

CLOSURE DOCUMENTATION

Lea-Hendricks 10" Ref. # 2005-00150 (Company #231735)

UL-E (SW¼ of the NW¼) of Section 9, R37E, T23S Latitude 32° 19' 17.416"N and Longitude 103° 10' 33.311"W Elevation $\sim 3,320$ 'amsl

9 miles south of Eunice, Lea County, New Mexico

January 2006

Prepared by

Environmental Plus, Inc. 2100 West Avenue O P.O. Box 1558 Eunice, New Mexico 88231 Tele 505•394•3481 FAX 505•394•2601 RP#1322 (pmccasland@envplus.net)

ficility-PPAC 07 13425997 Incident-nPAC071342612 Vication-pPAC0713426248

H PLAINS

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Larry Johnson	Environmental Engineer	New Mexico Oil Conservation Division	1625 French Dr., Hobbs, NM 88231	lwjohnson@state.nm.us
Daniel Bryant	Environmental Coordinator	Plains	P.O. Box 3119, Midland, TX 79702	dmbryant@paalp.com
Jeff Dann	Environmental Director	Plains	333 Clay Street Suite #1600, Houston, TX 77002	jpdann@paalp.com
file		Environmental Plus, Inc.	P.O. Box 1558, Eunice, NM 88231	pmccasland@envplus.net

STANDARD OF CARE

SITE CHARACTERIZATION REPORT AND REMEDIATION PROPOSAL

Lea-Hendricks 10" Ref. # 2005-00150 (Company #231735)

The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993), the NMOCD Unlined Surface Impoundment Closure Guidelines (February 1993), and the Environmental Plus, Inc. (EPI) Standard Operating Procedures and Quality Assurance/Quality Control Plan. The conclusions are based on field observations and laboratory analytical reports as presented in the report. Recommendations follow NMOCD guidance and represent the professional opinions of EPI staff. These opinions were arrived at with currently accepted geologic, hydrogeologic and engineering practices at this time and location. The report was prepared or reviewed by a certified or professional with a background in registered EPI engineering, environmental, and/or the natural sciences.

This report was prepared by:

Mailang

Patrick W. McCasland

This report was reviewed by:

Iain Olness, PG Hydrogeologist

7 Jebruan Dated

7 February 2006

ii

Table of Contents

Distrib	ution List	i
	rd of Care	
Table of	of Contents	iii
1.0	Summary	.1
2.0	Environmental Media Characterization	.2
2.1	Geological Description	.2
2.2	Ecological Description	
2.3	Area Groundwater	
2.4	Area Water Wells	.3
2.5	Area Surface Water Bodies	.3
3.0	NMOCD Site Ranking	.3
4.0	Subsurface Soil Investigation	.3
4.1	TPH ^{8015m} Delineation	.3
4.2	Benzene Delineation	
4.3	BTEX Delineation	.4
5.0	Groundwater Investigation	.4
6.0	Remediation and Restoration	
7.0	Conclusion	.4

FIGURES

Figure 1 - Area Map with Groundwater Wells Figure 2 - Lea-Hendricks 10" Site Map Figure 3 - Lea-Hendricks 10" July 14/15, 2005 Sample Location Map

TABLES

Table 1 - Lea-Hendricks 10" Area Groundwater Level Summary Table 2 - Lea-Hendricks 10" Summary of Excavation Analytical Results

APPENDICES

Appendix A - Analytical Report and Chain of Custody Form

Appendix B – Photographic Documentation

Appendix C - Site Information and Metrics Form and Final C-141

1.0 SUMMARY

This site is located in UL-E (SW¹/₄ of the NW¹/₄) of Section 9, Range 37 East, Township 23 South at a latitude of 32°19'17.416"N and a longitude of 103°10'33.311"W, approximately 9 miles south of Eunice, Lea County, New Mexico on property owned by Imogene Salzman (reference Figure 1). The estimated 4 barrel (bbl) crude oil release was attributed to external corrosion in a weld. During initial response mitigation activities, approximately 2 bbls of crude oil were recovered and reintroduced to the pipeline system, a temporary line repair clamp installed and impacted soil to a depth of approximately 6-feet below ground surface (bgs) was excavated and stockpiled on a plastic barrier positioned within the pipeline right-of-way. The initial release (Plains ref. #2005-00150) occurred on June 24, 2005 and affected approximately 225 sqft (15' x 15') of the land surface. A second release (Plains ref. #2005-00158) occurred on July 7, 2005 during line replacement activities and over sprayed a 10-foot by 20-foot area east of the excavation with minor pooling in the excavation floor. The release was estimated to consist of approximately 3 bbls of crude oil with none recovered. These saturated soils were immediately excavated and stockpiled with the previously excavated impacted soils. Even though the second release was <5 bbls and not considered to be reportable, as a point of information, Plains verbally notified the NMOCD of the second release and that it would be remediated at the same time and in the same manner as the soils from the initial release. Utilizing groundwater level information from the New Mexico Office of the State Engineer and the USGS, the estimated depth to groundwater is approximatel 92-feet below ground surface (reference Table 1). There are no water wells or surface water bodies located within a 1,000-foot radius of the site. The attached site information and metrics form summarizes the site information and ranks the site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and <u>Releases (August 13, 1993)</u> (reference Appendix B).

The NMOCD constituents of concern (CoCs) and respective remedial goals at this site are as follows:

- Total petroleum hydrocarbon (TPH^{8015m}) = 1,000 mg/Kg,
- Benzene = 10 mg/Kg, and
- BTEX, (i.e., the mass sum of benzene, toluene, ethylbenzene, and total xylenes) = 50 mg/Kg.

The contaminated soil is not exempted from RCRA 40 CFR Part 261.

A total of 470 cubic yards (yd³) of impacted soil was disposed of in the Plains Pipeline, L.P. Lea Station Landfarm and, after receipt of acceptable analytical results and NMOCD consensus, the excavation was backfilled with a similar volume of clean soil obtained from the landowner. At the request of the landowner, an additional 48-yd³ of topsoil was spread over the disturbed area to promote revegetation. The landowner will also be responsible for reseeding the site at a time in the future. An estimated 5-yd³ of visibly impacted soil around the power pole located on the south side of the excavation could not be safely excavated and, with NMOCD approval, was left in place. Given the site has been remediated to below the NMOCD remedial guidelines and the surface restored, it is requested that the NMOCD require "no further remedial action" at this site and a site closure letter issued.

2.0 ENVIRONMENTAL MEDIA CHARACTERIZATION

Chemical parameters of the soil and groundwater were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the NMOCD approved "General Work Plan for Remediation of E.O.T.T. Pipeline Spills, Leaks and Releases in New Mexico, July 2000" and the NMOCD guidelines published in the following documents:

- Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993); and
- Unlined Surface Impoundment Closure Guidelines (February 1993).

Acceptable thresholds for contaminants/constituents of concern (CoCs), (i.e., TPH, benzene, and BTEX, were determined based on the NMOCD Ranking Criteria as follows:

- Depth to Groundwater (i.e., distance from the lower most acceptable concentration to the groundwater);
- Wellhead Protection Area (i.e., distance from fresh water supply wells); and
- Distance to Surface Water Body (i.e., horizontal distance to all down gradient surface water bodies).

2.1 GEOLOGICAL DESCRIPTION

The United States Geological Survey (USGS) Groundwater Report #6 – Geology and Groundwater Conditions in Southern Lea County, New Mexico (Nicholson, Jr. and Clebsch, 1961), describes the near surface geology of southern Lea County as an intergrade of the Quaternary Alluvium (QA) sediments (i.e., fine to medium sand), with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche.

2.2 ECOLOGICAL DESCRIPTION

The area is an intergrade of the Upper Chihuahuan Desert and the Short Grass Prairie Eco-Regions consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Querqus harvardi*) interspersed with Honey Mesquite (*Prosopis* glandulosa) along with typical desert grasses and weeds. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, and the Mule Deer. Reptiles, amphibians, and birds are numerous and typical of area. A survey of listed, threatened, or endangered species was not conducted.

