.8 %	70-13	80	"	"	"	"		
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	"	я	"	"	-			
Carbon Ranges C28-C35	264	10 0	"	-	"			"		
Total Hydrocarbon nC6-nC35	1880	10.0	n		"	۳	"	n		
Surrogate: 1-Chlorooctane		94.2 %	70-1.	30	"	"	"	"		
Surrogate: 1-Chlorooctadecane		101 %	70-1	30	"	"	"	"		
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	"	"	"	N	*	n		
Carbon Ranges C28-C35	123	10 0	"	"	H	н				
Total Hydrocarbon nC6-nC35	885	10 0		"	**	n		"		
Surrogate. 1-Chlorooctane		908%	70-1.	30	*	H	"	"		
Surrogate: 1-Chlorooctadecane		96.4 %	70-1.	30	"	"	"	"		

Environmental Lab of Texas

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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	06/09/06 16 29

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

		Environn	nental I	Lab of Te	exas				
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	01	%	1	EF60903	06/09/06	06/09/06	% calculation	

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1301 S County Road 1150 Midland TX, 79706-4476	Project Number OSI Project Manager Dan	#01-01-04 lel Bryant		<b>Reported:</b> 06/09/06 16 29
	Organics by GC - Qu	ality Control	<u></u>	
	Environmental La	ub of Texas		
	Reporting	Spike Source	%REC	RPD

	n t	Reporting		Spike	Source	4/DE()	%REC	DDD	RPD	Neter
Analyte	Kesult	Limit	Units	Level	Kesult	%REC	Limits	RPD	Limit	INOLES
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	500		105	70-130			
Surrogate 1-Chlorooctadecane	52 1		"	500		104	70-130			
LCS (EF60924-BS1)				Prepared &	z 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		970	70-130			
Surrogate. 1-Chlorooctadecane	46.0		"	50 0		92.0	70-130			
Matrix Spike (EF60924-MS1)	Sou	irce: 6F08005	-01	Prepared &	k 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		06.6	70 120			

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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 #01-0	01-04	Reported:
Midland TX, 79706-4476	Project Manager: Daniel Br	ryant	06/09/06 16 29

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

**Environmental Lab of Texas** 

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

#### Batch EF60924 - Solvent Extraction (GC)

Matrix Spike Dup (EF60924-MSD1)	Sourc	e: 6F08005	5-01	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	510		mg/kg	50 0		102	70-130		
Surrogate · 1-Chlorooctadecane	48.5		"	50 0		970	70-130		

Environmental Lab of Texas

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

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

#### Environmental Lab of Texas

		Paporting		Smike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF60903 - General Preparation (Prep)										
Blank (EF60903-BLK1)				Prepared (	)6/08/06 A	nalyzed 06	/09/06			
% Moisture	ND	01	%							
Duplicate (EF60903-DUP1)	Sour	ce: 6F07014-0	1	Prepared (	06/08/06 A	nalyzed 06	/09/06			
% Solids	93 9		%		94 3			0 425	20	
Duplicate (EF60903-DUP2)	Sour	ce: 6F07012-0	6	Prepared (	)6/08/06 A	nalyzed 06	/09/06			
% Solids	94 6		%		95 3			0 737	20	
Duplicate (EF60903-DUP3)	Sour	ce: 6F07012-2	6	Prepared: (	06/08/06 A	nalyzed 06	/09/06			
% Solids	96 7		%		96 6			0 103	20	
Duplicate (EF60903-DUP4)	Sour	ce: 6F08005-(	)1	Prepared (	06/08/06 A	nalyzed: 06	/09/06			
% Solids	874		%		90 2			3.15	20	

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

6/9/2006

Raland K. Tuttle, Lab Manager	Jeanne Mc Murrey, Inorg. Tech Director	
Celey D. Keene, Lab Director, Org. Tech Director	LaTasha Cornish, Chemist	-
-Peggy-Allen-OA-Officer	Sandra Sanchez, Lab Tech	

Date:

