

SOIL REMEDIATION, CLOSURE DOCUMENTATION, AND FINAL C-141

Young Deep to Lynch 8" Ref. # #2004-00180

UL-H (SE¼ of the NE¼) of Section 11, R33E, T20S Latitude 32° 35' 27.30"N and Longitude 103° 37' 41.48"W Elevation ~3,590'amsl

34.5 miles west of Hobbs, Lea County, New Mexico

Date November 9, 2004

Prepared by

Environmental Plus, Ind 2100 Avenue O P.O. Box 1558 Eunice, New Mexico 88231 c 505•394•3481 FAX 505•394•20

Hobbs

- 34053 etc. 505.394.3481 FPACO602449037 -cPAC0602449183 ncident - NPACO602449563 polication -pPACO60249856



December 16, 2004

Mr. Larry Johnson Environmental Engineer New Mexico Oil Conservation Division 1625 North French Hobbs, New Mexico 88240

Subject: Plains All American Final C-141

Re: Young Deep to Lynch 8", #2004-00180
UL H, SE¼ of the NE¼ of Section 11 T20S R33E
Latitude 32° 35' 27.30"N and Longitude 103° 37' 41.48"W
Landowner: Bureau of Land Management

Dear Mr. Johnson,

Included herewith please find the New Mexico Oil Conservation Division (NMOCD) final form C-141 and documentation, i.e., "Plains Soil Remediation, Closure Documentation, and Final C-141 for the Young Deep to Lynch 8 ref.#2004-00180" being submitted by Environmental Plus, Inc. (EPI), on behalf of Camille Reynolds, Plains All American for the above referenced leak site located on land owned by the Bureau of Land Management, approximately 34.5 miles west of Hobbs, New Mexico. EPI, on behalf of Plains, requests "no further action" be required at the site except final reseeding in the spring of 2005.

If there are any questions please call Mr. Cody Miller or myself at the office or at 505.631.8447 and 505.390.7864, respectively or Camille Reynolds at 505.396.3341. All official communication should be addressed to:

Camille Reynolds Plains All American PO Box 3119 Midland, Texas 79706 (CJReynolds@paalp.com)

Sincerely,

Pat McCasland EPI Technical Services Manager





cc: Camille Reynolds, Plains All American (CJReynolds@paalp.com) Jeff Dann, Plains All American (JPdann@paalp.com) Cody Miller, EPI Vice President and General Manager (enviplus1@aol.com) Sherry Miller, EPI President file

ALL AMERICA	Site Information a Metrics	nd	Incident Date: 8-5-04@7:30AM	NMOCD Noti 8-05-04@2:15	
SITE: Young I	Deep to Lynch 8"		Assigned Site R	eference #: #2	004-00180
Company: Pla	ins All American				
Street Address:	PO Box 1660				
Mailing Address	s: 5805 East Highway 80)			· · · · · · · · · · · · · · · · · · ·
	Midland, Texas 79702				
	Camille Reynolds			10 m	
Representative 7		1			
Telephone:					
	leased (bbls): 10		Recover	red (bbls): 0 bbl	s
T fulle volume re		NMOCI	D verbally within 24 hrs and sub		
	(Als	so applie	es to unauthorized releases >500	mcf Natural Gas)	
			15 days (Also applies to unaut	horized releases of f	50-500 mcf Natural Gas)
	Pit (LSP) Name: Young		to Lynch 8"		
	mination: 8" Steel Pipelin				
	., BLM, ST, Fee, Other: E	Bureau	of Land Management		
LSP Dimension				- to the set	
LSP Area:	78 ft ²				
Location of Ref	erence Point (RP)				
	e and direction from RP			••••••••••••••••••••••••••••••••••••••	
	° 35' 27.30"N	·		. 24	
Longitude: 103					
Elevation above		mel		······	
Feet from South					
Feet from West					
	or $\frac{1}{4}$ SE ¹ /4 of the NE ¹ /4		Unit Letter: H		
Location- Section					
Location- Town					<u> </u>
Location- Rang	e: R33E				
					a
	ody within 1000 ' radius of				
	wells within 1000' radius				
	wells within 1000' radius				······
<u>×</u>	ter wells within 1000' rad				
	ter wells within 1000' rad				
Public water su	oply wells within 1000' ra	dius o	f site: none		
Depth from land	I surface to ground water	(DG)	150		
Depth of contan					
Depth to ground	l water $(DG - DC = DtGV)$	V) -	?		
1. G	round Water		2. Wellhead Protection	on Area	3. Distance to Surface Water Body
If Depth to GW	<50 feet: 20 points	If <1	000' from water source, o		<200 horizontal feet: 20 points
If Depth to GW	50 to 99 feet: 10 points		te domestic water source		200-100 horizontal feet: 10 points
	· · _ · _ · _ · _ · _ · _ · _ ·		000' from water source, o		
If Depth to GW	>100 feet: 0 points		te domestic water source		>1000 horizontal feet: 0 points
Ground water S	core = 0		head Protection Area Sco		Surface Water Score= 0
Site Rank (1+2-				·	
		te Rar	iking Score and Accepta	ble Concentra	tions
Parameter	>19		10-19	Siv Concentia	0-9
Benzene ¹	10 ppm		10 ppm		10 ppm
BTEX	50 ppm		50 ppm		50 ppm
TPH	100 ppm				
	VOC headspace measuren		1000 ppm	nalucio	5000 ррт
	• <u>C</u> neauspace measurem		ay be substituted for fab	111d1 y 515	

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

			Releas	se Notifica	tion a	and Cor	rective A	ction				
	OPERA	ГOR					🔲 In	itial Report	🛛 Fina	l Report		
Name of Co					u.	Contact						
Plains All A	American						e Reynolds					
Address	10 Midlow	1 Towas 7070	2			Telepho 505.393						
Facility Nat		l, Texas 7970	1 <u>2</u>			Facility						
-		8" #2004-00	180				I Pipeline					
Toung Dee	p to Lynen									· · · · · · · · · · · · · · · · · · ·		
Surface Ow	ner: Burea	u of Land M	anageme	ent		Mine	ral Owner		Lease No	D.		
				LOCAT	TION	OF REL	EASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Li	ne County:	Lea		
Н	11	T20S	R33E				2					
L	L		· · · · · · · · · · · · · · · · · · ·				• 1 • •					
		L	atitude: _	<u>32° 35' 27.3</u>	<u>0"N</u>	Lo	ngitude: 10	<u>3° 37' 41.48</u>	<u>"W</u>			
				NATU	RE O	F RELE						
Type of Rele						Volume of 10 barre			Volume Reco			
	Sweet Crude Oil Source of Release						IS Iour of Occurre	nce		0 bbls barrels Date and Hour of Discovery		
8" Steel Pip	el <u>ine</u>					8-5-04@7	30AM		8-5-04@8:00			
Was Immedi	ate Notice G	iven?	Ves 🗖	No 📋 Not Req	wired	If YES, To Larry Joh						
By Whom?	- <u></u>				lanca	Date and H						
By whom:						8-05-04@2						
Was a Water	course Reac	hed? 🗌 Yes	s 🛛 No			If YES, Vo NA	olume Impactin	g the Waterco	ourse.			
If a Watercon	urse was Imp	acted, Describe	e Fully.*									
Describe Cau										Temporary repair		
				psi; API Gravity						ols. alytical results. The		
soil will be b	lended to be	low the NMOC	D remedi	al goals on site of , and BTEX, i.e.,	r taken t	o the Plains	Lea Station L	andfarm for i	remediation. I	Remedial Goals:		
I hereby cert	ify that the in	formation give	en above is	s true and comple	te to the	best of my l	nowledge and	understand th	at pursuant to	NMOCD rules and		
regulations a	ll operators a	are required to a	report and	/or file certain rel	lease noti	fications an	d perform corre	ctive actions	for releases w	hich may endanger		
public health	or the envir	onment. The ad	cceptance	of a C-141 report nvestigate and rer	t by the N	MOCD ma	rked as "Final i	Report" does	not relieve the	operator of liability		
health or the	environment	t. In addition, I	NMOCD a	acceptance of a C	-141 rep	ont does not	relieve the ope	rator of respo	nsibility for co	ompliance with any		
other federal		al laws and/or										
Signature:							OIL CO	NSERVA	TION DIV	<u>/ISION</u>		
Printed Nam	e: Camille F	Reynolds (e-m	nail: CJRe	ynolds@paalp.co	om)	Approve	ed by District S	upervisor:				
Title: Distrie	et Environme	ental Superviso	r			Approva	al Date:		Expiration D	Date:		
Date: Dec	ember 20, 20	004	Phor	ne: 505.396.3341		Conditio	ons of Approva	l:		Attached		

* Attach Additional Sheets If Necessary

STANDARD OF CARE

Environmental Assessment and Remediation Report

Young Deep to Lynch 8" Ref. # 2004-00180

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 Impoundment Closure Guidelines (February 1993), Surface 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 registered EPI professional with a background in engineering, environmental, and/or the natural sciences.

This report was prepared by:

Maelang

Patrick W. McCasland

This report was reviewed by:

Iain Olness, PG

12.16.04 Date

Date

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1.0 INTRODUCTION

This site is located in UL-H (SE¼ of the NE¼) of Section 11, R33E, T20S at Latitude $32^{\circ} 35' 27.30$ "N and Longitude $103^{\circ} 37' 41.48$ "W approximately 34.5 miles west of Hobbs, Lea County, New Mexico on property owned by the Bureau of Land Management. A topographical map is included in Attachment I. The estimated 10 barrel (bbl) crude oil leak, attributed to internal/external corrosion, occurred on 8-5-04 at 7:30 A.M. in the Young Deep to Lynch 8" steel pipeline with 0 bbls recovered. Approximately 78 square feet (ft^2) (~25' x 7') of surface was initially affected. During the preliminary investigation, ground water was estimated to occur at approximately 325' below ground surface ('bgs) giving soil down to 225'bgs a 0 point New Mexico Oil Conservation Division (NMOCD) ranking score that applies the following remedial guidelines for the constituents of concern (CoCs);

- Benzene= 10 mg/Kg
- BTEX = 50 mg/Kg (BTEX is the mass su
- (BTEX is the mass sum of benzene, toluene, ethylbenzene, and xylenes)
- Total Petroleum Hydrocarbon 8015m(TPH^{8015m})= 5000 mg/Kg

On August 5, 2004, with Plains oversight, EPI responded to the release and excavated a portion of the visibly contaminated and odorous soil and stockpiled on site. On August 31, 2004, the sides and bottom of the excavation were sampled. The east and west sidewalls and the excavation bottom remained impacted above the CoC remedial goals and required further investigation. On September 16, 2004 the site delineation proposal approved by the NMOCD and BLM was implemented. The results of the delineation were submitted by letter on September 23, 2004 in the "Plains Young Deep to Lynch 8" #2004-00180 Site Investigation and Remediation Proposal." After NMOCD and BLM approval, the remediation proposal was implemented. The remediation proposal was to remove impacted soil down to 15'bgs and laterally until the CoC remedial goals were achieved and confirmed by laboratory analyses. The impacted soil would be blended with local clean to below the CoC remedial goals, placed back into the excavation, the site contoured to grade, and the site reseeded in the spring of 2005. This report documents successful implementation of the remediation proposal and provides necessary support documentation in support of the NMOCD requiring "no further action" at the site. The final NMOCD form C-141 is included in Attachment V.

2.0 ENVIRONMENTAL MEDIA CHARACTERIZATION

Chemical parameters of the soil and ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the New Mexico Oil Conservation Division (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)

• Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH^{8015m}, benzene, and BTEX, i.e., the mass sum of benzene, toluene, ethylbenzene, and total xylene, were determined based on the NMOCD Ranking Criteria as follows;

- Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.
- Wellhead Protection Area, i.e., distance from fresh water supply wells.
- 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) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. 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 typical of the Upper Chihuahuan Desert Biome 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 GROUND WATER

The New Mexico Office of the State Engineer website database indicates groundwater in the area occurs at approximately 325'bgs. According to the USGS, the ground water elevation decreases generally to the southeast.

2.4 AREA WATER WELLS

The New Mexico Office of the State Engineer records a single well in Section 5 T20S R33E approximately 3 miles to the west of the site approximately 325'bgs.

2.5 AREA SURFACE WATER BODIES

There are no permanent or intermittent surface water bodies within 1,000 horizontal feet of the site.

3.0 NMOCD SITE RANKING

Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to ground water, the site surface soil down to 225'bgs has an NMOCD ranking score of 0 points with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Gro	ound Water	2. 1	Wellhead Protection Area	3. Distance to Surface Water Body		
points	GW <50 feet: 20 GW 50 to 99 ts		' from water source, or;<200' vate domestic water source: 20	<200 horizontal feet: 20 points 200-100 horizontal feet: 10 points		
	GW >100 feet: 0		' from water source, or; >200' vate domestic water source: θ	>1000 horizontal feet: 0 points		
Ground water	Score = 0	Wellbead	Protection Area Score= 0	Surface Water Score= 0		
Site Rank ((1+2+3) = 0 + 0	+ 0 =	0 points			
Total S	ite Ranking So	core and	d Acceptable Remedial	Goal Concentrations		
Parameter	>19 (275 to 32	5'bgs)	10-19 (225 to 275'bgs)	0-9 (surface to 225'bgs)		
Benzene ¹	10 ppm		10 ppm	10 ppm		
BTEX ¹	50 ppm		50 ppm	50 ppm		
ТРН	100 ppm		1000 ppm	5000 ppm		

4.0 SOIL INVESTIGATION

On August 5, 2004, with Plains oversight, EPI excavated a portion of the visibly contaminated and odorous soil and stockpiled on a plastic barrier south of the excavation inside an exclusionary fence. On August 31, 2004, the sides and bottom of the excavation were sampled and analyzed. The east and west sidewalls and the excavation bottom remained impacted above the CoC remedial goals and required further investigation. On September 16, 2004 the site delineation proposal approved by the NMOCD and BLM was implemented. The results of the delineation were submitted by letter on September 23, 2004 in the "Plains Young Deep to Lynch 8" #2004-00180 Site Investigation and Remediation Proposal." Three soil borings were advanced and sampled using a hollow stem auger rig; borehole BH1 was advanced and sampled approximately 10' east of the leak origin, borehole BH2 was advanced and sampled adjacent to the leak origin, and borehole BH3 was advanced and sampled approximately 10' west of the leak origin. The annotated site map is included in Attachment I. Selected samples were submitted to Environmental Lab of Texas using chain-of-custody protocols for CoC analyses. Samples collected and analyzed from boreholes BH1 and BH3 did not exhibit impacts above the method detection limits for any of the CoCs. TPH and BTEX in excess of the remedial goals were monitored down to 15'bgs in borehole BH2, adjacent to the leak origin. The vertical extent of impact is limited to15'bgs with the horizontal extent of impact not extending beyond boreholes BH1 and BH3 approximately 10 feet on either side of borehole BH1 at the leak origin. The analytical reports and results summary are included in Attachment IV and illustrated below.

Plains All American Pipeline Young Deep to Lynch 8" #2004-00180 Total Petroleum Hydrocarbon 8015M Delineation



Plains All American Pipeline Young Deep to Lynch 8" #2004-00180 BTEX Delineation







5.0 GROUND WATER INVESTIGATION

The soil investigation supports the conclusion that the groundwater at this site has not been impacted in excess of the WQCC standards.