2.3 AREA GROUNDWATER

Utilizing groundwater level information from the New Mexico Office of the State Engineer and the USGS the estimated depth to groundwater is approximately 92feet bgs (reference *Table 1*). According to the USGS Groundwater Report #6, the groundwater gradient in the area of the release is generally to the southeast.

2.4 AREA WATER WELLS

Based on available records, there are no water supply wells located within a 1,000foot radius of the release site. Available information indicates the nearest well to the site is located approximately 1.1 miles south-southeast (down-gradient) of the release site.

2.5 AREA SURFACE WATER BODIES

There are no surface water bodies located within a 1,000-foot radius of the release site.

3.0 NMOCD SITE RANKING

Based on the proximity of the site to protectable area water wells, surface water bodies and depth to groundwater, the site has an NMOCD ranking score of 10 points with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Gr	oundwater	2. 1	Wellhead Protection Area	3. Distance to Surface Water Body
points	GW <50 feet: 20 GW 50 to 99 ts	1	' from water source, or;<200' vate domestic water source: 20	<200 horizontal feet: 20 points 200-100 horizontal feet: 10 points
If Depth to points	GW >100 feet: 0		' from water source, or; $>200'$ vate domestic water source: 0	>1000 horizontal feet: 0 points
Site Rank ((1+2+3) = 10 + 0	+ 0 =	0 points	
Total S	ite Ranking So	core and	d Acceptable Remedial G	oal Concentrations
Parameter	>19 (42 to 92	'bgs)	10-19 (surface to 42'bgs)	0-9
Benzene ¹	10 ppm		10 ppm	10 ppm
BTEX ¹	50 ppm		50 ppm	50 ppm

1,000 ppm

4.0 SUBSURFACE SOIL INVESTIGATION

100 ppm

After visibly impacted and odorous soil was excavated, composite samples were collected from the sidewalls and discrete grab samples collected from floor of the excavation at 15-feet bgs and at 18-feet bgs, 3-feet below the floor of the excavation (reference Figure 3). The samples were submitted to the laboratory for quantification of the CoCs (reference Appendix A).

4.1 TPH^{8015M} DELINEATION

TPH

Analytical results for the sidewall samples indicated TPH^{8015m} was not detected at or above the method detection limit (MDL). Analytical results for the excavation floor sample from 15-feet bgs (PLH1071405BH-15) had a reported value of 34.6 mg/Kg and the sample collected from 18-feet bgs (PLH1071405BH-18) was not detected above the MDL, below the 1,000 mg/Kg TPH^{8015m} remedial goal.

5,000 ppm

4.2 **BENZENE DELINEATION**

Analytical results for all samples indicated benzene was not detected at or above the MDL and was well below the 10 mg/Kg benzene remedial goal.

4.3 BTEX DELINEATION

Analytical results for all samples indicated BTEX compounds were not detected at or above the respective MDLs.

5.0 GROUNDWATER INVESTIGATION

The information collected during the subsurface soil investigation support the conclusion that local groundwater has not been impacted above the New Mexico Water Quality Control Commission (WQCC) standards; therefore, a groundwater investigation was not warranted.

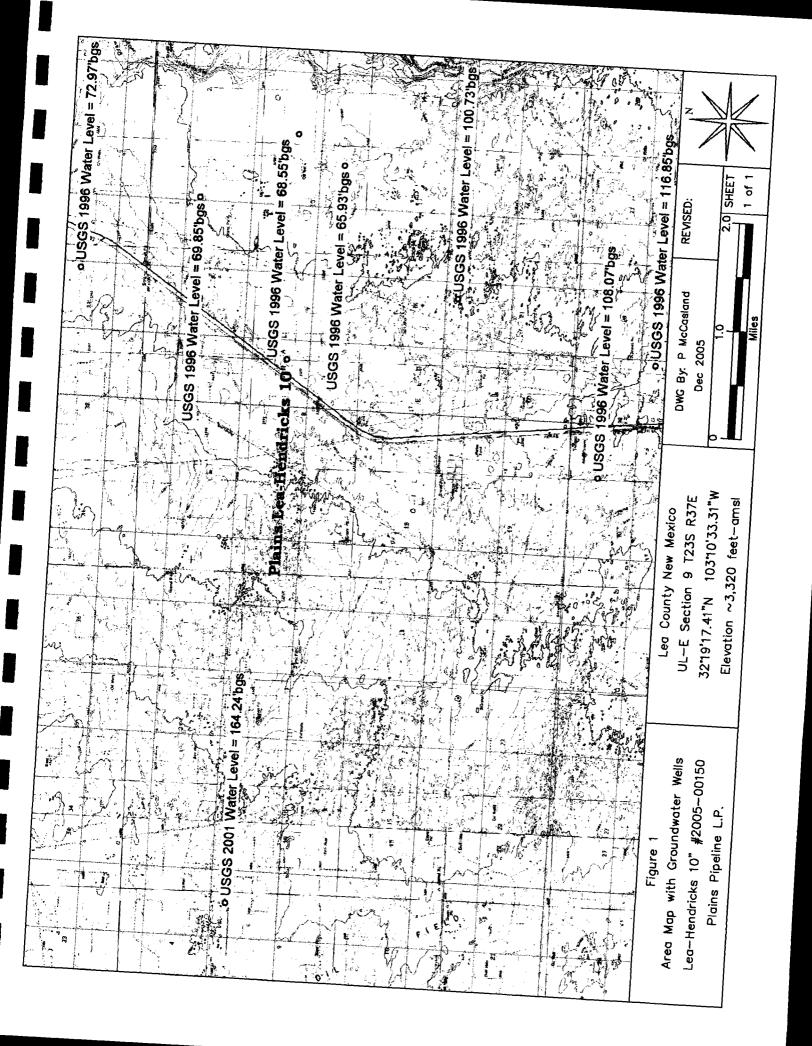
6.0 REMEDIATION AND RESTORATION

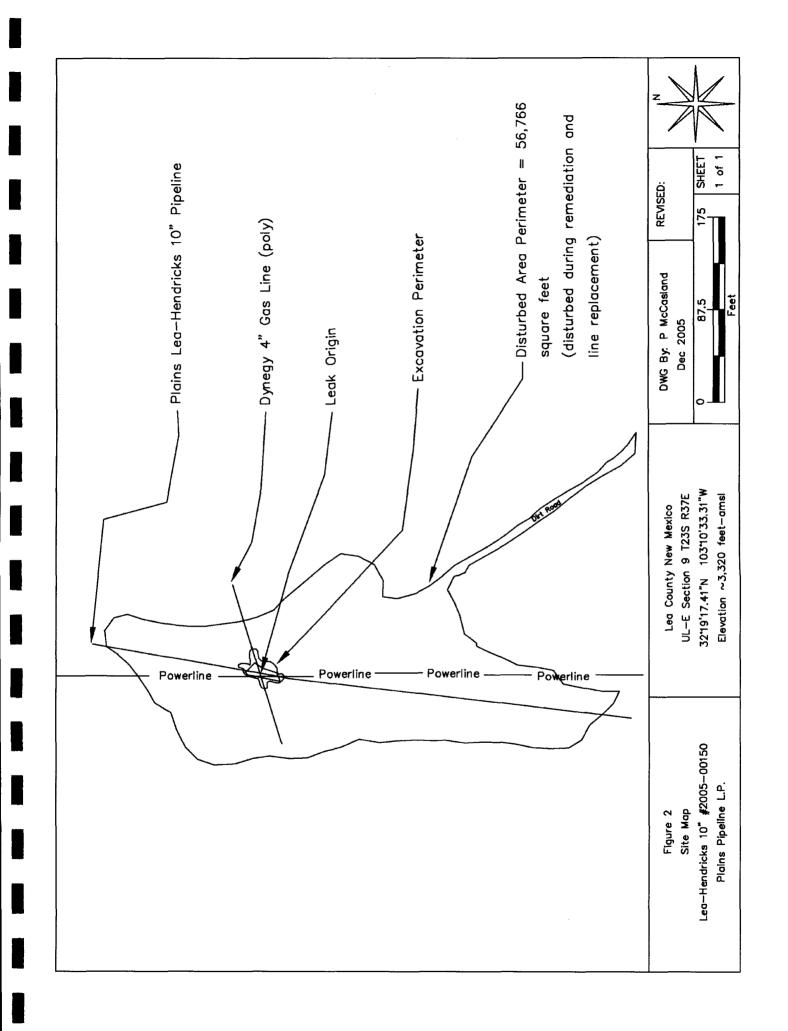
The remediation strategy was to excavate and dispose of soils impacted above the CoCs in the Plains Pipeline, L.P. Lea Station Landfarm. A total of 470 cubic yards (yd³) of impacted soil were disposed of and, after receipt of acceptable analytical results and NMOCD consensus, the excavation was backfilled with a similar volume of clean soil obtained from the landowner. At the request of the landowner, an additional 48-yd³ of topsoil were spread over the disturbed area to promote revegetation. The landowner also agreed to be responsible for reseeding the site at a time in the future. An estimated 5-yd³ of visibly impacted soil around the power pole located on the south side of the excavation could not be safely excavated and, with NMOCD approval, was left in place. This remaining impacted soil forms a semi-circle around the north side of the power pole out to approximately 4-feet, extends vertically approximately 8-feet bgs and is not considered to be an environmental risk.