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CLIENT NAME:	SITE MANAGER:		PARA	METERS/	METH		UMBE	R_	CHAIN-	-0FC	USTODY RE
PROJECT NO :	PROJECT NAME:	INERS	5M						Aarsor	n & 🜌	Eax: 432-687-0
5-0103 PAGE 1 OF 1 1	Anadarks Tenresett	- CONTA	BUR						Environme 507 N. Mari	enfeld, Ste.	432-687-0 202 • Midland, T
2011 Inte	SAMPLE IDENTIFICATION	NUMBER OF	Fall						LAB. 1.D. NUMBER (LAB USE ONLY)	F	REMARKS I E , FILTERED, UNFILTERED, RESERVED, UNPRESERVED GPAR COMPOSITE
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SAMPLED BY/4StgnaiUre)	DATE 4 2/56 RELINQUER		gnature)	•		DATE	12/00	RE	CEIVED BY: (Sign	ature)	DATE
RELINCUISHED BY: (Signature)	DATE RECEIVED BY	(Signate	ure)			TIME: DATE:	1645		AMPLE SHIPPED E	BY: (Circle)	TIME
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		DATE:	e[8]t	HE TIME:	01	6.4	5	G	OLD - QA/QC	COORDINAT	'OR
3.0 Ancalas	no labels	LA CON	NTACT PE	RSON:				S4	AMPLE TYPE:		

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

ا موري	Larson_	
aterTime	618/00e	16:46
urder#	10508016	
	CK	

# Sample Receipt Checklist

\_\_\_\_\_

emperature of container/cooler?	Yes No	3.0 CI
Spicoing container/cooler in good condition?	(ES) NO	i
Dustody Seals intact on shipping container/cooler?	Yes   No	that present i
Dustody Seals intact on sample bottles?	Yes   No	ADT Present
Chain of custody present?	XEL No	
Sample Instructions complete on Chain of Custody?	RES I NO	:
Chain of Custody signed when relinquished and received?	As I No	{
Chain of custody agrees with sample label(s)	No 1	II on ior
Container labe's legible and intact?	Yes No	
Sample Mattix and properties same as on chain of custody?	No No	}
Samples in proper container/bottle?	CES   NO	
Samples properly preserved?	No No	
Sample bottles intact?	1 223 1 NO	
Preservations occurrented on Chain of Custody?	1 Jes' I No	}
Containers documented on Chain of Custody?	Kess No	
Sufficient sample amount for indicated test?	ARE NO	
All samples received within sufficient hold time?	NO NO	
VOC samples have zero headspace?	REST NO	Not Applicable

Other observations:

Contact Person:	Variance Documentat	Contacted by:	
Corrective Action Taken:			



# Analytical Report

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

Project: Anadarko Penrose #1 Project Number: OSI #01-01-04 Location: None Given

Lab Order Number: 6F15022

Report Date: 06/19/06

Plains All Am	rican EH & S	Project	Anadarko Penrose #1	Fax. (432) 687-4914
1301 S Count	Road 1150	Project Number.	OSI #01-01-04	
Midland TX, 7	9706-4476	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

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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	

# 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	11	"	"	м	"		
Carbon Ranges C28-C35	57.3	10 0		"	"	н			
Total Hydrocarbon nC6-nC35	922	10 0	н	"				n	
Surrogate. I-Chlorooctane		128 %	70-13	0	"	"	"	"	
Surrogate · 1-Chlorooctadecane		126 %	70-13	0	"	"	"	"	

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Plains All American EH & SProject.Anadarko Penrose #1Fax (432) 687-49141301 S County Road 1150Project NumberOSI #01-01-04Midland TX, 79706-4476Project ManagerDaniel 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	

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Page 3 of 7

Plains All American EH & S	Project.	Anadarko Penrose #1	Fax <sup>-</sup> (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**

	<b>D</b> 1.	Reporting	TTest	Spike	Source	A/DEC	%REC	DDD	RPD	Neter
Analyte	Result	Limit	Units	Level	Kesult	%REC	Limits	KPD	Limit	Notes
Batch EF61511 - Solvent Extraction (GC)										
Blank (EF61511-BLK1)				Prepared: 0	6/15/06 A	nalyzed 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 0	06/15/06 A	nalyzed 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	609		mg/kg	50 0		122	70-130			
Surrogate <sup>-</sup> 1-Chlorooctadecane	570		"	50 0		114	70-130			
Calibration Check (EF61511-CCV1)				Prepared 0	06/15/06 A	nalyzed 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	618		"	50 0		124	70-130			
Surrogate. 1-Chlorooctadecane	58.5		"	50 0		117	70-130			
Matrix Spike (EF61511-MS1)	Sour	ce: 6F14016	-01	Prepared 0	)6/15/06 A	nalyzed 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	м	564	46 9	93.5	75-125			
Carbon Ranges C28-C35	ND	10 0	۲	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 "I-Chlorooctadecane	54 1		- • • • • •	50'0' -		108	70-130 <sup>-</sup>			