6.0 SOIL REMEDIATION

With NMOCD and BLM approval, the remediation proposal was implemented. The NMOCD also approved the request via NMOCD form C-138 to dispose of approximately 50 yd³ of impacted soil in the Plains Lea Station Landfarm under chain-of custody protocol. The stockpiled soil was disposed of and the remaining impacted soil was excavated down to 15'bgs and blended with local soil to less than 100 ppm VOC. The analytical reports and results summary are included in Attachment IV and illustrated in Section 4.0.

6.1 EXCAVATION CONFIRMATION SAMPLING

On October 13, 2004, 5-point composite samples were collected from the excavation sidewalls and bottom and submitted to the laboratory for analyses. The analytical results were less than the CoC remedial goals (refer to Attachment IV).

6.2 **BLENDING CELL CONFIRMATION SAMPLING**

On October 18, 2004, 5-point composite samples were collected from the north, south, and middle sections of the blending cell and submitted to the laboratory for analyses. The analytical results were less than the CoC remedial goals for each section (refer to Attachment IV).

7.0 CONCLUSION

Based on the information provided in this report, the NMOCD remedial goals have been achieved at this site and the surface area will be reseeded in the spring of 2005 with a seed blend acceptable to BLM. Plains All American Pipeline therefore requests that the NMOCD require "no further action" be required at this site.



ATTACHMENT I: SITE MAPS



'Link Lusk 8 Mainline no1.it3'; Scale: 1" = 0.580Mi 933Mt 3,061Ft, 1 Mi = 1.725", 1 cm = 367Mt





ATTACHMENT II: AREA GROUNDWATER INFORMATION

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Towns NAD27	hip: 205	Range: 33E			******	
NA D97			Sections:			
NAD27	X:	Y:	Zone:	÷	Search Radi	us:
County:	T	Basin:		Numł	per:	Suffix:
Owner Name: (Fi	irst)	(La	<i>,</i> ,		C Non-Dom	estic 🗘 Domestic
			e All			
	Well / Su	rface Data Report	A	vg Dept	h to Water Repo	in
		Wate	er Column Rep	ort		
		Clear Form	WATERS N	lenu	Help	

		AVER	AGE I	EPTH OF	WATER	REPORT	07/2	29/20	04		
									(Depth	Water in	Feet)
Bsn	Tws	Rng	Sec	Zone	х	1	Y We	ells	Min	Max	Avg
CP	205	33E	05					1	325	325	325
Paco	rd Co	unt.	1								

Record Count: 1

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http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher



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ATTACHMENT III: PHOTOGRAPHS

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PLAINS







ATTACHMENT IV: ANALYTICAL REPORTS AND SUMMARY

						All Ameri	-								
				You	ng Deep	to Lync	h 8'' #2	004-0018	0						
		F	Excavation and So	il Boring	g Deline	ation Da	ata and]	Blending	g Cell A	ttenuatio	m Data				
Sample Location	Description	Sampling Interval	SAMPLE ID#	Date	Lithology	VOC Headspace	GRO ³	DRO ⁴	TPH ⁵	BLEX ₅	Benzene	Toluene	Ethylbenzene	p/m Xylene	o-Xylen
		(FT BGS ¹)				ppm	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Bottom	Composite		SLYD83104BHC	8/31/04	Sand	na	1290	10800	12090	54.6100	1.4200	13.3000	9.3500	21.2000	9.3400
	Composite		SPYD101304BH	10/13/04	Sand	na	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Sidewall	Composite		SLYD83104NSW	8/31/04	Sand	na	11.2	90	101.2	ND	ND	ND	ND	ND	ND
	Composite		SPYD1304NSW	10/13/04	Sand	na	ND	ND	ND	ND	ND	ND	ND	ND	ND
South Sidewall	Composite		SLYD8310488W	8/31/04	Sand	na	14	70.4	84.4	ND	ND	ND	ND	ND	ND
	Composite		SPYD101304SSW	10/13/04	Sand	na	ND	ND	ND	ND	ND	ND	ND	ND	ND
East Sidewall	Composite		SLYD83104ESW	8/31/04	Sand	na	2590	19700	22290	32.8170	0.2070	5.6200	6.4000	14.7000	5.8900
	Composite	2 to 12	SPYD101304ESW	10/13/04	Sand	na	ND	ND	ND	ND	ND	ND	ND	ND	ND
West Sidewall	Composite		SLYD83104WSW	8/31/04	Sand	na	3070	35600	38670	37.4100	1.1200	8.7800	7.0400	14.4000	6.0700
	Composite	2 to 12	SPYD1304WSW	10/13/04	Sand	na	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH1	Discrete	Surface	YD8inch091504BH1-S	9/15/04	Sand	2.3	na	na	na	na	na	na	na	na	na
	Discrete	5	YD8inch091504BH1-5'	9/15/04	Sand	9.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Discrete	10	YD8inch091504BI-I1-10'	9/15/04	Sand	3.6	na	na	na	na	na	na	na	na	na
·	Discrete	15	YD8inch091504BFI1-15	9/15/04	Sand	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Discrete	10	YD8inch091504BI-I2-10'	9/15/04	Sand	1904.0	2610	6430	9040	103.4000	1.4000	23.5000	21.9000	40.6000	16.000
DIA	Discrete	15	YD8inch091504BI-12-15'	9/15/04	Sand	1011.0	646	2740	3386	13.0630	0.1930	2.1900	2.7700	5.8300	2.0800
BH2	Discrete	20	YD8inch091504BH2-20'	9/15/04	Sand	25.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Discrete	25	YD8inch091504BI-12-25'	9/15/04	Sand	15.7	na	na	na	na	na	na	na	na	na
	Discrete	30	YD8inch091504BH2-30'	9/15/04	Sand	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Discrete	Surface	YD8inch091504BH3-S	9/15/04	Sand	1.8	na	na	na	na	na	na	na	na	na
BH3	Discrete	5	YD8inch091504BI-I3-5	9/15/04	Sand	5.1	na	na	na	na	na	na	na	na	112
	Discrete	10	YD8inch091504BH3-10'	9/15/04	Sand	6.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Discrete	15	YD8inch091504BH3-15'	9/15/04	Sand	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Blending Cell	Composite	na	SPYD101804NBC	10/18/04	Sand	na	J[8.05]	49.7	49.7	0.0262	ND	J[0.0107]	J[0.0155]	0.0262	ND
South Blending Cell	Composite	na	SPYD101804SBC	10/18/04	Sand	na	83.0	341	424	0.2684	J[0.0172]	0.0464	0.0770	0.0820	0.0630
Middle Blending Cell	Composite	na	SPYD101804MBC	10/18/04	Sand	na	23.6	125	149	0.0290	ND	ND	J[0.0149]	0.0290	J[0.0179
			N	fethod Dete			10	10			0.0250	0.0250	0.0250	0.0250	0.0250
				Ren	nedial Goals	100.0			5000	50.0000	10.0000				
) ppm Isobutylene calibratio	n gas = 101 pp	m						⁵ 1PH-Total	Petroleum	Hydrocarbor	n = GRO+I	ORO.			
s – below ground surface								na - not an	alyzed						
C–Volatile Organic Contar	ninants/Const	ituents						⁹ BTEX - M	ass sum of t	enzene, tolu	ene, ethylbei	nzene, and x	ylenes		
RO-Gasoline Range Organic	s C ₆ -C ₁₂							ND - not d	etected abox	e the metho	d detection l	imit.			
RO-Diesel Range Organics (L - Detected	l but below	the Reportin	a Limit ther	fore result	is and estimated	concentration	



Analytical Report

Prepared for:

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

Project: Young Deep to Lynch Project Number: 2004-00180 Location: None Given

Lab Order Number: 4102009

Report Date: 09/09/04

Plains All American EH & S	Project: Project Number:	Young Deep to Lynch	Fax: (432) 687-4914
1301 S. County Road 1150 Midland TX, 79706-4476	Project Manager:		Reported: 09/09/04 19:05
	ANALYTICAL REPORT	FOR SAMPLES	

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SLYD83104BHC	4I02009-01	Soil	08/31/04 08:30	09/02/04 16:48
SLYD83104NSW	4102009-02	Soil	08/31/04 08:40	09/02/04 16:48
SLYD83104SSW	4102009-03	Soil	08/31/04 08:50	09/02/04 16:48
SLYD83104ESW	4102009-04	Soil	08/31/04 09:00	09/02/04 16:48
SLYD83104WSW	4102009-05	Soil	08/31/04 09:10	09/02/04 16:48

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

Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager Jeff Dann Fax: (432) 687-4914 Reported: 09/09/04 19:05

		O	ganics by	y GC					
		Environ	mental L	ab of Te	xas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLY D83104BHC (4102009-01) Sail									
Benzene	1.42	0.100	mg/kg dry	100	E140710	09/06/04	09/06/04	EPA 8021B	
T oku en e	13.3	0.100	•	в		•		8	
Ethylbenzene	9.35	0.100	•	н	•	•	•	•	
Kylene (p/m)	21.2	0.100	•		•	•	•	•	
Kylene (o)	9.34	0.100	•	u		•		•	
Surrogate: a,a,a-Trifluorotoluene		214 %	80-1	20	"	и	"	"	S-0
Surrogate: 4-Bromofluorobenzene		115%	80-1	20	"	*	"	"	
Gasoline Range Organics C6-C12	1290	10.0	ing/kg dry	1	E140801	09/02/04	09/08/04	EPA 8015M	
Diesel Range Organics>C12-C35	10800	10.0	•	ч.	•	•	•	•	
Total Hydrocarbon C6-C35	12100	10.0	•		*		•	*	
Surrogate: 1-Chlorooctane		129 %	70-1	30	"	"	"	*	
Surrogate: 1-Chlorooctadecane		370 %	70-1	30	"	"	"	~	S-0-
SLY D83104NSW (4102009-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	E140710	09/06/04	09/07/04	EPA 8021B	
foluene	ND	0.0250	•	•		•			
Ethylbenzene	ND	0.0250	•	•	"	•	•		
Xylene (p/m)	ND	0.0250	•	•	н	•		24	
Kylene (0)	ND	0.0250	•	•		•		•	
Surrogate: a,a,a-Trifluorotoluene		81.1 %	80-1	20	"		"	~	
Surrogate: 4-Bromofluorobenzene		82.2 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	11.2	10.0	mg/kg dry	1	EI40811	09/02/04	09/09/04	EPA 8015M	
Diesel Range Organics>C12-C35	90.0	10.0	•	н	-	•	•	•	
Total Hydrocarbon C6-C35	101	10.0	•	н		•	•	•	
Surrogate: 1-Chlorooctane		124 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		128 %	70-1	30	~	"	"	"	
SLY D83104SSW (4102009-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	E140710	09/06/04	09/07/04	EPA 8021B	
Foluene	ND	0.0250	•	•	н	•	"		
Ethylbenzene	ND	0.0250	•	•	u	•			
Xylene (p/m)	ND	0.0250	•	•		•	н		
Xylene (0)	ND	0.0250		•		•	"	IF	
Surrogate: a,a,a-Trifluorotoluene		82.2 %	80-1	20	~	"	"	*	
Surrogate: 4-Bromofluorobenzene		83.9 %	80-1	20	~	"	"	~	
Gaseline Range Organics C6-C12	14.0	10.0	mg/kg dry	1	EI40811	09/02/04	09/09/04	EPA 8015M	
Diesel Range Organics >C12-C35	70.4	10.0	•	н	•	•	•	N	
Total Hydrocarbon C6-C35	84.4	10.0	•		•	•	•		

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Plains All American EH & S 1301 S. County Road 1150		Project: Young Deep to Lynch Project Number: 2004-00180							
Midland TX, 79706-4476		-	anager: Jefi					Report 09/09/04	
<u></u>	·	 01	ganics b	v GC					
		Environ	~	•	Xas				
	<u> </u>	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
SLY D83104SSW (4102009-03) Soil									
Surrogate: 1-Chlorooctane		120 %	70-1	130	E140811	09/02/04	09/09/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		128 %	70-1	130	"	"	"	~	
SLY D83104E SW (4102009-04) Soil									
Benzene	0.207	0.100	mg/kg dry	100	E140710	09/06/04	09/07/04	EPA 8021B	
Toluene	5.62	0.100	•	U	•	•	•	•	
Ethylbenzene	6.40	0.100	•		•	•	•	•	
Xylene (p/m)	14.7	0.100	•	•	•	•		•	
Xylene (o)	5.89	0.100	•			•	•	•	
Surrogate: a,a,a-Trifluorotoluene		121 %	80	80-120		"	N	"	S-0
Surrogate: 4-Bromofluorobenzene		99.8 %	80	120	#	"	"	"	
Gasoline Range Organics C6-C12	2590	50.0	mg/kg dry	5	E140801	09/02/04	09/08/04	EPA 8015M	
Diesel Range Organics >C12-C35	19700	50.0	•	н				•	
Total Hydrocarbon C6-C35	22300	50.0	•			•	•	u	
Surrogate: 1-Chlorooctane		35.8%	70	130	~	"	"	"	S-0
Surrogate: 1-Chlorooctadecane		31.2 %	70-,	130	"	"	"	~	S-0
SLY D83104WSW (4102009-05) Soil									
Benzene	1.12	0.200	mg/kg dry	200	E140710	09/06/04	09/07/04	EPA 8021B	
Toluene	8.78	0.200	•		•	•	•		
Ethylbenzene	7.04	0.200	•		•	•	•	•	
Xylene (p/m)	14.4	0.200	•		•	•	•	•	
Xylene (o)	6.07	0.200	•	н	•	•		•	
Surrogate: a,a,a-Trifluorotoluene		135%	80	120	"	"	"	"	S-0
Surrogate: 4-Bromofluorobenzene		<i>95.8 %</i>	80	120	"	"	"	"	
Gasoline Range Organics C6-C12	3070	50.0	mg/kg dry	5	E140801	09/02/04	09/08/04	EPA 8015M	
Diesel Range Organic \$ >C12-C35	35600	50.0	•			•	•	•	
Total Hydrocarbon C6-C35	38700	50.0	•			•	•	•	
Surrogate: 1-Chlorooctane		44.0%	70-	130	"	"	"	"	S-0
Surrogate: 1-Chlorooctadecane		30.0 %	70	130	"	"	**	"	S-0

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Plains All American EH & S		P	roject: Y	oung Deep to	> Lynch			Fax. (432) (87-4914
1301 S. County Road 1150		Project Nu	mber: 20	04-00180				Report	ed:
Midland TX, 79706-4476		Project Ma	nager: Je	ff Dann				09/09/04	19:05
	General Cher	nistry Para	neters	by EPA /	Standar	d Method	S		
		Environn	iental]	Lab of Te	XAS				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLYD83104BHC (4102009-01) Soil									
% Solids	91.0		%	1	E140711	09/03/04	09/03/04	% calculation	
SLY D83104NSW (4102009-02) Soil									
% Solids	90.0		%	1	E140711	09/03/04	09/03/04	% calculation	
SLY D83104SSW (4102009-03) Soil									
% Solids	89.0		%	1	E140711	09/03/04	09/03/04	% calculation	
SLY D83104E SW (4102009-04) Soil									
% Solids	96.0		%	1	EI40711	09/03/04	09/03/04	% calculation	
SLYD83104WSW (4102009-05) Soil									
% Solids	97.0		%	1	E140711	09/03/04	09/03/04	% calculation	