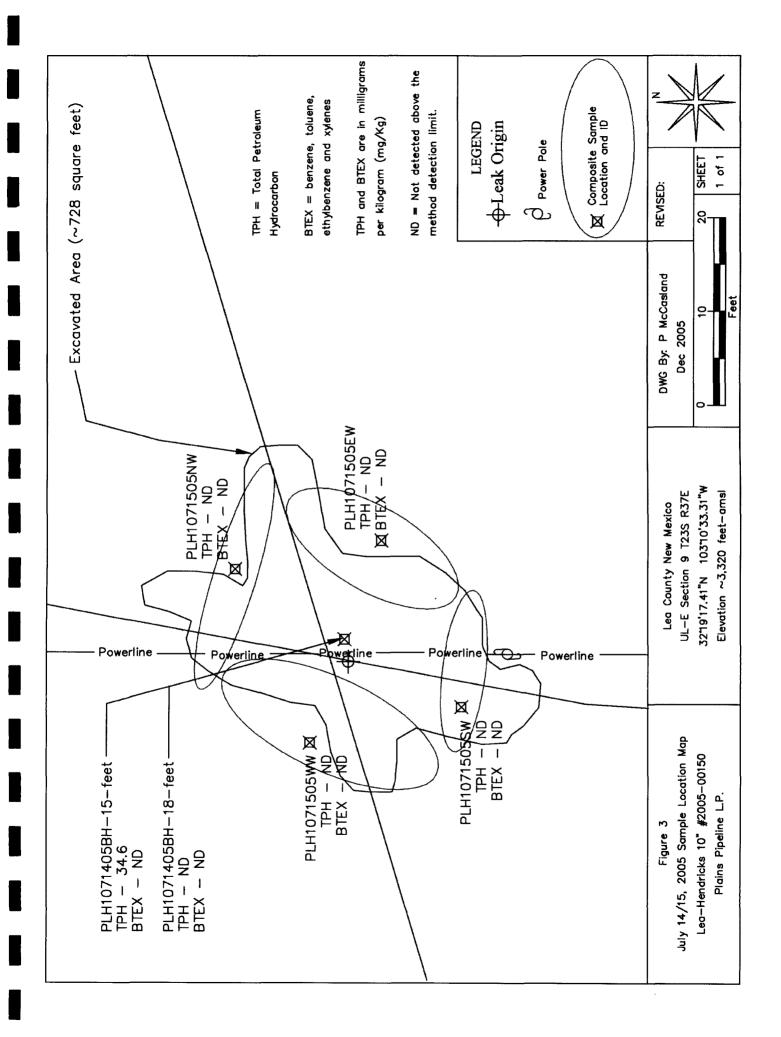
7.0 CONCLUSION

Given soils impacted above the NMOCD CoC remedial goals have been disposed of off-site, the excavation backfilled and the surface contoured, it is requested that the NMOCD require "no further remedial action" be required at the site and a site closure letter be issued to Plains.

FIGURES







TABLES

TABLE 1	Summary of Area Groundwater Levels and Site Water Level Estimate	Plains Pipeline, L.P.	Lea-Hendricks 10" #2005-00150
---------	---	-----------------------	-------------------------------

L

USGS ID#	Latitude	Longitude	Tnshp.Rng.Sec.qtrs	Measure ment Date	Groundwater Level	Surface Elevation	Calculated Groundwater Elevation	Distance and Direction from
					feet-bgs	feet-amsl	feet-amsl	2110
321936103154601	32° 19' 36.0"N 103° 15' 46.0	103° 15' 46.0"W	23S.36E.04.42431	2/21/2001	164.24	3,580	3,415.76	5.0 miles W
322003103090301	32° 20' 03.0"N 103° 09' 03 (103° 09' 03 0"W	23S.37E.03.124441 2/21/1996	2/21/1996	69.85	3,298	3,228.15	2.0 miles NE
321853103084201	32° 18' 53.0"N 103° 08' 42.0	103° 08' 42.0"W	23S.37E.10.42123	2/21/1996	65.93	3,293	3,227.07	2.0 miles ESE
321916103082501	32° 19' 16.0"N 103° 08' 25.0	103° 08' 25.0"W	23S.37E.11.111411 2/21/1996	2/21/1996	68.55	3,295	3,226.45	2.2 miles E
321755103095501	32° 17' 55.0"N 103° 09' 55.0	103° 09' 55.0"W	23S.37E.16.41411	1 2/21/1996	100.73	3,305	3,204.27	1.9 SSE
Surface elevations were internolated from the USCS Tonocarchical man	from the USCS Ton	a contraction of the contraction						

Surface elevations were interpolated from the USGS Topographical map. The estimated groundwater elevation at the site is the average of the three wells in T23S R37E nearest the site

Summary of Excavation Analytical Results Plains Pipeline, L.P. Lea-Hendricks 10" #2005-00150 TABLE 2

			Donth	μD	Co:l	Doursons	Toluce	Ethylbenze	Total	DTTV	Quy	Van	1 Mar
Sample Description	Sample ID	Date	nochun	Analysis	Inc	Delizence	allanio	пе	Xylenes	DIEA	CRO	ONU	111
			(feet)	(mqq)	Status	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Excavation Bottom	PLH1071405BH-15 14-Jul-05	14-Jul-05	15	NA	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	34.6	34.6
	PLH1071405BH-18	14-Jul-05	18	NA	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
North Sidewall Composite	PLH1071405BH-18	14-Jul-05	4 to 15	AN	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
South Sidewall Composite	PLH1071405BH-18	14-Jul-05	9 to 15	AN	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
West Sidewall Composite	PLH1071405BH-18	14-Jul-05	4 to 15	AN	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
East Sidewall Composite	PLH1071405BH-18 14-Jul-05	14-Jul-05	4 to 15	NA	In Situ	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
NMOCD Remedial Thresholds						10				50			1,000
ppm = parts per million, which is equivalent to milligrams per kilogram	milligrams per kilogram						GRO = Gasol	GRO = Gasoline Range Organics	anics				

ppur = parts per mution, which is equivalent to mutigrams per kilogram mg/Kg = milligrams per kilogram, which is equivalent to parts per million TPH = Total Petroleum Hydrocarbon NA = Not Analyzed Results in **Bold** are above the remedial action levels as set by the NMOCD.