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ProjectAnadarko Penrose #1Project NumberOSI #01-01-04Project ManagerDaniel 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 EF61511 - Solvent Extraction (GC)											

Matrix Spike Dup (EF61511-MSD1)	Source	e: 6F14016	-01	Prepared (	06/15/06 A	nalyzed 0	6/16/06			
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	н	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	549		"	50.0		110	70-130			

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

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

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF61710 - General Preparation (Prep)							<u></u>			
Blank (EF61710-BLK1)				Prepared	06/16/06 A	nalyzed 00	5/17/06			
% Moisture	ND	01	%							
Duplicate (EF61710-DUP1)	Sou	rce: 6F15019-	01	Prepared	06/16/06 A	nalyzed 0	5/17/06			
% Moisture	0 2	0 1	%		03			40 0	20	S-08
Duplicate (EF61710-DUP2)	Source: 6F15019-21 Pre				06/16/06 A	nalyzed 00	5/17/06			
% Moisture	09	0.1	%		12			28 6	20	S-08
Duplicate (EF61710-DUP3)	Sou	rce: 6F15019-	41	Prepared	06/16/06 A	nalyzed: 06	5/17/06			
% Moisture	0.8	0 1	%		09			11.8	20	
Duplicate (EF61710-DUP4)	Sou	rce: 6F15019-	61	Prepared	06/16/06 A	nalyzed 00	5/17/06			
% Moisture	88	0 1	%		9.4			6 59	20	
Duplicate (EF61710-DUP5)	Sou	rce: 6F15021-	05	Prepared.	06/16/06 A	nalyzed. 00	5/17/06			
% Moisture	6 1	01	%		81			28 2	20	S-08
Duplicate (EF61710-DUP6)	Sou	Source: 6F16008-01		Prepared	06/16/06 A	nalyzed 0	5/17/06			
% Moisture	20	01	%		29			36 7	20	S-08
Duplicate (EF61710-DUP7)	Sou	rce: 6F16010-	01	Prepared	06/16/06 A	nalyzed: 0	5/17/06			
% Moisture	11	01	%		11			0.00	20	

Environmental Lab of Texas

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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 Julies 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.

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	AE:				SITE MANAGER:	5	56-8656		P		ETERS,	/MET			२	CHAIN-	-OF—C	USTOD	Y RECORD
PIA ROJECT NO	<u>1NS</u> 0.: -010	3			PROJECT NAME Anadarki	RSON Per	<u></u> nse <u>#1</u>	ONTAINERS	Ho							A arson ssocia	& Inc ates, Inc ntal Consultants	2. Fax: 432-0 5 432-0	687-0456 687-0901
AGE }	O۶	1		LAB, P	0#	-		R OF C	577							507 N. Marie LAB, I.D.	enfeld, Ste.	202 • Midla REMARKS	ind, TX 79701
345	inte	MAIED	20%	day to	Sample identific	ATION		NUMBI	33							NUMBER (LAB USE ONLY)	5	(I.E., FILTERED, UNP PRESERVED, UNPRI GRAB COMPO	ESERVED, ULE (LE (LE) SITE)
014 C	1615		$\times$		Spoil	2		1	×							LE E15022	1-01	KUS	H 2Ahis
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	NV (Cir					hala								15/0					DATE
					TIME:	630	KELINGUISH						TIME:_	1638					
ELINQUIS	HED BY:	(Signo	iture)				RECEIVED BY	: (Sign	ature)				DATE:			AMPLE SHIPPED B	Y: (Círcle)		
OMMEN	TS:						<u> </u>		<u>.</u>		TURNA		D TIME N	NEEDED	H/	AND DELIVERED	UPS	OTHER:	
ECEIVING	LABOR	ATORY			1	1 1 1	R		D BY	Sianatu	re}.					LLOW ~ RECEIVI	NG LAB NG LAB (TO P DECEIDT)	BE RETURNED	ТО
					DATE:	UL 1011	, ) 51 0 Q	TOP	Šų	- - 38		- Pl G	PINK – PROJECT MANAGER GOLD – QA/QC COORDINATOR						
AMPLE CON	IDITION WI	HEN REC	EIVED	<u> </u>				LAC	ONTA	T PERSO	DN: A,	Ð	U		SA	AMPLE TYPE:			