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Plains All American EH & S	Project: Young Deep to Lynch									Fax: (432) 687-4914		
1301 S. County Road 1150	Project Number: 2004-00180								Reported:			
Midland TX, 79706-4476		Project Ma	mager: Jeff	Dann					09/09/04 19:05			
	0	rganics by	/ GC - Q	uality Co	mtr ol							
		Environn	nental La	ab of Te	KAS							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch E140710 - EPA 5030C (GC)												
Blank (EI40710-BLK1)				Prepared 8	t Analyzed:	09/06/04						
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	81.9		ug/kg	100		81.9	80-120					
Surrogate: 4-Bromofluoroberizane	808		"	100		80.8	80-120					
LCS (E140710-BSI)	Prepared & Analyzed: 09/06/04											
Benzene	111		ug/kg	100		111	80-120					
Foluene	105		•	100		105	80-120					
Ethylbenzene	103		•	100		103	80-120					
Xylene (p/m)	224		٠	200		112	80-120					
Xylene (0)	112		•	100		112	80-120					
Surrogate: a,a,a-Triftuorotoluene	86.3		~	100		86.3	80-120					
Surrogate: 4-Bromofluoroberzene	91.5		~	100		91.5	80-120					
Calibration Check (EI40710-CCV1)				Prepared: (09/06/04 A	nalyzed: 09	0/07/04					
Benzene	106		ug/kg	100		106	80-120					
Toluene	98.4		•	100		98.4	80-120					
Ethylbenzene	93.0		•	100		93.0	80-120					
Xylene (p/m)	203		•	200		102	80-120					
Xylene (o)	102		•	100		102	80-120					
Surrogate: a,a, a-Trifluorotoluene	99.6		~	100		99.6	80-120					
Surrogate: 4-Bromofluoroberzene	84.4		~	100		84.4	80-120					
Matrix Spike (EI40710-MS1)	Sou	1rce: 4103007-	-05	Prepared: (09/06/04 A	nalyzed: 09	/07/04					
Benzene	105		ug/kg	100	ND	105	80-120	_				
Toluene	99.8		•	100	ND	99.8	80-120					
Ethylbenzene	97.9		•	100	ND	97.9	80-120					
Xylene (p/m)	215		•	200	ND	108	80-120					
Xylene (o)	108			100	ND	108	80-120					
Surrogate: a,a,a-Trifluorotolwene	89.7		"	100		89.7	80-120					
Surrogate: 4-Bromofluorobenzene	903		*	100		90.3	80-120					

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Plains All American EH & S 1301 S. County Road 1150 Mi dland TX, 79706-4476 Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann Fax: (432) 687-4914 Reported: 09/09/04 19:05

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Realit	Reporting Limit	Umts	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E140710 - EPA 5030C (GC)										
			-							

Matrix Spike Dup (E140710-MSDI)	Source: 4	Prepared: (09/06/04 A						
Benzene	108	ug/kg	100	ND	108	80-120	2.82	20	
Toluene	102	•	100	ND	102	80-120	2.18	20	
Ethylbenzene	99.4	•	100	ND	99.4	80-120	1.52	20	
Xylene (p/m)	218	•	200	ND	109	80-120	0.922	20	
Xylene (0)	109	•	100	ND	109	80-120	0.922	20	
Surrogate: a,a,a-Trifluorotoluene	88.8	"	100		88.8	80-120			
Surrogate: 4-Bromofluoroberzene	90.1	*	100		90.1	80-120			

Batch EI40801 - Solvent Extraction (GC)

Blank (£140801-BLK1)				Prepared: 08/30/0	04 Analyzed: 09	9/07/04			
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	61.4		mg/kg	50.0	123	70-130			
Surrogate: 1-Chlorooctadecane	64.5		"	50.0	129	70-130			
CS (E140801-BS1)				Prepared: 08/30/	04 Analyzed: 0	9/07/04			
Gasoline Range Organics C6-C12	569	10.0	mg/kg wet	500	114	75-125			
Diesel Range Organics >C12-C35	590	10.0	•	500	118	75-125			
Total Hydrocarbon C6-C35	1160	10.0	•	1000	116	75-125			
Surrogate: 1-Chlorooctane	57.5		mg/kg	50.0	115	70-130			
Surrogate: 1-Chlorooctadecane	63.9		"	50.0	128	70-130			
.CS Dup (E140801-BSD1)				Prepared: 08/30/	04 Analyzed: 0	9/07/04			
Gasoline Range Organics C6-C12	558	10.0	mg/kg wet	500	112	75-125	1.95	20	
Diesel Range Organics >C12-C35	580	10.0	•	500	116	75-125	1.71	20	
Total Hydrocarbon C6-C35	1140	10.0	•	1000	114	75-125	1.74	20	
Surrogate: 1-Chlorooctane	55.2		mg/kg	50.0	110	70-130			
Surrogate: I-Chlorooctadecane	56.8		*	50.0	114	70-130			

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Fax: (432) 687-4914

1301 S. County Road 1150 Midland TX, 79706-4476	Project Number: 2004-00180 Project Manager: Jeff Dann								Reported: 09/09/04 19:05		
	0	rganics by Environr	-	-		<u></u>					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EI40801 - Solvent Extraction (GC)											
Calibration Check (EI40801-CCV1)				Prepared: (08/30/04 A	naiyzed: 09	9/07/04		_		
Gasoline Range Organics C6-C12	414		mg/kg	500		82.8	80-120				
Diesel Range Organics >C12-C35	521		•	500		104	80-120				
Total Hydrocarbon C6-C35	935		•	1000		93.5	80-120				
Surrogate: 1-Chlorooctane	35.6		"	50.0		71.2	70-130				
Surrogate: 1-Chiorooctadecane	35.5		~	50.0		71.0	70-130				
Batch EI40811 - Solvent Extraction (GC)											
Blank (E140811-BLK1)				Prepared:	09/02/04 A	nalyzed: 05	9/08/04				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet						_		
Diesel Range Organics >C12-C35	ND	10.0	•								
Total Hydrocarbon C6-C35	ND	10.0	•								
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.2	70-130				
Surrogate: 1-Chlorooctadecane	44.8		~	50.0		89.6	70-130				
LCS (EI40811-BSI)				Prepared: (09/02/04 A	nalyzed: 01	9/08/04				
Gasoline Range Organics C6-C12	440	10.0	tng/kg wet	500		88.0	75-125				
Diesel Range Organics >C12-C35	556	10.0		500		111	75-125				
Total Hydrocarbon C6-C35	996	10.0	•	1000		99.6	75-125				
Surrogate: 1-Chlorooctane	45.2		mg/kg	50.0		90.4	70-130				
Surrogate: 1-Chlorooctadecane	50.1		"	50.0		100	70-130				
Calibration Check (EI40811-CCVI)				Prepared:	09/02/04 A	nalyzed: 0	9/08/04				
Gasoline Range Organics C6-C12	422		mg/kg	500		84.4	80-120				
Diesel Range Organics >C12-C35	538		•	500		108	80-120				
Total Hydrocarbon C6-C35	960		•	1000		96.0	80-120				
Surrogate: 1-Chlorooctane	53.2		"	50.0		106	70-130				
Surrogate: 1-Chlorooctadecane	59.9		"	50.0		120	70-130				

Project: Young Deep to Lynch

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Plains All American EH & S

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

Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann Fax: (432) 687-4914 Reported: 09/09/04 19:05

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Umts	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E140811 - Solvent Extraction (GC)										
Matrix Spike (EI40811-MS1)	Sou	rce: 4102001-	07	Prepared: (09/02/04 A	naiyzed: 09	/08/04			
Gasoline Range Organics C6-C12	518	10.0	mg/kg đry	549	ND	94.4	75-125			
Diesel Range Organics >C12-C35	641	10.0	•	549	ND	117	75-125			
Total Hydrocarbon C6-C35	1160	10.0	•	1100	ND	105	75-125			
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	64 5		~	50.0		129	70-130			
Matrix Spike Dup (E140811-MSD1)	Sou	rce: 4102001	07	Prepared: ()9/02/04 A	nalyzed: 09	/08/04			
Gasoline Range Organics C6-C12	517	10.0	mg/kg dry	549	ND	94.2	75-125	0.193	20	
Diesel Range Organics >C12-C35	631	10.0	•	549	ND	111	75-125	4.79	20	
Total Hydrocarbon C6-C35	1130	10 0	•	1100	ND	103	75-125	2.62	20	
Surrogate: 1-Chlorooctane	58 6		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	64.8		"	50.0		130	70-130			

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann									687-4914 arted: 4 19:05
Genera	l Chemistry Para	neters by Environm				ls - Qua	lity Con	trol		
·····		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EI40711 - General Preparatio	m (Prep)									
Blank (E140711-BLK1)				Prepared 8	z Analyzed	09/02/04				
% Solids	100		%							
Duplicate (EI40711-DUP1)	Sour	ce: 4H31009-	01	Prepared 8	2 Analyzed	09/02/04				
% Solids	93.0		%		94.0			1.07	20	

% Solids

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PLAINS

Notes and Do	finitions	
covery of this surrogate is outside control limits due to sample di t interference's.	hution required from high analyte concentration and/or	
arrogate recovery for this sample is outside of established control	limits due to a sample matrix effect	
e DETECTED		
e NOT DETECTED at or above the reporting limit		
sported		
e results reported on a dry weight basis		
re Percent Difference		
atory Control Spike		
Spike		
	Spike 10	

Report Approved By:

Raland K hards

9/9/04

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

Date:

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Analytical Report

Prepared for: Jeff Dann Link Energy Pipeline P.O. Box 1660 Midland, TX 79702

Project: Young Deep to Lynch Project Number: 2004-00181 Location: None Given

Lab Order Number: 4J14025

Report Date: 10/19/04

10/14/04 14:45

10/14/04 14:45

10/14/04 14:45

Link Energy Pipeline P.C. Box 1660 Mi dland TX, 79702	Project: Young Dee Project Number: 2004-0018 Project Manager: Jeff Dann		F	ax: (432) 682-9719 Reported: 10/19/04 10:06
	ANALYTICAL REPORT FOR SA	MPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SPYD101304NSW	4J14025-01	Soil	10/13/04 14:15	10/14/04 14:45
SPYD101304ESW	4J14025-02	Soil	10/13/04 14:25	10/14/04 14:45

4J14025-03

4J14025-04

4J14025-05

Soil

Soil

Soil

10/13/04 14:35

10/13/04 14:45

10/13/04 14:55

SPYD101304SSW

SPYD101304WSW

SPYD101304BH

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Fax (432) 682-9719

Link Energy Pipeline P.O. Box 1660			Project: You umber: 200		Lynch			rax (432) 0 Report	
Midland TX, 79702			anager: Jeff					10/19/04	
		Or	ganics by	y GC					
		Environ			exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Noti
SPYD101304NSW (4J14025-01) Soil						-			
Benzene	ND	0.0250	mg/kg dry	25	EJ41805	10/17/04	10/17/04	EPA 8021B	
loluene	ND	0.0250	•		•	•	•	4	
Sthylbenzene	ND	0.0250	•		•	•	•		
(ylene (p/m)	ND	0.0250			•				
(ylene (o)	ND	0.0250	•		в	•		•	
Surrogate: a,a,a-Trifhiorotohiene		87.3 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.5 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ41416	10/15/04	10/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		н	•	•	•		
Fotal Hydrocarbon C6-C35	ND	10.0	•		•	•	•		
Surrogate: 1-Chlorooctane		80.0 %	70-1	30	"	"	~	н	_
Surrogate: 1-Chlorooctadecane		88.4 %	70-1	30	"	"	"	"	
SPYD101304ESW (4.J14025-02) Soil									
Senzene	ND	0.0250	mg/kg dry	25	EJ41805	10/17/04	10/17/04	EPA 8021B	
Toluene	ND	0.0250		н					
Sthylbenzene	ND	0.0250	•					*	
Kylene (p/m)	ND	0.0250			•				
Kylene (0)	ND	0.0250	•	м	•	•	•	•	
Surrogate: a,a,a-Trifluorotoluene		80.0 %	80-1	20	"	"	"	"	
Surrogaie: 4-Bromofluorobenzene		94.2 %	80-1		"	*	"	"	
Gasoline Range Organics C6-C12	ND	10.0		1	EJ41416	10/15/04	10/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		и					
Total Hydrocarbon C6-C35	ND	10.0	×	и				•	
Surrogate: 1-Chlorooctane		85.4 %	70-1	30	"	"	"	"	
Surragate: 1-Chlorooctadecane		94.2 %	70-1		"	*	"	"	
SPYD101304SSW (4J14025-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EJ41805	10/17/04	10/17/04	EPA 8021B	
Foluene	ND	0.0250	•	в	•	•	•		
Ethylbenzene	ND	0.0250	•			•			
Kylene (p/m)	ND	0.0250	18		•	H	•	•	
Kylene (0)	ND	0.0250				•	•		
Surrogate: a,a,a-Trifluorotoluene		81.8 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.7 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ41416	10/15/04	10/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10 0	•		н	•			
Total Hydrocarbon C6-C35	ND	10.0							

Project: Young Deep to Lynch

Environmental Lab of Texas

Link Energy Pipeline

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Page 2 of 9

Link Energy Pipeline		I	Project: Yo	ung Deep to	Lynch			Fax (432) 6	82-9719
P.O. Box 1660			umber: 200					Report	led:
Midland TX, 79702			anager: Jefi					10/19/04	
		Or	ganics b	y GC					
		Environ	mental L	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
SPYD101304SSW (4J14025-03) Soil									
Surrogate: 1-Chlorooctane		85.0 %	70-1	30	<i>EJ41416</i>	10/15/04	10/15/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		89.4 %	70-1	30	~	"	"	"	
SPYD101304WSW (4.J14025-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EJ41805	10/17/04	10/17/04	EPA 8021B	
Toluene	ND	0.0250		н	•	•	•	a	
Ethylbenzene	ND	0.0250	•		•	٠	•	•	
Xylene (p/m)	ND	0.0250	•	a	•	•	•	•	
Xylene (0)	ND	0.0250	•		•	•		•	
Surrogate: a,a,a-Trifluorotoluene		82.0 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.4 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	I	EJ41416	10/15/04	10/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	•		•	•	•	*	
Total Hydrocarbon C6-C35	ND	10.0	•		•	•	•		
Surrogate: 1-Chlorooctane		95.2 %	70-,	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-,	30	"	"	"	"	
SPYD101304BH (4J14025-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EJ41805	10/17/04	10/17/04	EPA 8021B	
Toluene	ND	0.0250	8	u		•	٠	•	
Ethylbenzene	ND	0.0250	•	u		•		•	
Xylene (p/m)	ND	0.0250	•	U	•	•			
Xylene (0)	ND	0.0250	•	м	•	•	e 	· · · · · · · · · · · · · · · · · · ·	
Surrogate: a,a,a-Trifluorotoluene		84.6 %	80	20	~	"	"	*	
Surrogate: 4-Bromofluorobenzene		91.2 %	80	20	"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ41416	10/15/04	10/15/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		u			•	•	
Total Hydrocarbon C6-C35	ND	10.0			•	•	ų	•	
Surrogate: 1-Chlorooctane		90.6 %	70	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		99.0 %	70-	130	"	*	"	"	

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Link Energy Pipeline		Pr	oject: Y	oung Deep to	Lynch			Fax: (432) 6	82-9719
P.O. Box 1660 Midland TX, 79702		Project Nu Project Ma						Report 10/19/04	
	General Cher	nistry Parar Envir <i>o</i> nn		•		d Method	S		
<u></u>		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SPYD101304NSW (4J14025-01) Soil									
% Moisture	9,0		%	1	EJ41811	10/15/04	10/18/04	% calculation	
SPYD101304ESW (4J14025-02) Soil									
% Moisture	11.0		%	1	EJ41811	10/15/04	10/18/04	% calculation	
SPYD101304SSW (4.J14025-03) Soil									
% Moisture	10.0		%	1	EJ41811	10/15/04	10/18/04	% calculation	
SPYD101304WSW (4J14025-04) Soil									
% Moisture	39.0		%	1	EJ41811	10/15/04	10/18/04	% calculation	
SPYD101304BH (4J14025-05) Soil									
% Moisture	15.0		%	1	EJ41811	10/15/04	10/18/04	% calculation	