URU = Casoline Kange Organics DRO = Diesel Range Organics BTEX = Mass sum of benzene, toluene, ethylbenzene and total xylenes PID = Photoionization Detector

APPENDICES

APPENDIX A - ANALYTICAL REPORT AND CHAIN OF CUSTODY FORM



Analytical Report

Prepared for: Daniel Bryant Plains All American EH & S 1301 S. County Road 1150

Midland, TX 79706-4476

Project: Lea-Hendricks 10" Project Number: 2005-00150 Location: UL-E Section 9 T23S R37E- Lea Co. NM

Lab Order Number: 5G15015

Report Date: 07/21/05

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project: Lea-Hendri Project Number: 2005-00150 Project Manager: Daniel Bry)	1	Fax: (432) 687-4914 Reported: 07/21/05 10:07
	ANALYTICAL REPORT FOR SAM	4PLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PLH1071405BH-15	5G15015-01	Soil	07/14/05 12:45	07/15/05 14:40
PLH1071405BH-18	5G15015-02	Soil	07/14/05 13:40	07/15/05 14:40
PLH1071505NW- Comp	5G15015-03	Soil	07/15/05 08:20	07/15/05 14:40
PLH1071505SW- Comp	5G15015-04	Soil	07/15/05 08:30	07/15/05 14:40
PLH1071505WW- Comp	5G15015-05	Soil	07/15/05 08:15	07/15/05 14:40

5G15015-06

Soil

07/15/05 08:25

07/15/05 14:40

PLH1071505EW- Comp

Page 1 of 11

Plains All American EH & S	Project: Lea-Hendricks 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00150	Reported:
Midland TX, 79706-4476	Project Manager: Daniel Bryant	07/21/05 10:07

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No
PLH1071405BH-15 (5G15015-01) Soll									
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B	
Toluene	ND	0.0250	ю	н	"	"		n	
Ethylbenzene	ND	0.0250	"	"	"	"	"		
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250		ы		"	"	n	
Surrogate: a,a,a-Trifluorotoluene		82.2 %	80-1	20	"	"	"	11	
Surrogate: 4-Bromofluorobenzene		100 %	80-1	20	"		"	58	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51517	07/15/05	07/20/05	EPA 8015M	
Diesel Range Organics >C12-C35	34.6	10.0		"	"	"	"	"	
Total Hydrocarbon C6-C35	34.6	10.0	"		"	"	"	"	
Surrogate: 1-Chlorooctane			70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		104 %	70-1	30	"	"	"	"	
PLH1071405BH-18 (5G15015-02) Soli									
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	*	"	"	
Ethylbenzene	ND	0.0250	"	"	"	11	"		
Xylene (p/m)	ND	0.0250	*	"		н	"	n	
Xylene (o)	ND	0.0250	"	"	"	n	"	n	
Surrogate: a,a,a-Trifluorotoluene		91.0 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.6 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51518	07/15/05	07/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"		"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	n	"		**	9	"	
Surrogate: 1-Chlorooctane		78.0 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		7 0 .8 %	7 0-1	30	"	"	"	"	
PLH1071505NW- Comp (5G15015-03) S	oil								
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B	
Foluene	ND	0.0250	n	"	р	"	"	"	
Ethylbenzene	ND	0.0250		"	н	**	"	"	
Kylene (p/m)	ND	0.0250	"		"	"	"	"	
Kylene (o)	ND	0.0250	"	"	"	*	ņ	"	
Surrogate: a,a,a-Trifluorotoluene		97.9 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51518	07/15/05	07/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	14	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"		"	"	"	

Environmental Lab of Texas

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

Page 2 of 11

Plains All American EH & S			Project: Le	a-Hendricks	s 10"			Fax: (432) 6	587-4914	
1301 S. County Road 1150			umber: 20					Reported: 07/21/05 10:07		
Midland TX, 79706-4476				niel Bryant						
		Oi	ganics b	y GC						
		Environ	mental I	ab of Te	exas					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No	
PLH1071505NW- Comp (5G15015-03) S	loll									
Surrogate: 1-Chlorooctane		76.4 %	70-	130	ECI\$1518	07/15/05	07/19/05	EPA 8015M		
Surrogate: 1-Chlorooctadecane		71.4 %	70-	130	"	"	"	"		
PLH1071505SW- Comp (5G15015-04) S	oil									
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B		
Toluene	ND	0.0250	11	"	"	"	"	u		
Ethylbenzene	ND	0.0250	"		"	"	"	"		
Xylene (p/m)	ND	0.0250	.,	"	"	"	υ			
Xylene (o)	ND	0.0250	н	"			0			
Surrogate: a,a,a-Trifluorotoluene		88.8 %	80-	120	"	"	n	"		
Surrogate: 4-Bromofluorobenzene		97.7 %	80-	120	"	"	~	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51518	07/15/05	07/19/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	**	"		
Total Hydrocarbon C6-C35	ND	10.0		"	"	N	"			
Surrogate: 1-Chlorooctane		108 %	70-	130	"	n	"	"		
Surrogate: 1-Chlorooctadecane		111 %	7 0- .	130	"	"	"	"		
PLH1071505WW- Comp (5G15015-05)	Soil									
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B		
Toluene	ND	0.0250	"	н	"	"	"	"		
Ethylbenzene	ND	0.0250	"	"	"	"	P	"		
Xylene (p/m)	ND	0.0250	"	"	"	n	p	**		
Xylene (o)	ND	0.0250	"	"	14	"	"	11		
Surrogate: a,a,a-Trifluorotoluene		82.9 %	80-	120	"	"	n	"		
Surrogate: 4-Bromofluorobenzene		103 %	80-	120	"	"	"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51518	07/15/05	07/20/05	EPA 8015M		
Diesel Range Organics >C12-C35	ND	10.0	"	н		"	"	н		
Total Hydrocarbon C6-C35	ND	10.0	н	"	"	н	"	"		
Surrogate: 1-Chlorooctane		87.6 %	70-	130	"	н	"	"		
Surrogate: 1-Chlorooctadecane		79.0 %	70-	120	"	"	"	*		

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

Page 3 of 11

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

Plains All American EH & S	Project: Lea-Hendricks 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00150	Reported:
Midland TX, 79706-4476	Project Manager: Daniel Bryant	07/21/05 10:07

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
PLH1071505EW- Comp (5G15015-06) Soll									
Benzene	ND	0.0250	mg/kg dry	25	EG51903	07/18/05	07/19/05	EPA 8021B	
Toluene	ND	0.0250		н	"	"		п	
Ethylbenzene	ND	0.0250	"	"	"		"	*	
Xylene (p/m)	ND	0.0250	"	"	"	"		"	
Xylene (o)	ND	0.0250	н		"	"	"	P	
Surrogate: a,a,a-Trifluorotoluene		81.7 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.9 %	80-12	0	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG51518	07/15/05	07/19/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"		"	U II	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"		
Surrogate: 1-Chlorooctane		79.8 %	70-13	0	"	"	"	"	
Surrogate: 1-Chlorooctadecane		82.4 %	70-13	0	"	"	~	"	

Environmental Lab of Texas

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

Page 4 of 11

Plains All American EH & S		P	roject: Le	a-Hendricks	s 10"			Fax: (432) 687-4914				
1301 S. County Road 1150		Project Nu						Reported:				
Midland TX, 79706-4476				niel Bryant				07/21/05 10:07				
	General Cher	nistry Parai	neters	by EPA /	Standar	d Method	s					
		Environn	nental I	ab of Te	exas							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
PLH1071405BH-15 (5G15015-01) S	oll		<u> </u>									
% Moisture	4.6	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation				
PLH1071405BH-18 (5G15015-02) S	oli											
% Moisture	4.0	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation				
PLH1071505NW- Comp (5G15015-	03) Soil											
% Moisture	2.6	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation				
PLH1071505SW- Comp (5G15015-0	04) Soil											
% Moisture	2.7	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation				
PLH1071505WW- Comp (5G15015	-05) Soil											
% Moisture	3.8	0.1	%	1	EG51807	07/15/05	07/18/05	% calculation				