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

ient.	Plans	
ate/Time:	6/15/06 10:38	
rder #:	6\$15022	
itials:	Ck_	

### Sample Receipt Checklist

Yes	No	1 1
Yes		
	No	Not present
Yes	No	Not presedt
100	No	]
Yes	No	
200	No	
803	No	FDONING
Yes	No	
1 CB	No	1
1 Yes	No	· ·
1 Cen	No	
1 Kes	No	
1 Cas	No	
145	No	1
Ves	No	
1 Yes	No	
yes,	No	Not Apolicable
	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes No Yes No

)ther observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		
	·	



# Analytical Report

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

Project: 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 <sup>-</sup> (432) 687-4914
1301 S County Road 1150	Project Number OSI #01-01-04	
Mıdland TX, 79706-4476	Project Manager. Daniel Bryant	

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Spotl 13	6F16013-01	Soil	06/16/06 13 10	06/16/06 16 <sup>.</sup> 03

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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	

#### 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	"			"	и	Π	
Carbon Ranges C28-C35	83.4	20 0	м		"	н	н		
Total Hydrocarbon nC6-nC35	1000	20.0	"	"			н	11	
Surrogate: 1-Chlorooctane		57.0 %	70-13	30	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		64.8 %	70-13	30	"	n	"	"	S-06

Environmental Lab of Texas

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

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Plains All American EH & S	Project Ana	darko Penrose #1	Fax (432) 687-4914
1301 S County Road 1150	Project Number. OSI	#01-01-04	
Midland TX, 79706-4476	Project Manager Dar	uel Bryant	
Ge	neral Chemistry Parameters b	y EPA / Standard Metho	ds

#### 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	

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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		

#### Organics by GC - Quality Control

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

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

#### Batch EF61713 - Solvent Extraction (GC)

Blank (EF61713-BLK1)				Prepared (	06/17/06 A	nalyzed 0	6/18/06
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	M				
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. 0	)6/17/06 A	nalyzed: 0	6/18/06
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	100	"	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 0	)6/17/06 A	nalyzed 00	6/18/06
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		н	50 0		127	70-130
Surrogate. 1-Chlorooctadecane	63.0		"	50 0		126	70-130
Matrix Spike (EF61713-MS1)	Sourc	e: 6F16012	-01	Prepared: 0	)6/17/06 A	nalyzed 0	6/18/06
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. <sup>-</sup> 1-Chlorooctadecane	63 6		— <i>n</i> ·	50.0		127	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	
Midland TX, 79706-4476	Project Manager.	Daniel Bryant	

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

**Environmental Lab of Texas** 

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

#### Batch EF61713 - Solvent Extraction (GC)

Matrix Spike Dup (EF61713-MSD1)	Source: 6F16012-01 Pr		Prepared. 0	6/17/06 A	5/18/06				
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	н	502	188	.79 9	75-125	1 89	20
Carbon Ranges C28-C35	108	10 0	17	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	613		"	50 0		123	70-130		

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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		Pro Project Nun Project Mor	oject Ar nber: OS	nadarko Pen SI #01-01-04 aniel Bryant	rose #1 ŧ				Fax (432)	687-4914
General	Chemistry Paran	reters by	EPA /	Standar	d Meth	ods - Qu	ality Con	trol	<u></u>	
	E	Invironm	ental I	Lab of Te	exas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF61710 - General Preparatio	n (Prep)									
Blank (EF61710-BLK1)				Prepared	06/16/06	Analyzed	06/17/06			
% Moisture	ND	0 1	%			<u> </u>				
Duplicate (EF61710-DUP1)	Source	e: 6F15019-0	)1	Prepared	06/16/06	Analyzed	06/17/06			
% Moisture	0 2	0 1	%		0.3			40 0	20	S-0
Duplicate (EF61710-DUP2)	Sourc	e: 6F15019-2	21	Prepared	06/16/06	Analyzed	06/17/06			
% Moisture	0 9	0 1	%		12			28 6	20	S-0
Duplicate (EF61710-DUP3)	Source	e: 6F15019-4	1	Prepared	06/16/06	Analyzed	06/17/06			
% Moisture	0 8	0.1	%		09			11 8	20	
Duplicate (EF61710-DUP4)	Sourc	e: 6F15019-6	<b>i</b> 1	Prepared	06/16/06	Analyzed	06/17/06			
% Moisture	8.8	01	%		94		·····	6 59	20	
Duplicate (EF61710-DUP5)	Sourc	e: 6F15021-0	15	Prepared	06/16/06	Analyzed.	06/17/06			
% Moisture	61	01	%	· · ·	81			28 2	20	S-0
Duplicate (EF61710-DUP6)	Sourc	e: 6F16008-0	11	Prepared.	06/16/06	Analyzed	06/17/06			
% Moisture	2.0	01	%		29			36 7	20	