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Link Energy Pipeline		Р	roject You	ung Deep to	Lynch		-		Fax: (432)	682-971
P.O. Box 1660 Mi dland TX, 79702			umber: 200 mager: Jeff						Repo 10/19/0	
·····	Or	ganics by	/ GC - Q	uality Co	ontrol					
		Environn	nental L	ab of Tex	xas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ41416 - Solvent Extraction (GC))									
Blank (E.J41416-BLK1)				Prepared: 1	10/14/04 A	nalyzed: 10)/15/04			
Gasoline Range Organics C6-C12	DA	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	•							
Total Hydrocarbon C 6-C 35	ND	10.0	•							
Surrogate: 1-Chlorooctane	35.7		mg/kg	50.0	*****	71.4	70-130			
Surrogate: 1-Chlorooctadecane	39 8		"	50.0		79.6	70-130			
LCS (EJ41416-BS1)				Prepared: 1	10/14/04 A	nalyzed: 10)/15/04			
Sasoline Range Organics C6-C12	450	10.0	mg/kg wet	500	-	90.0	75-125			
Diesel Range Organics >C12-C35	513	10.0	н	500		103	75-125			
Total Hydrocarbon C6-C35	9ti3	10.0	"	1000		96.3	75-125			
Surrogate: I-Chlorooctane	467		mg/kg	50.0		93.4	70-130			
Surrogate: 1-Chlorooctadecane	43 4		"	50.0		86.8	70-130			
Calibration Check (EJ41416-CCV1)				Prepared:	10/14/04 A	nalyzed: 10	0/15/04			
Gasoline Range Organics C6-C12	502		mg/kg	500		100	80-120			
Diesel Range Organics >C12-C35	574		•	500		115	80-120			
Total Hydrocarbon C6-C35	1080		•	1000		108	80-120			
Surrogate: 1-Chlorooctane	51.6		н	50.0		103	70-130			
Surrogate: I-Chlorooctadecane	60. I		*	50.0		120	70-130			
Matrix Spike (EJ41416-MSI)	Sou	ce: 4J14001	-01	Prepared	10/14/04 A	nalyzed: 10	0/15/04			
Gasoline Range Organics C6-C12	556	10.0	mg/kg dry	575	ND	96.7	75-125			
Diesel Range Organics >C12-C35	6 21	10.0		575	ND	108	75-125			
Total Hydrocarbon C6-C35	1180	10.0		1150	ND	103	75-125			
Surrogate: I-Chlorooctane	48.0		mg/kg	50.0		96.0	70-130			
Surrogate · I-Chiorooctadecane	48.2		"	50.0		96.4	70-130			
Matrix Spike Dup (EJ41416-MSD1)	Sour	ce: 4J14001	-01	Prepared	10/14/04 A	nalyzed: 10	0/15/04			
Gasoline Range Organics C6-C12	530	10.0	mg/kg dry	575	ND	92.2	75-125	4.79	20	
Diesel Range Organics >C12-C35	564	10.0		575	ND	98.1	75-125	9.62	20	
Total Hydrocarbon C6-C35	1090	10.0		1150	ND	94.8	75-125	7.93	20	
Surrogate: 1-Chlorooctane	52.1		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorooctadecane	50.0		"	50.0		100	70-130			

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Link Energy Pipeline			•	ung Deep to	Lynch				Fax: (432)	
P.O. Box 1660 Mi dland TX, 79702			imber: 200 inager: Jef						Repo 10/19/0	
	O	rganics by	GC - Q	uality Co	mtr ol				_	
		Environ	nental L	ab of Te	KAS					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ41805 - EPA 5030C (GC)										
Blank (EJ41805-BLK1)				Prepared 8	t Analyzed	10/17/04				
Benzene	ND	0.0250	mg/kg wet	•						
Foluene	ND	0.0250	•							
Ethylbenzene	ND	0.0250								
Xylene (p/m)	ND	0.0250								
Xylene (0)	ND	0.0250								
Surrogate: a,a,a-Trifluorotoluene	82.2		ug/kg	100		82.2	80-120			
šurrogate: 4-Bromofluorobenzene	81.8		"	100		81.8	80-120			
LCS (EJ41805-BS1)				Prepared 8	2 Analyzed	10/17/04				
Benzene	90 5		ug/kg	100		90.5	80-120			
foluene	87.9			100		87.9	80-120			
Ethylbenzene	80.3			100		80.3	80-120			
Xylene (p/m)	177		9	200		88.5	80-120			
Xylene (0)	81.0		•	100		810	80-120			
Surrogate a,a,a-Irifluorotoluene	103		"	100		103	80-120			
Surrogate: 4-Bromofluorobenzene	105		"	100		105	80-120			
Calibration Check (EJ41805-CCV1)				Prepared	10/17/04 A	nalyzed: 1	0/18/04			
Benzene	92.7		ug/kg	100		92.7	80-120			
Toluene	89.5		٠	100		89.5	80-120			
Ethylbenzene	82 8		•	100		82.8	80-120			
Xylene (p/m)	177		•	200		88.5	80-120			
Xylene (0)	85.2		•	100		85.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	109		"	100		109	80-120			
Matrix Spike (EJ41805-MS1)		гсе: 4Л14026			k Analyzed					
Benzene	90.9		ug/kg	100	ND	90.9	80-120			
Toluene	89.3		n	100	ND	89.3	80-120			
Ethylbenzene	84.9		•	100	ND	84.9	80-120			
Xyiene (p/m)	183		•	200	ND	91.5	80-120			
Xylene (o)	87.4			100	ND	87.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	99.2		"	100		99.2	80-120			
Surrogate. 4-Bromofluorobenzene	114		"	100		114	80-120			

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Link Energy Pipeline	Project: Young Deep to Lynch	Fax (432) 682-9719
P.O Box 1660	Project Number: 2004-00181	Reported:
Midland TX, 79702	Project Manager: Jeff Dann	10/19/04 10:06

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 EJ41805 - EPA 5030C (GC)										
Matrix Spike Dup (EJ41805-MSD1)	Sou	гсе: 4Л4026-0	6	Prepared &	Analyzed:	10/17/04				
Benzene	92.7		ug/kg	100	ND	92.7	80-120	1.96	20	_
Toluene	89.5			100	ND	89.5	80-120	0.224	20	
Ethylbenzene	84.7		•	100	ND	84.7	80-120	0.236	20	
Xylene (p/m)	191		•	200	ND	95.5	80-120	4.28	20	
Xylene (o)	85.3		u	100	ND	85.3	80-120	2.43	20	
Surrogate: a,a,a-Trifluorotoluene	97.8		"	100		97.8	80-120			
Surrogate: 4-Bromofluorobenzene	118		"	100		118	80-120			

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Link Energy Pipeline P.O. Box 1660 Midtand TX, 79702		Pr Project Nu Project Mar	mber: 20		Lynch				Fax: (432) Repo 10/19/0	rted:
General	Chemistry Para	meters by Environm				ls - Qua	lity Con	trol		
		Reporting		Spike	Source		%REC		RPD	
Analyte	Resilt	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EJ41811 - % Solids										
Blank (EJ41811-BLK1)				Prepared: 1	0/15/04 A	nalyzed: 10	/18/04			
% Moisture	0.0		%							
Duplicate (EJ41811-DUP1)	Sour	се: 4Л4025-0	01	Prepared: 1	0/15/04 A	nalyzed: 10	/18/04			
% Moisture	9.0		%		9.0			0.00	20	

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PLAINS

Link Ene	rgy Pipeline	Project:	Young Deep to Lynch	Fax. (432) 682-971
P.O. Box	1660	Project Number.		Reported:
Midland	TX. 79702	Project Manager.	Jeff Dann	10/19/04 10.06
		Notes and De	Initions	
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	Mainx Spike			
Dup	Duplicate			

Report Approved By:

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

Date:

10/19/04

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Raland Khut

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

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Page 9 of 9

	Fax :	915-563-1 915-563-1																										
Project Manager: Jeff Dar	<u>n</u>												Pr	oject	Nar	ne:_	3	(ou	ng L	eep	To	Ly	nch					
Company Name: Link En	ergy / Plain	s Market	ting											Pr	oject	t#:_	2	004	-00	<u>181</u>								
Company Address: PO Box 1	560													Proje	ect L	oc: _												
City/State/Zip: Midland,	Texas	79701													р)#:_												
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L PLAINS ALL AVERICAN

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

Client: Link Energy

Date/Time: 10-14-04

Order #: 4 514025

NT-

Initials:

Sample Receipt Checklist

Temperature of container/cooler?	Ves	No No	Rec 1.4C
Shipping container/cooler in good condition?	Tes	> No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	Yes/	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	(es)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

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



Analytical Report

Prepared for:

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

Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Location: UL-H Section 11 T20S R33E

Lab Order Number: 4117009

Report Date: 09/22/04

09/17/04 13:07

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project: Young Deep Project Number: 2004-00180 Project Manager: Jimmy Brya		Fax: (432) 687-4914 Reported: 09/22/04 16:43	
	ANALYTICAL REPORT FOR SAM	PLES		<u> </u>
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YDL8inch091504BH2-10	4117009-01	Soil	09/15/04 10:35	09/17/04 13:07
YDL8inch091504BH2-15	4[17009-02	Soil	09/15/04 11:15	09/17/04 13:07
YDL8inch091504BH2-20'	4117009-03	Soil	09/15/04 11:39	09/17/04 13:07
YDL8inch091504BH2-30	4117009-04	Soil	09/15/04 13:35	09/17/04 13:07
YDL8inch091604BH-5	4117009-05	Soil	09/16/04 08:33	09/17/04 13:07
YDL8inch091604BH-15'	4117009-06	Soil	09/16/04 09:32	09/17/04 13:07
YDL8inch091604BH3-10'	4[17009-07	Soil	09/16/04 11:26	09/17/04 13:07

4117009-08

Soil

09/16/04 11:53

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YDL8inch091604BH3-15'

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant Fax: (432) 687-4914 Reported: 09/22/04 16:43

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
YDL8inch091504BH2-10' (4117009-01) S	ioil		· · · · ·						
Benzene	1.40	0.100	mg/kg dry	100	E142202	09/20/04	09/21/04	EPA 8021B	
Toluene	23.5	0.100	-				-	-	
Ethylbenzene	21.9	0.100			•	•	-		
Xylene (p/m)	40.6	Û. 10 0	a		•	-			
Xylene (0)	16.0	0.100		4	-	•	-		
Surragate: a,a,a-Trifluorotoluene		157%	80-1	20	"	"	"	w	5-0-
Surragate: 4-Bromofluorobenzene		119%	80-1	20		"	*	*	
Gasoline Range Organics C6-C12	2610	10.0	mg/kg dry	I.	EI41719	09/17/04	09/19/04	EPA 8015M	
Diesel Range Organics >C12-C35	6430	10.0	n	*		"		-	
Total Hydrocarbon C6-C35	9040	10.0	"	-	6	-	۳	-	
Surrogate: 1-Chlorooctane		125 %	70-1	30	4	*	~	"	
Surrogate: 1-Chlorooctadecane		126 %	70-1	30	٣	-	**	v	
YDL8inch091504BH2-15' (4117009-02) S	oil								
Benzene	0.193	0.0250	mg/kg dry	25	EI42202	09/20/04	09/21/04	EPA 8021B	
Toluene	2.19	0.0250		•	-		•	•	
Ethylbenzene	2.77	0.0250			•	*		-	
Xylene (p/m)	5.83	0.0250	v	•			•		
Xylene (o)	2.08	0.0250	•	"	4			u.	
Surrogate: a,a,a-Trifluorotoluene		143 %	80-1	20	**	"	~		5-0
Surrogate: 4-Bromofluorobenzene		111%	80-1	20	*	"	"	~	
Gasoline Range Organics C6-C12	646	10.0	mg/kg dry	I	EI41719	09/17/04	09/19/04	EPA 8015M	
Diesel Range Organics >C12-C35	2740	10.0	0			н		-	
Total Hydrocarbon C6-C35	3380	10.0		4			-		
Surrogate: 1-Chlorooctane		116%	70-1	30		*	"	"	
Surrogate: 1-Chlorooctadecane		170 %	70-1	30	~	"	"	"	5-0
YDL8inch091504BH2-20' (4117009-03) S	oil								
Benzene	ND	0.0250	mg/kg dry	25	E142206	09/21/04	09/21/04	EPA 8021B	
Toluene	ND	0.0250		*		"	•	•	
Ethylbenzene	ND	0.0250	**	*		"	•	-	
Xylene (p/m)	ND	0.0250	и	4	-				
Xylene (0)	ND	0.0250			r		N	N	
Surrogate: a.a.a-Trifluorotoluene		87.6 %	80-1	20	"	*	м	*	
Surrogale: 4-Bromofluorobenzene		80.7 %	80-1	20		"	*	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	١	E141719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	•		*		
Total Hydrocarbon C6-C35	ND	10.0	•			14	**		

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project N	Project: Yo lumber: 200 lanager: Jim	4-00180		ıch		Rej	2) 687-4914 ported: /04 16:43
<u> </u>		0	rganics b	y GC					
		Environ	mental L	ab of Te	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
YDL8inch091504B112-20' (4117009-03) S	ioit								
Surrogate: 1-Chlorooctane		100 %	70-1	30	EI41719	09 17 04	09 20 04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		123 %	70-1	30	•	"	"		
YDL8inch091504BH2-30' (4117009-04) S	ioi1								
Benzene	ND	0.0250	mg/kg dry	25	E142206	09/21/04	09/21/04	EPA 8021B	
Toluene	ND	0.0250		-	•	•		.,	
Ethylbenzene	ND	0.0250		24	•	•	м	*	
Xylene (p/m)	ND	0.0250	"	н	-		4		
Xylene (0)	ND	0.0250	-		*	•	*		
Surrogate: a,a,o-Trifluorotoluene		81.5 %	80-1	20		*		"	
Surrogute: 4-Bromofluorobenzene		82.1 %	80-1	20	"	*	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	t	EI41719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	-		•	н		•	
Total Hydrocarbon C6-C35	ND	10.0	•		*	"	**		
Surrogate: 1-Chlorooctane		93.0%	70-1	30		*	-	•	
Surrogate: 1-Chlorooctadecane		115%	70-1	30	u	"	-	•	
YDL8inch091604BH-5' (4117009-05) Soi	I								
Benzene	ND	0.0250	mg/kg dry	25	EI42206	09/21/04	09/21/04	EPA 8021B	·····
Toluene	ND	0.0250	۳	•		•	•	u	
Ethylbenzene	ND	0.0250	11	-	•	N	n	•	
Xylene (p/m)	ND	0.0250		-	•		*		
Xylene (o)	ND	0.0250	"	-	•	н	u	**	
Surrogate: a,a,a-Trifluorotoluene	* N M M	92.0 %	80-1	20	*	"	"		
Surrogate: 4-Bromofluorobenzene		82,4%	80-1	20	~	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	ł	El41719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	~	"	•	4	-	0	
Total Hydrocarbon C6-C35	ND	10.0	•	-		"		11	
Surrogate: 1-Chlorooctane		102 %	70-1	30	•	*	*	, H	
Surrogate: 1-Chlorooctadecane		116 %	70-1	30		"	*	"	