PLH1071505EW- Comp (5G15015-06) Soil

3.4

0.1 %

% Moisture

Environmental Lab of Texas

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

EG51807 07/15/05

1

Page 5 of 11

% calculation

07/18/05

Plains All American EH & S	Project: Lea-Hendricks 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2005-00150	Reported:
Midland TX, 79706-4476	Project Manager: Daniel Bryant	07/21/05 10:07

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG51517 - Solvent Extraction (GC)										
Blank (EG51517-BLK1)				Prepared: (07/15/05	Analyzed: 01	7/19/05			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet	-		-				
Diesel Range Organics >C12-C35	ND	10.0	0							
Total Hydrocarbon C6-C35	ND	10.0	n							
Surrogate: 1-Chlorooctane	40.5		mg/kg	50.0		81.0	70-130			
Surrogate: 1-Chlorooctadecane	36.2		"	500		72.4	70-130			
LCS (EG51517-BS1)				Prepared: (07/15/05	Analyzed: 07	7/19/05			
Gasoline Range Organics C6-C12	428	10.0	mg/kg wet	500		85.6	75-125			
Diesel Range Organics >C12-C35	441	10.0	"	500		88.2	75-125			
Total Hydrocarbon C6-C35	869	10.0	"	1000		86.9	75-125			
Surrogate: 1-Chlorooctane	44.2		mg/kg	50.0		88.4	70-130			
Surrogate: 1-Chlorooctadecane	35.8		"	50.0		71.6	70-130			
Calibration Check (EG51517-CCV1)				Prepared: (07/15/05	Analyzed: 07	7/19/05			
Gasoline Range Organics C6-C12	438		mg/kg	500		87.6	80-120			
Diesel Range Organics >C12-C35	446		"	500		89.2	80-120			
Total Hydrocarbon C6-C35	884		"	1000		88.4	80-120			
Surrogate: 1-Chlorooctane	43.9		n	50.0		87.8	70-130			
Surrogate: 1-Chlorooctadeoane	36.6		n	50.0		73.2	70-130			
Matrix Spike (EG51517-MS1)	Sou	rce: 5G15011	t-14	Prepared: (07/15/05	Analyzed: 07	//19/05			
Gasoline Range Organics C6-C12	425	10.0	mg/kg dry	525	ND	81.0	75-125			
Diesel Range Organics >C12-C35	570	10.0	"	525	151	79.8	75-125			
Total Hydrocarbon C6-C35	995	10.0	19	1050	151	80.4	75-125			
Surrogate: 1-Chlorooctane	52.2		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorcoctadecane	54.9		"	50.0		110	70-130			
Matrix Spike Dup (EG51517-MSD1)	Sou	rce: 5G15011	1-14	Prepared: (07/15/05 A	Analyzed: 07	/19/05			
Gasoline Range Organics C6-C12	426	10.0	mg/kg dry	52.5	ND	81.1	75-125	0.235	20	-
Diesel Range Organics >C12-C35	575	10.0	*	525	151	80.8	75-125	0.873	20	
Total Hydrocarbon C6-C35	1000	10.0	"	1050	151	80.9	75-125	0.501	20	
Surrogate: 1-Chlorooctane	59.7		mg/kg	50.0		119	70-130			
Surrogate: 1-Chlorocctadecane	55.8		*	50.0		112	70-130			

Environmental Lab of Texas

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

Page 6 of 11

Plains All American EH & S	Project: Lea-Hendricks 10"									Fax: (432) 687-4914				
1301 S. County Road 1150			umber: 200						Reported:					
Midland TX, 79706-4476			anager: Dar						07/21/05 10:07					
	Or	ganics by	/ GC - Q	uality Co	ontrol									
		Environ	nental L	ab of Te	xas									
		Reporting		Spike	Source		%REC		RPD					
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes				
Batch EG51518 - Solvent Extraction (GC)								_						
Blank (EG51518-BLK1)				Prepared: 0	07/15/05 Ai	nalyzed: 07	//19/05							
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet											
Diesel Range Organics >C12-C35	ND	10.0	"											
Total Hydrocarbon C6-C35	ND	10.0	*											
Surrogate: 1-Chlorooctane	42.8		mg/kg	50.0		<i>85.6</i>	70-130							
Surrogate: 1-Chlorooctadecane	36.2		"	50.0		72.4	70-130							
LCS (EG51518-BS1)	Prepared: 07/15/05 Analyzed: 07/19/05													
Gasoline Range Organics C6-C12	436	10.0	mg/kg wet	500		87.2	75-125							
Diesel Range Organics >C12-C35	447	10.0	"	500		89.4	75-125							
Total Hydrocarbon C6-C35	883	10.0	"	1000		88.3	75-125							
Surrogate: 1-Chlorooctane	44.0		mg/kg	50.0		88.0	70-130							
Surrogate: 1-Chlorooctadecane	35.6		"	50.0		71.2	70-130							
Calibration Check (EG51518-CCV1)				Prepared: 0)7/15/05 Ai	n alyzed: 07	/19/05							
Gasoline Range Organics C6-C12	457		mg/kg	500		91.4	80-120							
Diesel Range Organics >C12-C35	440		"	500		88.0	80-120							
Total Hydrocarbon C6-C35	897		n	1000		89.7	80-120							
Surrogate: 1-Chlorooctane	43.4		"	50.0		86.8	70-130							
Surrogate: 1-Chlorooctadecane	36.0		"	50.0		72.0	70-130							
Matrix Spike (EG51518-MS1)	Sour	ce: 5G1501	5-02	Prepared: 0	07/15/05 At	n alyzed: 07	/19/05							
Gasoline Range Organics C6-C12	550	10.0	mg/kg dry	521	ND	106	75-125							
Diesel Range Organics >C12-C35	649	10.0	n	521	ND	125	75-125							
Total Hydrocarbon C6-C35	1200	10.0	н	1040	ND	115	75-125							
Surrogate: 1-Chlorooctane	39.9		mg/kg	50,0		79.8	70-130							
Surrogate: 1-Chlorooctadecane	41.9		"	50.0		83.8	70-130							
Matrix Spike Dup (EG51518-MSD1)		e: 5G15015	⊢0 2	Prepared: 0	07/15/05 Ar	nalyzed: 07	/19/05							
Gasoline Range Organics C6-C12	535	10.0	mg/kg dry	521	ND	103	75-125	2.76	20					
Diesel Range Organics >C12-C35	636	10.0	"	521	ND	122	75-125	2.02	20					
Fotal Hydrocarbon C6-C35	1170	10.0	"	1040	ND	112	75-125	2.53	20					
Surrogate: 1-Chlorooctane	40.7		mg/kg	50.0		81.4	70-130							
Surrogate: 1-Chlorooctadecane	42.1		"	50.0		84.2	70-130							