Source: 6F16010-01

0.1

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%

11

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Duplicate (EF61710-DUP7)

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% Moisture

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

Prepared 06/16/06 Analyzed 06/17/06

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Page 6 of 7

Fax (432) 687-4914

Plains Al 1301 S C Midland	ll American EH & S County Road 1150 TX, 79706-4476	Project Project Number Project Manager	Anadarko Penrose #1 OSI #01-01-04 Daniel Bryant	Fax (432) 687-4914
		Notes and De	finitions	<u></u>
S-08	Value outside Laboratory historical or m	ethod prescribed QC limits		
S-06	The recovery of this surrogate is outside matrix interference's	control limits due to sample di	lution required from high analyte concentration an	ıd/or
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the re	porting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight basis	3		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrıx Spike			
Dup	Duplicate			

Raland K Julies Report Approved By

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.

Date

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

Environmental Lab of Texas

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# Environmental Lab of Texas

 

12600 West I-20 East Odessa, Texas 79755	Phone: 432 Fax: 432	-563-1800										Cŀ	IAIN	OF C	UST	ODY	REG	CORI	D AN	D AI	VAL	ysis	REQL	iest		
Project Manag	Ber: MARX LAR	SON												Proje	ect N	ame	: f	the	zde	ark	ćo	Pe	2 N	) <u>R</u> i	#1	/
Company Na	IME LARSON S	ASJUC.													Proj€	ect#:	:	5-	0	(0)	3					
Company Addre				······································			_							Pn	oject	Loc:	·						<b>_</b>			
City/State/2	zip: Midland,	TX_		······································								<b></b>			F	°0 #:	1	21	A	1~	5					
Telephone I	No: 687-090	1		Fax No	:																					
Sampler Signatu	ire: Stud													-											—	
Em	ail:				-									ŀ		Т	CLP		Ana	alyze	For:	Τ				¥
							F	reser	vative	3		Ma	atrix				TAL.	ë	╉							1-
LAB # (lab use only)	FIELD GODE		Date Sampled	C L Line Sampled	- No. of Containers	× 1ce	CONH	HCI	H250.	None	Other (Specify)	Vater Sludge	Soit	Other (specify):	Cautons (Ca. Mp. Na. K)	Anians (Cl. SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg S	Volatites	Semivolatics BTEX B02115/5030 or RTEX 825	L L L L L L L L L L L L L L L L L L L	NO.R.M				Slandard TAT (Pre-Schedule)
Special Instructions:								_1_				<u> </u>				Sar	nole	Con	taine	rs In	fact7	Ļ			N	
		1														Lat Cu Ter	stody	on co y Sea ature	ontair Ils: ( Upo	ner? Conta on Re	ainer	s / Co ot.	γC ooler		5	
Relinquished by: Relinquished by	Date	I G D 3	Received by Received by ELC								e([[	Dale Date	6	Tir Tir (e`i i	ne ne	Lat	bora	tory Je	Com	men Gl	ts: Z <u>S</u> E	3		5,0		
												_				<u> </u>										

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

Client:	Plains
Date/Time:	10/110/010/110-0B
Order #:	LEFILLOS
Initials.	012

#### Sample Receipt Checklist

			52 /2
Temperature of container/cooler?	Yes	No	<u> </u>
Shipping container/cooler in good condition?	Ves	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Hot present 1
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	1850	No	1
Chain of Custody signed when relinguished and received?	YES;	Na	
Chain of custody agrees with sample label(s)	Ves	No	IID 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?	(Jes	No	•
Samples properly preserved?	1753	No	
Sample bottles intact?	Asy.	No No	
Preservations documented on Chain of Custody?	1853	No No	
Containers documented on Chain of Custody?	755	No	
Sufficient sample amount for indicated test?	N/AS	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	yes)	No	Not Apolicable
	-		

Other observations:

Gentact-Person: Regarding:	Variance Documentation: Date/Time:	Contacted by:
Corrective Action Taken:		
·		