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant

Fax: (432) 687-4914 Reported: 09/22/04 16:43

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
YDL8inch091604BH-15' (4117009-06) So	il								
Benzene	ND	0.0250	mg/kg dry	25	EI42206	09/21/04	09/21/04	EPA 8021B	
Toluene	ND	0.0250		•	-	•	•	"	
Ethylbenzenc	ND	0.0250	**	4	u	•	•		
Xylene (p/m)	ND	0.0250	b	•		-	•	-	
Xylene (o)	ND	0.0250	•	•	н			۳	
Surrogate: a.a.a-Trifluorotoluene		96.5 %	80- <i>1</i>	20	-	N	"	(¹	
Surrogate: 4-Bromojluorobenzene		80.6 %	80-1	20		"	"		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	L	EI41719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		•	•	•	*	•	
Total Hydrocarbon C6-C35	ND	10.0	н		-		н	•	
Surrogate: 1-Chlorooctane		111%	70-1	30	"	4		*	
Surrogate: 1-Chlorooctadecane		130 %	70-1	30	"	~	~	~	
YDL8inch091604BH3-10' (4117009-07) S	oil						· · · · ·		
Benzene	ND	0.0250	mg/kg dry	25	EI42206	09/21/04	09/21/04	EPA 8021B	
Toluene	ND	0.0250	-	4	•	*			
Ethylbenzenc	ND	0.0250			-			**	
Xylene (p/m)	ND	0.0250	•	-	•	•			
Xylene (o)	ND	0.0250		-	*	*	н	•	
Surrogate: a,a,a-Trifluorotoluene		86.1 %	80-1	20		*	*	r	
Surrogate: 4-Bromofluorobenzene		80.3 %	80-1	20	*	*	*	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	ı	EI41719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0		-	"	14	61	•	
Total Hydrocarbon C6-C35	ND	10.0		*	•		•	•	
Surrogate: 1-Chlorooctane		102 %	70-1	30	*	"	"	"	
Surrogate: 1-Chlorooctadecane		112%	70-1	30	*		Ħ	**	
YDL8inch091604B113-15' (4117009-08) S	oil								
Benzene	ND	0.0250	mg/kg dry	25	E142206	09/21/04	09/21/04	EPA 8021B	
Toluene	ND	0.0250	"		"	•	•	м	
Ethylbenzene	ND	0.0250			"		•	•	
Xylene (p/m)	ND	0.0250		"		-	•		
Xylene (0)	ND	0.0250		u	٠			•	
Surrogate: a.a,a-Trifluorotoluene		100 %	80-1	20		*	-	n	
Surrogate: 4-Bromofluorobenzene		84.9 %	80-1	20		~	*	*	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	E141719	09/17/04	09/20/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0				••	•	•	
Total Hydrocarbon C'6-C35	ND	10.0	•	4	н	•	н.		
Environmental Lab of Texas				ulte in this e		the sumples of			

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant

Fax: (432) 687-4914 Reported: 09/22/04 16:43

Organics by GC

Environmental Lab of Texas

Analyte	Kesuli	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
YDL8inch091604BH3-15' (4117009-08)	Soil								<u> </u>
Surrogate: 1-Chlorooctane		97.8 %	70-1	30	EI41719	09 17 04	09 20 04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		1119 %	70-1	30	~	•	~		

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant

Fax: (432) 687-4914 Reported: 09/22/04 16:43

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

	<u></u>	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
YDL8inch091504BH2-10' (4117009-01) Soil									
% Solids	96.0		%	t	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091504BH2-15' (4117809-82) Soil									
% Solids	95.0		%	1	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091504BH2-20' (4117009-03) Soil									
% Solids	87.0		5.0	I	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091504BH2-30' (4117009-04) Soil									
% Solids	96.0		%	l	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091604BH-5' (4117009-05) Soil									
% Solids	82.0		%	1	E142102	09/17/04	09/17/04	% calculation	
YDL8incb091604BH-15' (4117009-06) Soil									
% Solids	96.0		5	1	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091604BH3-10' (4117009-07) Soil									
% Solids	95.0		%	t	E142102	09/17/04	09/17/04	% calculation	
YDL8inch091604BH3-15' (4117009-08) Soil									
% Solids	94.0	······································	%	1	E142102	09/17/04	09/17/04	% calculation	

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant

Fax: (432) 687-4914 Reported: 09/22/04 16:43

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 E141719 - Solvent Extraction (GC)										

Blank (E141719-BLKI)				Prepared: 09/17/	04 Analyzed: 04	9/19/04	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet		**** · <u>***</u> *****		
Diesel Range Organics >C12-C35	ND	10.0	Р				
otal Hydrocarbon C6-C35	ND	10.0					
iurrogate: 1-Chlorooctane	44.2		mg kg	50.0	88.4	70-130	
larrogate: 1-Chlorooctadecane	41.8		*	50,0	83,6	70-130	
Blank (E141719-BLK2)				Prepared: 09/17/	04 Analyzed: 09	0/19/04	
Jasoline Range Organics C6-C12	ND	10.0	mg/kg wet				
Diesel Range Organics >C12-C35	ND	10.0					
otal Hydrocarbon C6-C35	ND	10.0					
Surrogate: 1-Chlorooctane	48.3		mg kg	50,0	96.6	70-130	
hurrogate: 1-Chlorooctadecane	36.3		*	50.0	72.6	70-130	
.CS (EI41719-BS1)				Prepared: 09/17/	04 Analyzed: (M	/19/04	
asoline Range Organics C6-C12	426	10,0	mg/kg wet	500	85,2	75-125	
Diesel Range Organics >C12-C35	498	10,0	•	500	99.6	75-125	
otal Hydrocarbon C6-C35	924	10.0		1000	92.4	75-125	
urrogate: 1-Chlorooctane	51.3		mg kg	50,0	103	70-130	
urrogate: 1-Chlorooctadecane	56.4		"	50.0	113	7(1-13(1	
LCS (EI41719-BS2)				Prepared: 09/17/	04 Analyzed: 09	9/19/04	
Jasoline Range Organics C6-C12	415	10.0	mg/kg wet	500	83.0	75-125	
Diesel Range Organics >C12-C35	505	10.0	-	500	101	75-125	
otal Hydrocarbon C6-C35	920	10.0	•	1000	92.0	75-125	
urrogute: 1-Chlorooctane	\$4.0		mg kg	50.0	108	70-130	
urrogate: 1-Chlorooctadecane	44.3		"	50,0	88.6	70-130	
Calibration Check (E141719-CCV1)				Prepared: 09/17/	04 Analyzed: 09	/19/04	
Jasoline Range Organics C6-C12	425		mg/kg	500	85.0	80-120	
Diesel Range Organics >C12-C35	520		•	500	104	80-120	
otal Hydrocarbon C6-C35	945			1000	94.5	80-120	
urrogate: 1-Chlorooctune	52.0		"	\$0.0	104	74-130	
urrogate: 1-Chlorooctadecane	47.9		н	50.0	95.N	71-130	

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant Fax: (432) 687-4914 Reported: 09/22/04 16:43

09/22/04 16:4

Organics by GC - Quality Control Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Límit	Notes
Batch EI41719 - Solvent Extraction (GC)										
Calibration Check (EI41719-CCV2)				Prenarad: (00/17/04 A	natyzed: 09	1/10/04			
Gasoline Range Organics C6-C12	427		mg/kg	500		85.4	80-120			
Diesel Range Organics >C12-C35	483			500		96.6	80-120			
Fotal Hydrocarbon C6-C35	910		ч	1000		91.0	80-120			
urrogate: 1-Chlarooctane	51.6		**	50.0		103	70-130			
lurrogate: 1-Chlorowciadecane	47.0			50,0		94.0	70+130			
Matrix Spike (E141719-MS1)	Sou	rce: 4116003	-01	Prepared: ()9/17/04 A	alyzed: 09	/19/04			
asoline Range Organics C6-C12	469	10,0	mg/kg dry	521	ND	90.0	75-125			
Diesel Range Organics >C12-C35	555	10.0		521	ND	107	75-125			
'otal Hydrocarbon C6-C35	1020	10,0	۳	1040	ND	98.1	75-125			
urrogate: 1-Chlorooctane	55.9		mg kg	50.0		112	70-130	-		
arrogute: 1-Chlorooctadeçanc	52.5			50.0		105	70-130			
Matrix Spike (E141719-MS2)	Sou	rce: 4117004	-13	Prepared: (09/17/04 A	nalyzed: 09	/19/04			
Insoline Range Organics C6-C12	506	10.0	mg/kg dry	549	ND	92.2	75-125			
Diesel Range Organics >C12-C35	627	10.0	*	549	15.3	111	75-125			
otal Hydrocarbon C6-C35	1130	10.0		1100	15.3	101	75-125			
lurrogate: 1-Chloroockine	55.1		mg kg	50.0		110	70-130			
urrogate: 1-Chlorooctadecane	54.7		"	\$0,0		109	70-130			
Matrix Spike Dup (E141719-MSDI)	Sou	rce: 4116003	-01	Prepared: ()9/17/04 A	nalyzed: 09	/19/04			
Jasoline Range Organics C6-C12	478	10,0	mg/kg dry	521	ND	91.7	75-125	1.90	20	
Diesel Range Organics >C12-C35	577	10.0		521	ND	111	75-125	3.89	20	
Total Hydrocarbon C6-C35	1060	10.0	4	1040	ND	102	75-125	3.85	20	
Surrogate: 1-Chlorosctane	57.5		my ky	50.0		115	70-130			#** *** *** #******* **
Surrogate: 1-Chlorooctadevane	53.8		a	50.0		108	70-130			
Matrix Spike Dup (EI41719-MSD2)	Sou	rce: 4117004	-13	Prepared: (9/17/04 A	naiyzed: 09	/19/04			
Jasoline Range Organics C6-C12	522	10,0	mg/kg dry	549	ND	95.1	75-125	3.11	20	
Diesel Range Organics >C12-C35	630	10.0		549	15.3	112	75-125	0,477	20	
Total Hydrocarbon C6-C35	1150	10,0	-	1100	15.3	103	75-125	1.75	20	
Surrogate: 1-Chlorooctane	57.0		mg kg	50,0		114	70-130			
Surrogate: 1-Chlorooctadecane	57.5			50,0		115	70-130			

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project N	umber: 20	oung Deep to 04-00180 nmy Bryant	Lynch 8 in	ch			Rep) 687-4914 orted:)4 16:43
	0	rganics by								
		Environ	nental I	lab of Te	tas		-			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%aREC Limits	RPD	RPD Limit	Notes
Batch E142202 - EPA 5030C (GC)										
Blank (E142202-BLK1)				Prepared &	Analyzed:	09/20/04				
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	*							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250								
Kylene (o)	ND	0.0250	4							
Surrogale: a.a.a-Trifluorotoluene	91.5		ug kg	100		91.5	80-120			
Surrogate: 4-Bromofluorohenzene	N5.4		*	100		N.5.4	NO-120			
LCS (E142202-BS1)				Prepared &	Analyzed	09/20/04				
Benzene	98,8		ugkg	100		98.8	80-120			
Foluene	101			100		101	80-120			
Ethylbenzenc	102		•1	100		102	80-120			
Xylene (p/m)	228		*	200		114	80-120			
Xylene (o)	110			100		110	80-120			
Surrogate: a,a,a-Trifluorosoluene	710		-	100		110	80-120			~~
Surrogate: 4-Bromofluorobenzene	105			100		105	80-120			
Calibration Check (E142202-CCV1)				Prepared: (9/20/04 A	nalyzed: 09	0/21/04			
Benzene	104		ug/kg	100		104	80-120			
Toluene	105			100		105	80-120			
Ethylbenzene	100		*1	100		100	80-120			
Xylene (p/m)	223			200		112	80-120			
Xylene (0)	106		•	100		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	119		"	100		119	80-120	•••••		
Surrógate: 4-Bromofluorobenzene	101		*	100		101	80-120			
Matrix Spike (E142202-MS1)	Source: 4117003-01			Prepared: 0	9/20/04 A	nalyzed: 09	/21/04			
Benzene	2550		ug/kg	2500	ND	102	80-120			
Foluene	2580		-	2500	26,6	102	80-120			
Ethylbenzene	2630		-	2500	ND	105	80-120			
Xylene (p/m)	5850		•	5000	49,2	116	80-120			
(o)	2830		•	2500	ND	113	80-120			
Surrogate: a.a.,a-Trifluorotoluene	113		"	100	• • • •	- <u>113</u> -	80-120			
Surrogate: 4-Bromofluorobenzene	110		"	100		110	80-120			

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Fax: (432) 687-4914

Reported:

Midland TX, 79706-4476			anager: Jin	1my Bryant					-	4 16:43
	O	ganics by	, GC - Q	uality Co	ontrol					
		Environ	nental L	ab of Te	kas					
		Reporting		Spike	Source	4.850	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch E142202 - EPA 5030C (GC)										
Matrix Spike Dup (E142202-MSDI)	Sou	rce: 4117003	-01	Prepared: (9/20/04 A	nalyzed: 09	0/21/04			
Benzenc	2450		ug/kg	2500	ND	98.0	80-120	4.00	20	
Toluene	2530		-	2500	26.6	100	80-120	1.98	20	
Ethylbenzene	2530		-	2500	ND	101	80-120	3.88	20	
Xylene (p/m)	5670		"	5000	49.2	112	80-120	3.51	20	
Xylene (0)	2700			2500	ND	108	80-120	4.52	20	
Surrogate: a,a,a-Trifluorotoluene	114		** **	100		114	80-120	~ ~ ~	····	
Surroguie: 4-Bromofluorohenzeue	100		"	100		100	×0-120			
Batch E142206 - EPA 5030C (GC)				_						
Blank (EI42206-Bl.K1)				Prepared &	Analyzed	09/21/04				
Benzene	ND	0.0250	mg/kg wet			· · · · · · · · · · · · · · · · · · ·				
Toluene	ND	0.0250	•							
Ethylbenzene	ND	0 0250	ч							
Xylene (p/m)	ND	0.0250								
Xylene (0)	ND	0.0250	•							
Surrogate: a,a,a-Trifluorotoluene	95.1		ug kg	100		95.1	80-120			
Surrogale: 4-Bromofluorobenzene	88.0		-	100		×8.0	80-120			
LCS (E142206-BS1)				Prepared &	Analyzed:	09/21/04				
Benzent	97.6		ug/kg	100		97.6	80-120			
Toluene	100		4	100		100	80-120			
Ethylbenzene	97.7			100		97.7	80-120			
Xylene (p/m)	219		N	200		110	80-120			

н

м

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100

100

100

104

m

95.1

Project: Young Deep to Lynch 8 inch

Project Number: 2004-00180

Environmental Lab of Texas

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Xylenc (o)

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Plains All American EH & S

1301 S. County Road 1150

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104

111

95.1

80-120

80-120

80-120

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant Fax: (432) 687-4914 Reported: 09/22/04 16:43