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

Page 7 of 11

Plains All American EH & S				Fax: (432)	687-4914					
1301 S. County Road 1150			umber: 200	1-Hendricks 05-00150					Repo	rted :
Midland TX, 79706-4476		Project Ma	anager: Dai	niel Bryant					07/21/0	
	O	ganics by	7 GC - Q	uality Co	ontrol					
		Environ	nental L	ab of Tex	xas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG51903 - EPA 5030C (GC)					<u></u>		_			
Blank (EG51903-BLK1)				Prepared: ()7/18/05 A	nalyzed: 07	//19/05			
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
thy benzene	ND	0.0250	"							
(ylene (p/m)	ND	0.0250	н							
(ylene (o)	ND	0.0250	PI -							
urrogate: a.a.,a-Trifluorotoluene	83.5		ug/kg	100		83.5	80-120			
urrogate: 4-Bromofluorobenzene	83.2		"	100		83.2	80-120			
.CS (EG51903-BS1)										
Benzene	84.0		ug/kg	100		84.0	80-120			
Toluene	88.9		м	100		88.9	80-120			
Ethylbenzene	97.4		н	100		97.4	80-120			
(ylene (p/m)	191		"	200		95.5	80-120			
(ylene (o)	99.9		"	100		99.9	80-120			
urrogate: a,a,a-Trifluorotoluene	82.9		n	100		82.9	80-120			
urrogate: 4-Bromofluorobenzene	98.1		"	100		98. I	80-120			
Calibration Check (EG51903-CCV1)				Prepared: (07/18/05 A	nalyzed: 07	/19/05			
Benzene	90.2		ug/kg	100		90.2	80-120			
`oluene	96.3			100		96.3	80-120			
thylbenzene	102		"	100		102	80-120			
(ylene (p/m)	198		n	200		99.0	80-120			
(ylene (o)	97.3		*	100		97.3	80-120			
urrogate: a.a.a-Trifluorotoluene	91.0		"	100		91.0	80-120			
furrogate: 4-Bromofluorobenzene	99.6		*	100		99.6	80-120			
Aatrix Spike (EG51903-MS1)		ce: 5G15015	-06	Prepared: 0	07/18/05 A	nalyzed: 07	/19/05			
Senzene	105		ug/kg	100	ND	105	80-120			
ohiene	109		"	100	ND	109	80-120			
uthylbenzene	109			100	ND	109	80-120			
(ylene (p/m)	213		h 	200	ND	106	80-120			
ylene (0)	97.8		"	100	ND	97.8	80-120			
urrogate: a.a.a-Trifluorotoluene	96.0		"	100		96.0	80-120			

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

Page 8 of 11

Organics by GC - Quality Control Environmental Lab of Texas								
Midland TX, 79706-4476	Project Manager: Daniel Bryant	07/21/05 10:07						
1301 S. County Road 1150	Project Number: 2005-00150	Reported:						
Plains All American EH & S	Project: Lea-Hendricks 10"	Fax: (432) 687-4914						

Analyte	Result	Reporting Limit U		Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG51903 - EPA 5030C (GC)										
Matrix Spike Dup (EG51903-MSD1)	Sour	ce: 5G15015-06	Pre	pared: ()7/18/05 Ai	nalyzed: 07	/19/05			
Benzene	86.0	ug	Лкg	100	ND	86.0	80-120	19.9	20	
Toluene	90.9		4	100	ND	90.9	80-120	18.1	20	
Ethylbenzene	100		•	100	ND	100	80-120	8.61	20	
Xylene (p/m)	198			200	ND	99.0	80-120	6.83	20	
Xylene (0)	97.5			100	ND	97.5	80-120	0.307	20	
Surrogate: a,a,a-Trifluorotoluene	83.4		M	100		83.4	80-120			
Surrogate: 4-Bromofluorobenzene	100		"	100		100	80-120			

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 1

Page 9 of 11

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		mber: 200	-Hendricks 5-00150 niel Bryant		Fax: (432) 687-4914 Reported: 07/21/05 10:07					
General	Chemistry Para	meters by Environm				ls - Qua	lity Con	trol		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG51807 - General Preparatio	n (Prep)									
March (ECISIONS DI IZI)				Prepared: (07/15/05 A	nalyzed: 07	/18/05			
Blank (EG51807-BLK1)										

Duplicate (EG51807-DUP1)	Source:	5G15002-0	1	Prepared: 07/15/05 Analyzed: 07/18/05			
% Moisture	18.9	0.1	%	17.2	9.42	20	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 16

Page 10 of 11

Plains A	ll American EH & S	Project:	Lea-Hendricks 10"	Fax: (432) 687-4914
	County Road 1150	Project Number:		Reported:
Midland	TX, 79706-4476	Project Manager:	Daniel Bryant	07/21/05 10:07
		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 Kuthat

7/21/2005

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

Date:

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

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

Environmental Lab of Texas

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

Page 11 of 11

Ib of Texas, Inc. Phone: 432-563-171 Plains Pipeline, L.P. SY05 East Highway 158 AIDLAND, TX 79706 AIDLAND, TX 79707 AIDLAND, TX 79707 AIDL				o NM								yltidsifringl Chlorides Sulfates TAT H2UR TAT H2UR	×	×	×	×	X	×					ners Intact? (*) N	pon Request	nments:	in scale
B Project Mame: Lea Hendricks 10* Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 <td< td=""><td></td><td></td><td></td><td>O B9-</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td>ontai</td><td>ure U</td><td>V Cor</td><td>10</td></td<>				O B9-					-												_		ontai	ure U	V Cor	10
B Project Mame: Lea Hendricks 10* Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 <td< td=""><td></td><td></td><td></td><td>37E I</td><td></td><td></td><td></td><td>For</td><td>-</td><td>Γ</td><td></td><td></td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td></td><td></td><td></td><td></td><td>ple C</td><td>peral</td><td>rator</td><td>2</td></td<>				37E I				For	-	Γ			×	×	×	×	×	×					ple C	peral	rator	2
B Project Mame: Lea Hendricks 10* Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 Project #: 2005-00150 <td< td=""><td></td><td></td><td></td><td>ы К</td><td></td><td></td><td></td><td>1 Z</td><td></td><td><u>†</u></td><td>†</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>+</td><td>Sam</td><td>[em]</td><td>abde.</td><td></td></td<>				ы К				1 Z		<u>†</u>	†											+	Sam	[em]	abde.	
3 0 3 0 11 11 11 <td>o.</td> <td>2</td> <td></td> <td>T23</td> <td></td> <td></td> <td></td> <td>A</td> <td></td> <td>\mathbf{f}</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>1</td> <td>Ť</td> <td></td> <td>0</td> <td>1</td>	o.	2		T23				A		\mathbf{f}										-		1	Ť		0	1
3 0 3 0 11 11 11 <td>t si</td> <td>2</td> <td>1</td> <td>6 u</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>\square</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\uparrow</td> <td>-</td> <td>\uparrow</td> <td>-</td> <td></td> <td></td> <td>E:</td>	t si	2	1	6 u					1	\square										\uparrow	-	\uparrow	-			E:
3 0 3 0 11 11 11 <td>dric</td> <td></td> <td>2</td> <td>ctio</td> <td>150</td> <td></td> <td></td> <td></td> <td> </td> <td>t</td> <td>bЯ</td> <td></td> <td>×</td> <td>×</td> <td>×</td> <td>×</td> <td>×</td> <td>×</td> <td></td> <td></td> <td></td> <td>-</td> <td>1</td> <td></td> <td>1 1</td> <td><u>ا</u></td>	dric		2	ctio	150				 	t	bЯ		×	×	×	×	×	×				-	1		1 1	<u>ا</u>
3 0 3 0 11 11 11 <td>hen</td> <td></td> <td>Ş</td> <td>Se</td> <td>8</td> <td></td> <td></td> <td></td> <td>٩</td> <td>F</td> <td>L</td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td>	hen		Ş	Se	8				٩	F	L												1			1
3 0 3 0 11 11 11 <td>di Q</td> <td></td> <td>8</td> <td>1</td> <td><u>S</u></td> <td></td> <td></td> <td></td> <td>12</td> <td>Б</td> <td><u> </u></td> <td>Lar HqT</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td>1</td> <td></td> <td>et e</td> <td>le l</td>	di Q		8	1	<u>S</u>				12	Б	<u> </u>	Lar HqT								+			1		et e	le l
3 0 3 0 11 11 11 <td></td> <td>j :</td> <td>44 44</td> <td>ÿ</td> <td>- <u></u></td> <td></td> <td></td> <td></td> <td>ľ</td> <td>[</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td>+</td> <td>1</td> <td></td> <td></td> <td></td>		j :	44 44	ÿ	- <u></u>				ľ	[+		+	1			
3 0 3 0 11 11 11 <td>mah</td> <td></td> <td>ect ect</td> <td>L L</td> <td>ð</td> <td></td> <td></td> <td>L</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-+-</td> <td>+</td> <td>+</td> <td>1</td> <td></td> <td>·</td> <td><u> </u></td>	mah		ect ect	L L	ð			L		1										-+-	+	+	1		·	<u> </u>
3 0 3 0 11 11 11 <td></td> <td>ž i</td> <td>o L</td> <td>ojeć</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td> <td>×</td> <td>\mathbf{x}</td> <td>×</td> <td>×</td> <td>×</td> <td></td> <td></td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td></td>		ž i	o L	ojeć									×	×	\mathbf{x}	×	×	×					4			
3 0 3 0 3 1 3 1 3 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	roie	2		å							<u></u>				-		-	-	-+	-+		+-	-			
RPI Fine Sampled Time Sampled RPI Time Sampled RS Time Received by: No. of Containers Time Received by: No. of Containers	Ц	~												-					\rightarrow			+	-			
3 3 3 3											\vdash										+	+	4			
33 3 33 Bate Sampled EPI - Environmental Consultant EPI - Environmental Consultant 7/14/05 8:20 7/15/05 8:20 7/15/05 8:20 7/15/05 8:20 7/15/05 8:20 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7/15/05 8:25 7 7 7 7		I	T	ł	1			1											-+				-			
3 3 33 EPI - Environmental C 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7 1 X 7 1 X 7 1 X 1 X X 1 X X 1 X X 1 X X 1 X X 1 X X 1 X X											₽											+	-		0	
3 3 3 3 3 3 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 4 4				ļ							2at												-		8	}
3 3 33 EPI - Environmental Campled 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:20 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7/15/05 8:25 1 7 1 X 7 1 X 7 1 X 1 X 1 1 X 1 1 X 1 1 X 1 1 X 1 1 X 1			Í				4.0	2			ese							-	\rightarrow				-	50		$\langle \langle \rangle$
3 3 0 7/1 5/05 7/1 5/05								3			ą		-	24			<u>. 94</u>	-					-	4-26		18
3 3 0 7/1 5/05 7/1 5/05				1				ğ					5	-	-	늰	-	-					4	5-39	hannis	
3 0 7/1 5/05 7/1 5/05 7											Щ		$\hat{-}$	_	$\widehat{}$	_	_	-		\rightarrow	+	+	-	[20]		12
3 3 0 7/1 5/05 7/1 5/05							, in	5 E							_			_			+		-	AP	A d	2
I Lab of Texas, inc. Phone: 432-563-1713 432-563-1713 Fax: Ber: Daniel Bryant me: Plains Pipeline, L.P. sss: 3705 East Highway 158 sss: 1375 Fast Highway 158 sss: 1375 Fast Highway 158 No: 432.686.1769 No: 432.686.1769 No: 432.686.1769 No: 432.686.1769 No: 432.686.1769 No: 432.686.1769 No: 1371405 No: 714405 O71405BH-15 7/14/05 O71405BH-15 7/14/05 O71405EW-Comp 7/15/05 071505EW-Comp 7/15/05												belqms2 emiT	12:45	1:40	8:20	8:30	8:15	8:25						sland AS	Received	Received
I Lab of Texas, inc Phone: 432-563-17 ger: Daniel Bryant me: Plains Pipeline, L.P. ses: 3705 East Highway 158 ses: 3705 East Highway 158 Sip: MIDLAND, TX 79706 No: 432.686, 1769 OT1405BH-15 071405BH-15 071405BH-16 071405BH-15 0715055Ww-Comp 0715055Ww-Comp 0715055Ww-Comp 0715055W - Comp 0715055Ww-Comp Date	• 8 °											Date Sampled	7/14/05	7/14/05	7/15/05	7/15/05	7/15/05	7/15/05) Pat McCa	Time /	Time
I Lab of Te Phone: Fax: Pains Pipelin Fax: Mo: 432.686: 1769 No: 1071405BH-15 071405BH-16 0715055W-Comp 0715055W-Comp 0715055W-Comp	XaS, Inc 432-563-18(432-563-17)	-	e, L.P.	thway 158	90262 (ICATION			0	0	a	0						RESULTS TC	Date 250	Date
	Lab of Te Phone: Fax:	aris of the second	me: <u>Plains Pipelin</u>	ess: 3705 East Hic	ZIP: MIDLAND, T)	No: 432.686.1769	TTO: NY	in the second	And and	Pa.,		SAMPLE IDENTIF	071405BH-15	071405BH-18	071505NW-Com	071505SW-Com	071505WW-Com	1071505EW-Com						FAX		0
	Environmen 12600 West I-20 East Odessa Texas 79763 Prolect M.		E C C	Comp	U	Te	Cample							nar Lat Nation									Special Instructions		Relinquished:	lished:

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

Client:	Plains AA
Date/Time:	1/15/05 2:40
Order #:	5615015
Initials:	CK

Sample Receipt Checklist

and the second		
Yes	No	0.G C
Yes	No	none
Yes	No	Not present
Yes	No	Not presento
Kes	No	
KES	No	
1 des	No	
Kes	No	
(TES)	No	
(es)	No	
1 XPS	No	
Yes	No	
KES	No	
Yes	No	
1 des	No	
100	No	
(es)	No	
Tes	No	Not Applicable
	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes No Yes No Yes No Yes No Xes No

Other observations:

Variance Documentation:

.

•

Contact Person:	مید موجه المال میں میں المال اور میں المال میں میں الم	Date/Time:	 Contacted by:	
Regarding:				

Corrective Action Taken:

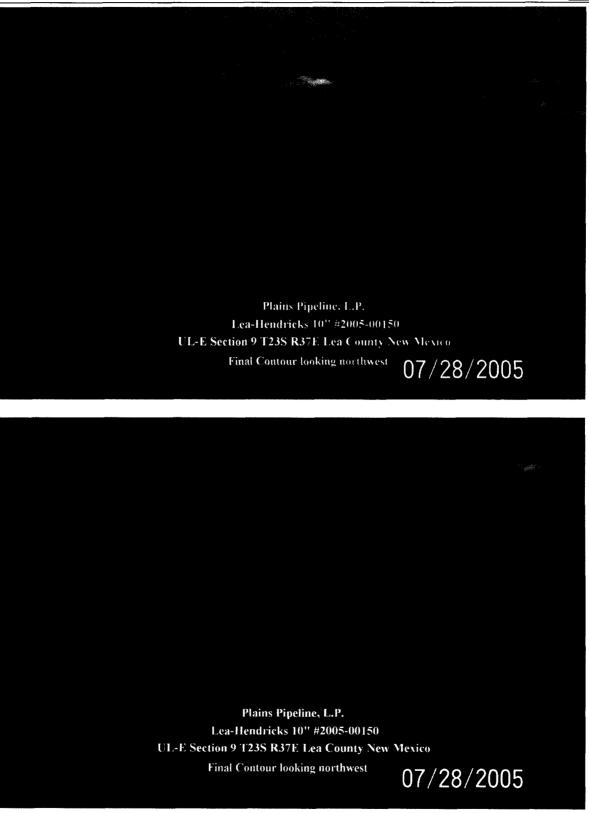
•

APPENDIX B - PHOTOGRAPHIC DOCUMENTATION



Plains Pipeline, L.P. Lea-Hendricks 10" #2005-00150 UL-E Section 9 T23S R37E Lea County New Mexico (south end of site looking west) 07/28/2005