Organics by GC - Quality Control Environmental Lab of Texas

Analyte	Result	Reporting Límit Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes			
Batch E142206 - EPA 5030C (GC)				-								
Calibration Check (EI42206-CCVI)			Prepared &	k Analyzed:	09/21/04							
Benzene	108	ug/kg	100		108	80-120						
Toluenc	107	•	100		107	80-120						
Ethylbenzene	94.1	•	100		94.1	80-120						
Xylene (p/m)	208	-	200		104	80-120						
Xylene (0)	99.5	N	100		99.5	80-120						
Surrogate: a,a,a-Trifluorotoluene	i la	•	100	•••••	118	811-120		~ ·				
Surrogate: 4-Bromofluorobenzene	N5.5	*	100		×5.5	80-120						
Matrix Spike (E142206-MS1)	Sour	ce: 4117011-12	Prepared:	09/21/04 A	nalyzed: 09	/22/04						
Benzene	100	ug/kg	100	ND	100	80-120						
Foluene	103		100	ND	103	80-120						
Ethylbenzene	101	-	100	ND	101	80-120						
Xylene (p/m)	226		200	ND	113	80-120						
Xylene (0)	107	н	100	ND	107	80-120						
Surrogate: a,a,a-Trifluorotoluene	120	a) - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	100		120	80-120						
Surrogue: 4-Bromofluorobenzene	96,9	~	100		96,9	80-120						
Matrix Spike Dup (E142206-MSD1)	Sour	ce: 4117011-12	Prepared:	09/21/04 A	nalyzed: 09	/22/04						
Benzene	99.5	ug/kg	100	ND	99,5	80-120	0,501	20				
Foluene	100	•	100	ND	100	80-120	2.96	20				
Ethylbenzene	98.0	۳	100	ND	98.0	80-120	3.02	20				
Xylene (p/m)	221		200	ND	110	80-120	2.69	20				
Xylene (o)	105	н	100	ND	105	80-120	1.89	20				
Surrogate: u,a,a-Trifluorotoluene	115	· · · · · · · · · · · · · · · · · · ·	100		113	80-120						
Surrogate: 4-Bromofluorobenzene	93.5	"	100		93.5	80-120						

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Project: Young Deep to Lynch 8 inch Project Number: 2004-00180 Project Manager: Jimmy Bryant

Fax: (432) 687-4914 Reported: 09/22/04 16:43

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch El42102 - % Solids									
Blauk (E142102-BLK1)			Prepared &	& Analyzed	09/17/04				
% Solids	100	%							
Duplicate (E142102-DUP1)	Sour	ce: 4116012-01	Prepared &	& Analyzed	09/17/04				
% Solidx	910	%		90,0			1,10	20	

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PLAINS

1301 S. (II American Ell & S County Road 1150 TX, 79706-4476	Project: Project Number: Project Manager:		Fax: (432) 687-4914 Reported: 09/22/04 16;43
		Notes and De	finitions	
S-04	The surrogate recovery for this samp	te is outside of established control l	imits due to a sample matrix effect.	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the	e reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight b	asis		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland Kuhants

9/22/04

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

Date:

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Analytical Report

Prepared for: Jeff Dann Plains All American EH & S 1301 S. County Road 1150

Midland, TX 79706-4476

Project: Young Deep to Lynch Project Number: 2004-00180 Location: None Given

Lab Order Number: 4J19005

Report Date: 10/26/04

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project Young De Project Number: 2004-0018 Project Manager: Jeff Dann			Fax: (432) 687-4914 Reported: 10/26/04 09:39
	ANALYTICAL REPORT FOR SA	MPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SPYD101804NBC		Soil	10/18/04 14:00	10/19/04 11:30
SPYD101804SBC	4J19005-02	Soil	10/18/04 14:15	10/19/04 11:30
SPYD101804MBC	4J19005-03	Soil	10/18/04 14:30	10/19/04 11:30

Page 1 of 10

Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann

Organics by GC

Fax: (432) 587-4914 Reported: 10/26/04 09:39

Environmental Lab of Texas Reporting Anaiyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes SPYD101804NBC (4J19005-01) Soil 25 EJ42201 10/19/04 10/20/04 EPA 8021B Benzene ND 0.0250 mg/kg dry Toluene J [0.0107] 0.0250 . . 1 Ethylbenzene J [0.0155] 0.0250 Ŧ 0.0262 Xylene (p/m) 0.0250 . . Xylene (0) 0.0250 . . . \mathbb{ND} . Surrogate: a,a,a-Trifluorotoluene 88.8 % 80-120 " ** " " Surrogate: 4-Bromofluorobenzene 109 % 80-120 " " mg/kg dry Gasoline Range Organics C6-C12 J [8.05] 10.0 EJ42013 EPA 8015M 1 10/20/04 10/22/04 J Diesel Range Organics >C12-C35 49.7 10.0 . Total Hydrocarbon C6-C35 49.7 10.0 . . 101 % " 70-130 " " Surrogate: 1-Chlorooctane .. Surrogate: 1-Chlorooctadecane 70-130 " 123 % SPYD101804SBC (4J19005-02) Soil Benzene J [0.0172] 0.0250 mg/kg dry EPA 8021B 25 EJ42201 10/19/04 10/20/04 J Tohiene 0.0464 0.0250 Ethylbenzene 0.0770 0.0250 Xylene (p/m) 0.0820 0.0250 . . . Xylene (o) 0.0630 0.0250 . . ıF Surrogate: a,a,a-Trifluorotohuene 98.4 % 80-120 .. " Surrogate: 4-Bromofluorobenzene 102 % 80-120 Gasoline Range Organics C6-C12 83.0 10.0 mg/kg dry EJ42013 10/20/04 10/22/04 EPA 8015M 1 Diesel Range Organics >C12-C35 341 10.0 Total Hydrocarbon C6-C35 424 10.0 Surrogate: 1-Chlorooctane 104 % 70-130 " .. n Surrogate: 1-Chlorooctadecane 126 % 70-130 ... SPYD101804MBC (4J19005-03) Sail Benzene ND0.0250 mg/kg dry 10/19/04 EPA 8021B 25 EJ42201 10/21/04 Toluene ND 0.0250 . . . Ethylbenzene J [0.0149] 0.0250 . J . 0.0290 0.0250 Xylene (p/m) Xylene (o) J [0.0179] 0.0250 . . J Surrogate: a,a,a-Trifluorotoluene 91.3% 80-120 " " " " Surrogate: 4-Bromofluorobenzene 120 % 80-120 Gasoline Range Organics C6-C12 23.6 EPA 8015M 10.0 mg/kg dry EJ42013 10/20/04 10/22/04 ł Diesel Range Organics >C12-C35 125 10.0 . Total Hydrocarbon C6-C35 . . 149 10.0

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Pro Project Num Project Mana	iber: 200		Lynch			Fax. (432) (Report 10/26/04	led:
		Org	anics b _. ental L	-	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SPYD101804MBC (4J19005-03) Soil									
Surrogate: 1-Chlorooctane		106 %	70-1	30	EJ42013	10/20/04	10/22/04	EPA 8015M	
Surrogate: 1-Chlorooctadecane		127 %	70-1	30	a	"	~	"	

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Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann

Fax: (432) 687-4914 Reported: 10/26/04 09:39

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SPYD101804NBC (4J19005-01) Soil						· · · ·	. <u></u>	···	i
% Moisture	12.0		%	1	EJ42001	10/20/04	10/20/04	% calculation	
SPYD101804SBC (4J19005-02) Soil									
% Moisture	6.0		%	1	EJ42001	10/20/04	10/21/04	% calculation	
SPYD101804MBC (4J19005-03) Soil									
% Moisture	7.0		%	1	EJ42001	10/20/04	10/21/04	% calculation	

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Plains All American EH & S	Project: Young Deep to Lynch								Fax: (432) 687-4914		
1301 S. County Road 1150 Midland TX, 79706-4476	Project Number: 2004-00180 Project Manager: Jeff Dann								Repo 10/26/0		
	O	rganics by	/ GC - Q	uality Co	ontrol						
		Environr	nental La	ab of Tey	KAS						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EJ42013 - Solvent Extraction (GC)											
Blank (EJ42013-BLK1)				Prepared: 1	0/20/04 A	nalyzed: 10	0/22/04				
Jasoline Range Organics C6-C12	MD	10.0	mg/kg wet								
Diesel Range Organics >C12-C35	ND	10.0									
Total Hydrocarbon C6-C 35	ND	10.0	•								
Surrogate: 1-Chlorooctane	37.1		mg/kg	50.0		74.2	70-130				
Surrogate: 1-Chlorooctadecane	36.5		"	50.0		73.0	70-130				
Blank (EJ42013-BLK2)				Prepared: 1	0/20/04 A	nalyzed: 10	0/22/04				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet					-			
Diesel Range Organics >C12-C35	ND	10.0									
Total Hydrocarbon C 6-C 35	ND	10.0	н								
Surrogate: 1-Chlorooctane	38 1		mg/kg	50.0		76.2	70-130	•			
Surrogate: 1-Chlorooctadecane	368		"	50.0		73.6	70-130				
LCS (EJ42013-BS1)				Prepared: 1	10/20/04 A	nalyzed: 10	0/22/04				
Gasoline Range Organics C6-C12	456	10.0	mg/kg wet	500		91.2	75-125				
Diesel Range Organics >C12-C35	435	10.0		500		87.0	75-125				
Total Hydrocarbon C6-C35	851	10.0	n	1000		89.1	75-125				
Surrogate: I-Chlorooctane	35.2		mg/kg	50.0		70.4	70-130				
Surrogate: 1-Chlorooctadecane	35.4		"	50.0		70.8	70-130				
LCS (E.J42013-BS2)				Prepared	10/20/04 A	nalyzed: 10	0/22/04				
Gasoline Range Organics C6-C12	453	10.0	mg/kg wet	500		90.6	75-125				
Diesel Range Organics >C12-C35	459	10.0		500		91.8	75-125				
Total Hydrocarbon C6-C35	9 13	10.0	u	1000		91.3	75-125				
Surrogate: I-Chlorooctane	41.2		mg/kg	50.0		82.4	70-130				
Surrogate: 1-Chlorooctadecane	36.9		**	50.0		73.8	70-130				
Calibration Check (EJ42013-CCVI)				Prepared: 1	10/20/04 A	nalyzed: 1(0/22/04				
Gasoline Range Organics C6-C12	513		mg/kg	500		103	80-120				
Diesel Range Organics >C12-C35	570		 n	500		114	80-120				
Total Hydrocarbon C6-C35	1080			1000		108	80-120				
Surrogate: 1-Chlorooctane	52.8		"	50.0		104	70-130				
Surrogate: I-Chlorooctadecane	55.2		"	50.0		110	70-130				

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Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann Fax: (432) 687-4914 Reported:

10/26/04 09 39

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 EJ42013 - Solvent Extraction (GC)										
Calibration Check (EJ42013-CCV2)				Prepared	10/20/04 A	nalyzed: 10	/22/04			
Gasoline Range Organics C6-C12	44.6		mg/kg	500		89.2	80-120			
Diesel Range Organics >C12-C35	523		۳	500		105	80-120			
Total Hydrocarbon C6-C35	969			1000		96.9	80-120			
Surrogate: I-Chlorooctane	48.7		"	50.0		97.4	70-130			
Surrogate: 1-Chlorooctadecane	49.9		"	50.0		99.8	70-130			
Matrix Spike (EJ42013-MSI)	Sour	се: 4Л9001	-03	Prepared	10/20/04 A	nalyzed: 10	0/22/04			
Gasoline Range Organics C6-C12	648	10.0	mg/kg dry	568	ND	114	75-125			
Diesel Range Organics >C12-C35	661	10.0	"	568	NĎ	116	75-125			
Total Hydrocarbon C6-C35	1310	10.0	•	1140	ND	115	75-125			
Surrogate: I-Chlorooctane	58.4		mg/kg	50.0		117	70-130			
Surrogate 1-Chlorooctadecane	63.2		"	50.0		126	70-130			
Matrix Spike (E.142013-MS2)	Source: 4J19016-01 Pr			Prepared	10/20/04 A	nalyzed: 10	0/25/04			
Gasoline Range Organics C6-C12	480	10.0	mg/kg dry	510	ND	94.1	75-125			_
Dieset Range Organics >C12-C35	534	10.0	•	510	ND	105	75-125			
Total Hydrocarbon C6-C35	1010	10.0	u	1020	ND	99.D	75-125			
Surrogate: I-Chlorooctane	48.3		mg/kg	50.0		96.6	70-130			
Surrogate: 1-Chlorooctadecane	47.3		"	50.0		94.6	70-130			
Matrix Spike Dup (EJ42013-MSD1)	Sour	се: 4Л9001	-03	Prepared:	10/20/04 A	nalyzed: 10	0/22/04			
Gasoline Range Organics C6-C12	631	10.0	mg/kg dry	568	ND	111	75-125	2.66	20	
Diesel Range Organics >C12-C35	653	10,0		568	ND	115	75-125	1.22	20	
Total Hydrocarbon C6-C35	1280	10.0	•	1140	ND	112	75-125	2.32	20	
Surrogate: 1-Chlorooctane	57.0		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	63.2		~	50.0		126	70-130			
Matrix Spike Dup (EJ42013-MSD2)	Sour	ce: 4J19016	-01	Prepared:	10/20/04 A	nalyzed: 10)/25/04			
Gasoline Range Organics C6-C12	489	10.0	mg/kg dry	510	ND	95.9	75-125	1.86	20	_
Diesel Range Organics >C12-C35	558	10.0		510	ND	109	75-125	4.40	20	
Total Hydrocarbon C6-C35	1050	10.0	٠	1020	ND	103	75-125	3.88	20	
Surrogate: 1-Chlorooctane	46.d		mg/kg	50.0		92.8	70-130			
Surrogate: 1-Chlorooctadecane	43.7		"	50.0		87.4	70-130			

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Plains All American EH & S		P	roject: Yo	ung Deep to	Lynch				Fax. (432)	687-4914		
1301 S. County Road 1150		Project Nu							Reported:			
Midland TX, 79706-4476		Project Ma							10/26/0			
	 	ganics by	_		ntrol							
		Environn	-	•								
		Reporting		Spike	Source		%REC		RPD			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Batch EJ42201 - EPA 5030C (GC)												
Blank (EJ42201-BLK1)		_		Prepared 1	10/19/04 A	nalyzed: 10)/20/04					
Benzene	ND	0.0250	mg/kg wet									
Toluene	ND	0.0250										
Ethylbenzene	ND	0.0250	8									
Xylene (p/m)	ND	0.0250										
Xylene (0)	ND	0.0250	u									
Surrogate: a,a,a-Triftuorotoluene	80.2		ug/kg	100	_	80.2	80-120					
Surrogate 4-Bromofluorobenzene	93.O		"	100		93.0	80-120					
LCS (EJ42201-BS1)				Prepared: 1	0/19/04 A	nalyzed: 10)/20/04					
Benzene	92.?		ug/kg	100	_	92.7	80-120					
Foluene	96.ú		•	100		96.6	80-120					
Ethylbenzene	100		•	100		100	80-120					
Xylene (p/m)	226		٠	200		113	80-120					
Xylene (0)	107		н	100		107	80-120					
Surrogate: a,a,a-Trifiuorotoluene	93.9			100		93.9	80-120					
Surrogate: 4-Bromofluorobenzene	118		"	100		118	80-120					
Calibration Check (EJ42201-CCV1)				Prepared: 1	10/19/04 A	nalyzed: 10	0/21/04					
Benzene	103		ug/kg	100		103	80-120					
Foluene	106			100		106	80-120					
Ethylbenzene	102		۰	100		102	80-120					
Xylene (p/m)	222		•	200		111	80-120					
Xylene (0)	107		•	100		107	80-120					
Surrogate: a,a,a-Trifluorotoluene	116		"	100		116	80-120					
Surrogate: 4-Bromofluorobenzene	112		"	100		112	80-120					
Matrix Spike (EJ42201-MSI)	Sou	rce: 4J19014	-01	Prepared: 1	10/19/04 A	nalyzed: 10	0/21/04					
Benzene	2570		ug/kg	2500	ND	103	80-120					
Toluene	2470			2500	11.1	98.4	80-120					
Ethylbenzene	2550			2500	16.2	101	80-120					
Xylene (p/m)	5610		•	5000	35.6	111	80-120					
Xylene (0)	2720			2500	9.78	108	80-120					
Surrogate: a,a,a-Trifluorotoluene	104		"	100		104	80-120					
Surrogate: 4-Bromofluorobenzene	1!2		"	100		112	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 Brivironmental Lab of Texas.

Page 7 of 10

Project:	Young Deep to Lynch	Fax: (432) 687-4914
Project Number: 2	2004-00180	Reported:
Project Manager J	leff Dann	10/26/04 09 39
	Project Number:	Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager, Jeff Dann

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 EJ42201 - EPA 5030C (GC)										
Matrix Spike Dup (E.J42201-MSD1)	Sour	се: 4Л19014-0	1	Prepared 1	.0/19/04 A	nalyzed: 10	/21/04			
Benzene	2660		ug/kg	2500	ND	106	80-120	2.87	20	
Toluene	2620			2500	11.1	104	80-120	5.53	20	
Ethylbenzene	2700			2500	16 2	107	80-120	5.77	20	
Xylene (p/m)	59.20			5000	35.6	118	80-120	6.11	20	
Xylene (o)	2830			2500	9.78	113	80-120	4.52	20	

100

Surrogate: 4-Bromofluorobenzene 118 " 100 118 80-120

112

Environmental Lab of Texas

Surrogate: a,a,a-Trifluorotoluene

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 writien approval of Britronnental Lab of Texas. Page 8 of 10

112

80-120

1 # 20 0 01 10



Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Pr Project Nus Project Mar	mber. 20		Lynch				Fax: (432) 687- Reported: 10/26/04 09:3				
General	Chemistry Para	meters by Environm				ls - Qua	lity Con	trol					
		Reporting		Spike	Source		%REC		RPD				
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes			
Batch EJ42001 - % Solids		-											
lank (EJ42001-BLK1)				Prepared &	2 Analyzed:	10/20/04	-						
6 Moisture	0.0		%										
Auplicate (EJ42001-DUP1)	Sou	гсе: 4Л9005-(01	Prepared 8	Analyzed:	10/20/04							
% Moisture	13.0		%		12.0			8.00	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 Brotronmental Lab of Texas. Page 9 of 10
Plains All American EH & S	Project:	Young Deep to Lynch	Fax. (432) 687-4914
1301 S. County Road 1150	Project Number.	2004-00180	Reported:
Midland TX, 79706-4476	Project Manager	Jeff Dann	10/26/04 09:39

Notes and Definitions

J Detected but below the Reporting Limit, therefore, result is an estimated concentration (CLP J-Flag)

DET Analyte DETECTED

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

Report Approved By:

Raland K that

Jeanne Mc Murrey, Inorg. Tech Director

10/26/04

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Biezugbe, 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 thus 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 Bavironmental Lab of Texas. Pone 10.4

Page 10 of 10

Environmental Lab of Te 12600 West 1-20 Eess Phone: 91 Odesen Texas 79763 Fest: 91																										
Project Manager: Pat McCasland										P	rojec	± Na	<u>006</u> :		You	10.0	Də	ep (<u>Fo</u>	Lyn	ch		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Company Name: Plains All American M	erketing										P	najee	1 #:		200	4-0	018	<u>90</u>								m.a
Conspany Address:		······································	•								Pro	ject	Loe:													
City/State/Zip:												P	Os:					_								
Telephone No:																										
Telephone No:	me		3445				_												_		_					-
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	Dute Facepied	Time Sumpled	Ma. of Contralments	108	ONE	ECH HORN	BBU	Natio	Cahes (Specify)	Water	Sinder	Other (Aperily)	TDSATAMAREC	1.815 HYT	19001 XL HALL	TIPHEOLEON	Metals	Volntales	Somivolatics	M PPEN 8021 BOOM	Reactivity	Curronivity	entrishiny	Chiorides		BURU TAT
SPYDI01804NBC	10/18/2004	2:00	1	X					C				Fi			x	+	+		<u>F</u>	<u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>			4	\pm	F
SPYDIOL804SBC	10/15/2004	2:15 2:80		X	+					-	B					XX		-		$\frac{X}{X}$	-		+	\pm	$\overline{-}$	F
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I PLAINS

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

Client: Plains P/L

Date/Time: 10-19-04 @ 1130

JMM

Order #: 4J 19005

Initials:

Sample Receipt Checklist

			and the second se	
Temperature of container/cooler?	(CO)	No	0,5	C
Shipping container/cooler in good condition?	(Yes)	No		
Custody Seals intact on snipping container/cooler?	Yes	No	O NOT presen	1
Custody Seals intact on sample bottles?	Yes	Na	Not presel	1-2
Chain of custody present?	2755	No		_
Sample Instructions complete on Chain of Custody?	(Tes)	No		
Chain of Custody signed when relinquished and received?	100	No_		
Chain of custody agrees with sample label(6)	763	No		
Container labels legible and intact?	105	No		
Sample Matrix and properties same as on chain of custody?	X09 ,	No		
Samples in proper container/bottle?	(Net	No		
Samples property preserved?	(es)	No		
Sample bottles intact?	Fes	No		
Preservations documented on Chain of Custody?	(रहा)	No		
Containers documented on Chain of Custody?	୍ୱାହେତ୍ର	No		
Sufficient sample amount for indicated test?	(es)	No		
All samples received within sufficient hold time?		No		
VOC samples have zero headspace?	res	No	Not Applica	bie

Other observations:

Variance Documentation:

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

ATTACHMENT V: FORM C-141 AND SITE INFORMATION & METRICS FORM

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

		IVI 87303		
Release Notification	on and	d Corrective	e Action	
OPERATOR		🗌 Initia	al Report 🛛 🛛	🖌 Final Report
Name of Company: Plains All American		Contact: Cam	ille Reynolds	
Address PO Box 1660 5805 East Highway 80		Telephone No	•	
Midland, Texas 79702		505.393.5611		
Facility Name		Facility Type		
Young Deep to Lynch 8" ##2004-00180		8" Steel Pipe		
Surface Owner: Bureau of Land Managemen	t	Mineral Own	ier	Lease No.
		RELEASE	**.	
Unit LetterSection 11Township T20SRange R33EFeet from the	Nortl South Line		East/West Line	County: Lea
Latitude: <u>32° 35' 27.</u> NATUDI		Longitude: _	103° 37' 41.	48"W
Type of Release Sweet Crude Oil	10 ba	of Release	0 barre	lecovered Is
Source of Release		d Hour of		Hour of Discovery
8" Steel Pipeline	Occurr 8-5-04(ence 0 7:30AM	8-5-04@8	
Was Immediate Notice Given?		To Whom?		
Yes 🗌 No 🗌 Not Required		ohnson		
By Whom?	Date an 8-05-04	d Hour @2:15PM		
Was a Watercourse Reached? 🔲 Yes 🛛 No	IF YES, NA	Volume Impacti	ng the Watercou	rse.
If a Watercourse was Impacted, Describe Fully.* NA	1	····		
Describe Cause of Problem and Remedial Action Ta pipeline was due to internal corrosion; Temporar API Gravity = 38-42 degrees; H2S = <10 ppm; Da Describe Area Affected and Cleanup Action Taken.* 78 sqft ~25' x 7': Visibly contaminated soil was e soil will be blended to below the NMOCD remedial remediation. Remedial Goals: TPH 8015m = 5000 m Benzene, Ethyl Benzene, Toluene, and Xylenes = 50	y repair hily Volu xcavated goals on ng/Kg, B	clamp installed me = 2,600 bbls and stored on p site or taken to enzene = 10 mg	l. Operating pr lastic to await a the Plains Lea S	essure = 100-120 psi; nalytical results. The Station Landfarm for
I hereby certify that the information given above is that pursuant to NMOCD rules and regulations all o notifications and perform corrective actions for rele acceptance of a C-141 report by the NMOCD marke should their operations have failed to adequately in ground water, surface water, human health or the en does not relieve the operator of responsibility for c regulations.	perators cases whi d as "Fin vestigate ivironme	are required to a ch may endanger al Report" does and remediate co nt. In addition,	report and/or fil public health or not relieve the o ontamination tha NMOCD accepta	e certain release the environment. The perator of liability t pose a threat to ince of a C-141 report
Signature:		OIL	CONSERVATI	ON DIVISION
Printed Name: Camille Reynolds			District Supervi	
E-mail Address: CJReynolds@PAALP.com	*	Approval Dat		Expiration Date:
Title: District Environmental Supervisor		Conditions of	f Approval:	Attached 🔲
Date: Phone: 505.393.5611				

Attach Additional Sheets If Necessary

Plains All American Site	Incident Date:	NMOCD N	otified:
Information and Metrics	Plains All Amer		
SITE: Young Deep to Lynch 8		gned Site Reference	
Company: Plains All American			$\frac{1}{10000000000000000000000000000000000$
Street Address: PO Box 1660			
	1 00	Notified Date/Ti	me:
Mailing Address: 5805 East Hig		Notified by:	······································
City, State, Zip: Midland, Te		Person Notified:	
Representative: Camille Reynold		NRC Report# :	· · · · · · · · · · · · · · · · · · ·
	5.393.5611	· • • • • • • • • • • • • • • • • • • •	
Telephone:			
Fluid volume released (bbls): 1		Recovered (bbls):	
		4 hrs and submit form C	
(Also app 5-25 bbls: Submit form C-141 with	lies to unauthorized	releases >500 mcf Natur	al Gas)
Leak, Spill, or Pit (LSP) Name:			eases of 50-500 mer Natural Gas
Source of contamination: 8" Ste		Lynen o	
Land Owner, i.e., BLM, ST, Fee,		fland Management	
Land Owner, i.e., BLM , 31 , Pee , LSP Dimensions $\sim 25' \times 7'$	Other. Dureau 0.	i Land Management	
)		
LSP Area: 78 sqft ft ²			*****
Location of Reference Point (RP			
Location distance and direction	trom KP		
Latitude: 32° 35' 27.30"N	····		·····
Longitude: 103° 37' 41.48"W			
Elevation above mean sea level:	3,590'amsl		
Feet from South Section Line			
Feet from West Section Line			
Location - Unit or 1/41/4: SE1/4 of	f the NE¼	Unit Le	tter: H
Location- Section: 11	· · · · · · · · · · · · · · · · · · ·		
Location- Township: T20S			· · · · · · · · · · · · · · · · · · ·
Location- Range: R33E		····	· · · · · · · · · · · · · · · · · · ·
Surface water body within 1000	' radius of site:	none	
Domestic water wells within 100			
Agricultural water wells within 1			
Public water supply wells within			· · · · · · · · · · · · · · · · · · ·
Depth from land surface to grou			and the second sec
Depth of contamination (DC) –	15'	<u></u>	
Depth of contamination $(DC) =$ Depth to ground water $(DG - D)$		2 5 '	
			3. Distance to Surface Water
1. Ground Water	2. Wellhead	Protection Area	Body
If Depth to GW <50 feet: 20	T.C. (1000) C	· · · · · · · · · · · · · · · · · · ·	<200 horizontal feet: 20
points	If <1000' from	-	points
If Depth to GW 50 to 99 feet:		private domestic	200-100 horizontal feet: 10
10 points	water source: 2	0 points	points
	If >1000' from	water source, or;	
If Depth to GW >100 feet: 0		vate domestic water	>1000 horizontal feet: 0
points	source: 0 points		points
Ground water Score = 0		ion Area Score= 0	Surface Water Score= 0
Site Rank $(1+2+3) = 0$	1		_ salut and store o
Total Site Ranking Score and Ac	centable Concent	rations	
Parameter >19		10-19	0-9
		10 ppm	
Banzanel 10 nmm			10 ppm
Benzene ¹ 10 ppm			
BTEX ¹ 50 ppm		50 ppm	50 ppm
BTEX ¹ 50 ppm TPH 100 ppm		50 ppm 1000 ppm	50 ppm 5000 ppm
BTEX ¹ 50 ppm		50 ppm 1000 ppm	50 ppm 5000 ppm



August 16, 2004

Mr. Larry Johnson Environmental Engineer New Mexico Oil Conservation Division 1625 North French Hobbs, New Mexico 88240

Subject: Plains All American Initial C-141

Re: Young Deep to Lynch 8", #2004-00180
UL H, SE¼ of the NE¼ of Section 11 T20S R33E
Latitude 32° 35' 27.30"N and Longitude 103° 37' 41.48"W
Landowner: Bureau of Land Management

Dear Mr. Johnson,

Environmental Plus, Inc. (EPI), on behalf of Camille Reynolds, Plains All American, submits the attached New Mexico Oil Conservation Division (NMOCD) initial form C-141 for the above referenced leak site located on land owned by the Bureau of Land Management, approximately 34.5 miles west of Hobbs, New Mexico . The New Mexico Office of the State Engineer Website Database records indicates an area groundwater level of 150 feet below ground surface. There are no recorded or observed water wells or surface water bodies within 1,000 horizontal feet of the site. The attached site information and metrics form ranks the site in accordance with the "NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)." Photographs and maps are attached.

Plains All American proposes to remediate the site consistent with the NMOCD Guidelines and, if necessary, develop and submit a site specific remediation plan for NMOCD approval to address issues identified during delineation of the vertical and horizontal extents of contamination of the Constituents of Concern (CoCs), i.e., Total Petroleum Hydrocarbon EPA method 8015m (TPH^{8015m}), Benzene, and BTEX, i.e., the mass sum of Benzene, Toluene, Ethyl Benzene, and Xylenes. The contaminated soil is not exempted from RCRA 40 CFR Part 261.