PLAINS



APPENDIX C - SITE INFORMATION AND METRICS FORM AND FINAL C-141

PLAINS ALL AMBRICAN

I PLA	INS		Incident		NMOCD Notified	
ALL AME	RICAN	1.34		05 @ 7:55:00 AN	M Larry Johnson b	у
	Site Information a Hendricks 10"	nd Metrics			# 2005 00150	
				signed Site Refer	ence #: 2005-00150	
	Plains Pipeline, L.P.				······································	
Street Address: PO Box 3119 Notified Date/T					ne:	
Mailing Address: 3705 East Highway 158 Notified by:						
City, State, Zip: Midland, Texas 79702 Person Notified:			·····			
	ve: Daniel Bryant	NRC Report# :				
	ve Telephone: 432	2.686.1769				
Telephone:						
Fluid volume	e released (bbls): 4			Recovered (bb		
	>25 bbls: Notify NMOO					
5 25 bblos ((Also appl	tes to unauth	orized relea	ses >500 mcf Natur	al Gas) ases of 50-500 mcf Natural	Gas
J-25 DDIs: 3	or Pit (LSP) Name:	Lea-Hend	tricks 10"	o unauthonized tete	ases of 50-500 mer Natural	Gasj
	ntamination: 10-inc					
	, i.e., BLM, ST, Fee,					<u> </u>
LSP Dimens		Other. Into	gene Salzi			
LSP Area:	$\frac{15 \times 15}{225 \text{ sqft}}$					
	Reference Point (RP)	,		<u> </u>		
	tance and direction f					
		TOM KP				
Latitude:	<u>32° 19' 17.416"N</u> 103° 10' 33.311"W				<u></u>	
	ove mean sea level:	3,320	amsl			
	outh Section Line					
	est Section Line					
Location- U		f the NW ¹ /4	Un	it Letter: E		
Location- Se						
	ownship: T23S					
Location- Ra	inge: R37E					
Surface wate	r body within 1000 '	radius of s	ite: none			
Domestic wa	ter wells within 1000)' radius of	site: non	e		
Agricultural	water wells within 10	000' radius	of site: n	one		
	supply wells within					
	land surface to groun				· · · · · · · · · · · · · · · · · · ·	
	ntamination (DC) -			~_		
Depth to gro	oundwater (DG – DC	= DtGW	- 77-fee	t		
	roundwater			tection Area	3. Distance to Surface	Water
1. 0		2. wei			Body	
	GW <50 feet: 20	If <1000'	from wate	er source.	<200 horizontal feet:	20
-			00' from private domestic			20
points		or:<200' f	rom priva	te domestic	points	
points If Depth to	GW 50 to 99 feet:				200-100 horizontal fe	
points	GW 50 to 99 feet:	water sour	rce: 20 poi	nts		
points If Depth to 10 points		water sour If >1000'	rce: 20 poi from wate	nts er source, or;	200-100 horizontal fe points	et: 10
points If Depth to 10 points If Depth to	GW 50 to 99 feet: GW >100 feet: 0	water sour If >1000' >200' from	rce: 20 poi from wate m private	nts	200-100 horizontal fe points >1000 horizontal feet	et: 10
points If Depth to 10 points If Depth to points	GW >100 feet: 0	water sour If >1000' >200' from source: 0	rce: 20 poi from wate m private points	nts er source, or; domestic water	200-100 horizontal fe points >1000 horizontal feet points	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater.	GW >100 feet: 0 Score = 10	water sour If >1000' >200' from source: 0	rce: 20 poi from wate m private points	nts er source, or;	200-100 horizontal fe points >1000 horizontal feet	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1-	GW >100 feet: 0 Score = 10 +2+3) = 10	water sour If >1000' >200' from source: 0 Wellhead P	rce: 20 poi from wate m private points Protection A	nts er source, or; domestic water trea Score=0	200-100 horizontal fe points >1000 horizontal feet points	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1-	GW >100 feet: 0 Score = 10 +2+3) = 10 anking Score and Acc	water sour If >1000' >200' from source: 0 Wellhead P ceptable Co	rce: 20 poi from wate m private points Protection A	nts er source, or; domestic water trea Score=0	200-100 horizontal fe points >1000 horizontal feet points	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1- Total Site Ra Parameter	GW >100 feet: 0 Score = 10 +2+3) = 10	water sour If >1000' >200' from source: 0 Wellhead P ceptable Co	rce: 20 poi from wate m private points Protection A ncentratio	nts er source, or; domestic water trea Score=0	200-100 horizontal fe points >1000 horizontal feet points	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1- Total Site Ra	GW >100 feet: 0 Score = 10 +2+3) = 10 anking Score and Acc	water sour If >1000' >200' from source: 0 Wellhead P ceptable Co	rce: 20 poi from wate m private points Protection A ncentratio	nts er source, or; domestic water rea Score=0 ns ce to 42'bgs)	200-100 horizontal fer points >1000 horizontal feet points Surface Water Score= 0 0-9	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1- Total Site Ra Parameter	GW >100 feet: 0 Score = 10 +2+3) = 10 anking Score and Acc >19 (42 to 92'bgs	water sour If >1000' >200' from source: 0 Wellhead P ceptable Co	rce: 20 poi from wate m private points Protection A ncentratio 19 (surfac 10 p	nts er source, or; domestic water rea Score=0 ns ce to 42'bgs)	200-100 horizontal fer points >1000 horizontal feet points Surface Water Score= 0 0-9 10 ppm	et: 10 : 0
points If Depth to 10 points If Depth to points Groundwater Site Rank (1- Total Site Ra Parameter Benzene ¹	GW >100 feet: 0 Score = 10 +2+3) = 10 anking Score and Acc >19 (42 to 92'bgs 10 ppm	water sour If >1000' >200' from source: 0 Wellhead P ceptable Co	rce: 20 poi from wate m private points Protection A ncentratio 19 (surfac 10 p 50 p	nts er source, or; domestic water <i>trea Score=0</i> ns ce to 42'bgs) opm	200-100 horizontal fer points >1000 horizontal feet points Surface Water Score= 0 0-9	et: 10 : 0

ĺ

.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III			Natural Resources		Revised October 10, 2004 Submit 2 Copies to appropriate	
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr. Santa Fr. NM 87505	1220 South S	t. Francis D NM 87505	r.	District	Office in accordance ith Rule 116 on back	
1220 S. St. Francis Dr., Santa Fe, NM 87505				····.	side of form	
	otification ar					
OPERATOR			Initial Repor		Final Report	
Name of Company: Plains Pipeline,			Daniel Brya	int		
Address: PO Box 3119, 3705 East H	ighway 158	Telephon 432.686.1				
Midland, Texas 79702 Facility Name		Facility T				
Lea-Hendricks 10" #2005-00150			steel pipelin	e		
Surface Owner: Imogene Salzman		Mineral			se No.	
	OCATION OF	RELEAS	SF			
Unit Section Township Ran		North/South	Feet from	East/West	County: Lea	
Letter 9 T23S R37	5 I . I	Line	the	Line		
		T *4	1 103° 10			
	32° 19' 17.416"N NATURE OF		de: <u>103°10</u> 7	<u>' 33.311" W</u>	_	
Type of Release		ne of Release		Volume Re	covered	
Crude Oil		arrels	-	2 barrel		
Source of Release		and Hour of			lour of Discovery	
10-inch Steel pipeline Was Immediate Notice Given?		6/24/2005 @ 7:55:00 AM 6/24/2005 @ 8:00:00 AM If YES, To Whom?				
Yes No X Not Re		v Johnson	ŗ			
By Whom? Daniel Bryant		Date and Hour				
Was a Watercourse Reached? 🔲 Yes	No If YE	If YES, Volume Impacting the Watercourse .: NA				
If a Watercourse was Impacted, Describe NA	Fully.*					
Describe Cause of Problem and Remedial Action Taken.*10-inch Steel pipeline External corrosion in a weld; the line was depressured and a repair clamp installed; standing fluids were reintroduced to the pipeline. 470 cy of impacted soil were disposed of in the Plains Lea Station Landfarm, the excavation backfilled and the surface contoured with topsoil.						
Describe Area Affected and Cleanup Action Taken.* Area=225 sqft (15' x 15'): Soil impacted above the NMOCD remedial goals was disposed of in the Plains Lea Station Landfarm and the excavation backfilled with clean soil. Remedial Goals: TPH 8015m = 1,000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.						
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to						
groundwater, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION						
Printed Name: Daniel Bryant Panel, Bryant Approved by District Supervisor:						
E-mail Address: DMBryant@PAALP.co	- 0	Approva	1 Date: 5.1()	Ex	piration Date:-	
Title: Environmental Specialist	<u>-</u>	Conditions of Approval: Attached			ached 🔲	
Date: 2.8.07 Phone: 432.686.1769						

Attach Additional Sheets If Necessary