If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively or Mr. Camille Reynolds at 505.393.5611. All official communication should be addressed to:

Mr. Camille Reynolds Plains All American PO Box 1660 5805 East Highway 80 Midland, Texas 79706

Sincerely,

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Mailan

Pat McCasland EPI Technical Services Manager

cc: Camille Reynolds, Plains All American, w/enclosure Jeff Dann, Plains All American, w/enclosure Ben Miller, EPI Vice President and General Manager Sherry Miller, EPI President file

T PLAINS Site Information a		NMOCD Noti	fied:
ALL AMERICAN Metrics	8-5-04@7:30AM	8-05-04@2:1	5PM
SITE: Young Deep to Lynch 8"	Assigned Si	te Reference #: #2	004-00180
Company: Plains All American			
Street Address: PO Box 1660			
Mailing Address: 5805 East Highway 80	· · · · · · · · · · · · · · · · · · ·		
City, State, Zip: Midland, Texas 79702			
Representative: Camille Reynolds			
Representative Telephone: 505.393.561	1	·····	·····
Telephone:			
Fluid volume released (bbls): 10	Rec	overed (bbls): 0 bb	ls
>25 bbls: Notify I	NMOCD verbally within 24 hrs an	submit form C-141 wi	thin 15 days.
(Als	o applies to unauthorized releases	>500 mcf Natural Gas)	
Leak, Spill, or Pit (LSP) Name: Young	within 15 days (Also applies to u	nauthorized releases of	50-500 mcl Natural Gas)
Source of contamination: 8" Steel Pipelin			
Land Owner, i.e., BLM, ST, Fee, Other: B			
Land Owner, i.e., BLM, S1, Fee, Other: E	ureau of Lanu Wanagemen		
LSP Dimensions $\sim 25 \times 7$ LSP Area: 78 ft ²	<u> </u>		
Location of Reference Point (RP)			
Location distance and direction from RP	·		
Latitude: 32° 35' 27.30"N			
Lantude: 52 55 27.50 IN Longitude: 103° 37' 41.48"W	· · · ·		
Elevation above mean sea level: 3,590'a			
Feet from South Section Line			
Feet from West Section Line		<u> </u>	· · · · · · · · · · · · · · · · · · ·
Location- Unit or 1/41/4: SE1/4 of the NE1/4	Unit Letter	<u> </u>	
Location- Section: 11			
Location- Township: T20S	······		
Location- Range: R33E			
Location- Range. R55E			
Surface water body within 1000 ' radius o	f site: none		
Domestic water wells within 1000' radius			
Domestic water wells within 1000' radius			
Agricultural water wells within 1000' radius			
Agricultural water wells within 1000 radi			
Public water supply wells within 1000' rad			
Depth from land surface to ground water (
Depth from rand surface to ground water (Depth of contamination (DC) $-$?	00) 100		
Depth of containmation $(DC)^{-1}$ Depth to ground water $(DG - DC = DtGW)$	1) 2		· · · · · · · · · · · · · · · · · · ·
1. Ground Water	2. Wellhead Prote	ction Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: 20 points	If <1000' from water source		S. Distance to surface water body <200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: 10 points	private domestic water sou		200-100 horizontal feet: 10 points
	If >1000' from water source		
If Depth to GW >100 feet: 0 points	private domestic water sou	rce: 0 points	>1000 horizontal feet: 0 points
Ground water Score = 0	Wellhead Protection Area	Score=0	Surface Water Score= 0
Site Rank $(1+2+3) = 0$			
	te Ranking Score and Acc		tions
Parameter >19	10-1	9	0-9
Benzene ¹ 10 ppm	10 pr		10 ppm
BTEX ¹ 50 ppm	50 pr	m	50 ppm
TPH 100 ppm	1000 г	pm	5000 ppm
¹ 100 ppm field VOC headspace measurem	nent may be substituted for	ab analysis	

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

<u></u>	· · · · · · · · ·		Releas	se Notificat	tion a	nd Cor	rective A	ction					
	OPERA	ΓOR					🛛 In	itial Report	🗌 Fina	l Report			
Name of Co						Contac		-					
Plains All A Address	American			<u>_</u>		Teleph	e Reynolds		·				
	60 5805 Ea	st Highway 8	80 Midla	nd, Texas 7970	2	505.39							
Facility Nar	ne					Facility							
Young Dee	p to Lynch	8" #2004-00)180	·		8" Stee	el Pipeline		<u></u>				
Surface Ow	ner: Burea	u of Land M	anageme	ent		Mine	ral Owner		Lease N	<u> </u>			
	<u> </u>		unugenie	··									
Unit Letter	Section	Township	Range	LOCAT Feet from the		outh Line	Feet from the	East/West Li	ne County:	Lea			
H	11	T20S	Kange			outin Enite		Euse west Er	County.	Lta			
			R33E										
		I	atitude:	32° 35' 27.30	0" <u>N</u>	La	ongitude: <u>10</u>	<u>3° 37' 41.48</u>	" <u>W</u>				
				NATU	RE OF	RELE	ASE						
Type of Rele						Volume of			Volume Reco				
Sweet Crude Source of Re						10 barre			0 bbls barn				
8" Steel Pipe						Date and Hour of OccurrenceDate and Hour of Discove8-5-04@7:30AM8-5-04@8:00AM							
Was Immedi	ate Notice G					If YES, To Whom? Larry Johnson							
			Yes []	No 🔲 Not Req		Date and Hour							
By Whom?						Date and F 8-05-04@							
Was a Water	course Reacl	hed? 🗌 Ye	s 🛛 No			If YES, Volume Impacting the Watercourse.							
If a Wataraa		acted, Describ	- Euller *			NA							
NA	irse was imp	acted, Describ	e runy.*										
										Femporary repair			
				psi; API Gravity ↑ * \\ Visibly conto						ols. alytical results. The			
				al goals on site of									
				, and BTEX, i.e.,									
										NMOCD rules and			
nublic health	or the envir	onment The a	ccentance	of a C-141 report	by the N	MOCD ma	a perform corre	ective actions Report does	for releases w	hich may endanger operator of liability			
should their o	operations ha	ive failed to ad	equately in	vestigate and ren	nediate co	ntaminatio	on that pose a th	reat to groun	d water, surfac	e water, human			
health or the	environment	In addition,	NMOCD a	acceptance of a C-	-141 repo	rt does not	relieve the ope	rator of respo	nsibility for co	ompliance with any			
	state, or loc	al laws and/or	regulation	s		- <u></u>							
Signature:	Lan	nilli	_Ku	upold	Ś		OIL CO	NSERVA	TION DIV	<u>/ISION</u>			
Printed Name	e: Camille R	Reynolds (e-n	nail: CJRe	v ynolds@paalp.com	m)	Approv	ed by District S	upervisor:					
Title: Distric	t Environme	ental Superviso	01			Approv	al Date:		Expiration D	Date:			
Date: Aug	ust 16, 2004		Phone:	505.393.5611		Conditi	ons of Approva	l:		Attached			

* Attach Additional Sheets If Necessary



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September 14, 2004

Mr. Larry Johnson Environmental Engineer New Mexico Oil Conservation Division 1625 North French Hobbs, New Mexico 88240

Subject: Delineation Proposal and Remediation Alternatives

Re: Young Deep to Lynch 8", #2004-00180 UL-H, SE¼ of the NE¼ of Section 11 T20S R33E Latitude: 32° 35' 27.30"N and Longitude: 103° 37' 41.48"W Landowner: Bureau of Land Management

Dear Ms. Reynolds,

Environmental Plus, Inc. (EPI) on behalf of Plains All American Pipeline, submits this delineation proposal for the above referenced leak site on land owned by the Bureau of Land Management located approximately 34.5 miles west of Hobbs, New Mexico. The New Mexico Office of the State Engineer Database records indicate an average area water level of 150 feet below ground surface ('bgs) with no water wells or surface water bodies located within 1,000 horizontal feet of the site. The attached site information and metrics form ranks the site in accordance with the <u>New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)</u>. Site maps and photographs are also attached.

This release was estimated at 10 barrels (bbls) of crude oil with 0 bbls recovered and was reported to the New Mexico Oil Conservation Division (NMOCD) according to the NMOCD Rule 116. The Constituents of Concern (CoCs) are: Total Petroleum Hydrocarbon EPA method 8015m (TPH^{8015m}), benzene, and BTEX, i.e., the mass sum of benzene, toluene, ethylbenzene, and xylenes. The NMOCD Guidelines allow submission of VOC headspace survey data <100 ppm collected in the field in lieu of laboratory benzene and BTEX closure analyses. The impacted soil is not exempted from RCRA 40 CFR Part 261.

On August 5, 2004, with Plains oversight, EPI excavated a portion of the visibly contaminated and odorous soil and stockpiled on site. The sides and bottom of the excavation were sampled on August 31, 2004. The analytical results are summarized and illustrated below. The analytical report is also included. The east and west sidewalls and the excavation bottom remain impacted above the CoC remedial goals and requires further investigation.

To delineate the extents of crude oil impact, it is proposed to advance and sample a three soil borings using a hollow stem auger rig; borehole BH1 approximately 10' east of the leak origin, borehole BH2 adjacent to the leak origin, and borehole BH3 approximately 10' west of the leak origin. To facilitate rig access, the current excavation will be backfilled with the stockpiled soil. The CoC NMOCD remedial goals have been achieved in the north and south sidewalls.

Remediation alternatives include removal of all soil impacted above the CoC thresholds and disposing or blending; or disposing or blending near surface soil and isolating the remaining impacted source term with an engineered clay barrier. Barrier installation would be supported by a conservative risk assessment.



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If there are any questions please call Mr. Ben Miller or myself at the office or at 505.390.0288 and 505.390.7864, respectively or Mr. Camille Reynolds at 505.393.5611. All official communication should be addressed to:

Mr. Camille Reynolds Plains All American PO Box 1660 5805 East Highway 80 Midland, Texas 79706 email: CJReynolds@paalp.com

Sincerely,

fat Mailan

Pat McCasland EPI Technical Services Manager Email: enviplus1@aol.com

cc: Camille Reynolds, Plains All American email: CJReynolds@paalp.com Jeff Dann, Plains All American, email: JPDann@paalp.com Ben Miller, EPI Vice President and General Manager Sherry Miller, EPI President file

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Plains Al	l American Site	Incident Date		NMOCD Noti	
	ion and Metrics	8-5-04@7:30)AM	8-05-04@2:1:	5PM
SITE: Young D	eep to Lynch 8"		Assigned Site R	eference #: #2	004-00180
Company: Plai					
Street Address:	PO Box 1660				
	: 5805 East Highway 80			·	
City, State, Zip:	Midland, Texas 79702	2			
Representative: (Camille Reynolds				
Representative T	elephone: 505.393.561	.1			
Telephone:					
Fluid volume rel	eased (bbls): 10		Recover	ed (bbls): 0 bbl	S
			within 24 hrs and sub		thin 15 days.
			thorized releases >500		
Look Spill or D	5-25 bbls: Submit form C-141 it (LSP) Name: Young			iorized releases of :	60-500 mcf Natural Gas)
			18	····	1910 march 20, 92 march 11
	nination: 8" Steel Pipelin		1		
	, BLM, ST, Fee, Other: E	sureau of Land	Management		
LSP Dimensions					
LSP Area:	$\frac{78 \text{ sqft } \text{ft}^2}{78 \text{ sqft } (\text{PP})}$				
Location of Refe					·····
	e and direction from RP				- · · · · · · · · · · · · · · · · · · ·
	35' 27.30"N	· · · · · ·			
Longitude: 103°					
Elevation above n		msl			
Feet from South					
Feet from West S					· · · · · · · · · · · · · · · · · · ·
	$r \frac{1}{4} \frac{1}{4}$: SE ¹ / ₄ of the NE ¹ / ₄		Unit Letter: H		
Location-Section					
Location- Towns					
Location- Range	: R33E				
	dy within 1000 ' radius o				
	dy within 1000 ' radius o				
	wells within 1000' radius				
	wells within 1000' radius				
	er wells within 1000' rad		ne		
<u> </u>	er wells within 1000' rad				
	ply wells within 1000' ra		one		
	ply wells within 1000' ra				
	surface to ground water				
Depth of contam					
A	water $(DG - DC = DtGV)$				
1. Gr	ound Water		ellhead Protectio		3. Distance to Surface Water Body
		If $< 1000^{\circ}$ from	m water source o	r;<200' from	<200 horizontal feet: 20 points
If Depth to GW					ZOO HOHEOHAA TOOL. 20 pointis
If Depth to GW	<50 feet: 20 points 50 to 99 feet: 10 points	private dome	stic water source:		200-100 horizontal feet: 10 points
If Depth to GW · If Depth to GW :		private dome If >1000' fro		r; >200' from	
If Depth to GW : If Depth to GW : If Depth to GW :	50 to 99 feet: 10 points	private dome If >1000' fro private dome	stic water source: m water source, o	r; >200' from 0 points	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points
If Depth to GW : If Depth to GW : If Depth to GW : Ground water So	50 to 99 feet: 10 points >100 feet: 0 points core = unknown	private dome If >1000' fro private dome Wellhead Pro	stic water source: m water source, o stic water source: otection Area Sco	r; >200' from 0 points	200-100 horizontal feet: 10 points
If Depth to GW : If Depth to GW : If Depth to GW : Ground water So	50 to 99 feet: 10 points >100 feet: 0 points core = unknown 3) = unknown; assume a	private dome If >1000' fro private dome Wellhead Pro	stic water source: m water source, o stic water source: otection Area Sco of 10 points	r; >200' from 0 points re= 0	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points Surface Water Score= 0
If Depth to GW : If Depth to GW : If Depth to GW : Ground water So	50 to 99 feet: 10 points >100 feet: 0 points core = unknown 3) = unknown; assume a	private dome If >1000' fro private dome Wellhead Pro	stic water source: m water source, o stic water source: otection Area Sco	r; >200' from 0 points re= 0	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points Surface Water Score= 0
If Depth to GW : If Depth to GW : If Depth to GW : Ground water So Site Rank (1+2+	50 to 99 feet: 10 points >100 feet: 0 points core = unknown 3) = unknown; assume a Total Sin >19	private dome If >1000' fro private dome Wellhead Pro	estic water source: m water source, of estic water source: otection Area Sco of 10 points core and Accepta 10-19	r; >200' from 0 points re= 0	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points Surface Water Score= 0 tions 0-9
If Depth to GW : If Depth to GW : If Depth to GW : <i>Ground water So</i> <i>Site Rank</i> (1+2+ Parameter Benzene ¹	50 to 99 feet: 10 points >100 feet: 0 points core = unknown 3) = unknown; assume a Total Sin >19 10 ppm	private dome If >1000' fro private dome Wellhead Pro	estic water source: om water source; of estic water source: otection Area Sco of 10 points core and Accepta 10-19 10 ppm	r; >200' from 0 points re= 0	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points Surface Water Score= 0 tions 0-9 10 ppm
If Depth to GW : If Depth to GW : If Depth to GW : Ground water So Site Rank (1+2+ Parameter	50 to 99 feet: 10 points >100 feet: 0 points core = unknown 3) = unknown; assume a Total Sin >19	private dome If >1000' fro private dome Wellhead Pro	estic water source: m water source, of estic water source: otection Area Sco of 10 points core and Accepta 10-19	r; >200' from 0 points re= 0	200-100 horizontal feet: 10 points >1000 horizontal feet: 0 points Surface Water Score= 0 tions 0-9

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'Link Lusk 8 Mainline no1,it3'; Scale: 1" = 0.580Mi_933Mt_3,061Ft, 1 Mi = 1.725" , 1 cm = 367Mt

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					Plains A	All Ameri	can Pip	eline	-						
				You	ng Deep	o to Lync	h 8" #2	004-0018	30						
					Excava	tion Deli	neation	Data							
Sample Location	Description	Sampling Interval	SAMPLE ID#	Date	Lithology	VOC Headspace	GRO ³	DRO ⁴	TPH ⁵	BTEX ⁹	Benzene	Toluene	Ethylbenzene	p/m Xylene	o-Xylene
		(FT. BGS ¹)				ppm	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Bottom	Composite	12	SLYD83104BHC	8/31/04	Sand		1290	10800	12090	54.6100	1.4200	13.3000	9.3500	21.2000	9.3400
North Sidewall	Composite	2 to 12	SLYD83104NSW	8/31/04	Sand		11.2	90	101.2	0.1250	0.0250	0.0250	0.0250	0.0250	0.0250
South Sidewall	Composite	2 to 12	SLYD83104SSW	8/31/04	Sand		14	70.4	84.4	0.1250	0.0250	0.0250	0.0250	0.0250	0.0250
East Sidewall	Composite	2 to 12	SLYD83104ESW	8/31/04	Sand		2590	19700	22290	32.8170	0.2070	5.6200	6.4000	14.7000	5.8900
West Sidewall	Composite	2 to 12	SLYD83104WSW	8/31/04	Sand		3070	35600	38670	37.4100	1.1200	8.7800	7.0400	14.4000	6.0700
100 ppm Isobutylene calibration	gas = 101 ppm							⁵ TPH-Tota	l Petroleum	Hydrocarbo	on = GRO+	DRO.			
¹ bgs – below ground surface								⁶ Bolded val	ues are in e	xcess of the	NMOCD gu	uideline thre	eshold for the pa	trameter	
² VOC–Volatile Organic Contam	inants/Constituen	ts						⁷ Italicized v	alues are <	the instrume	ent detection	n limit.			
³ GRO-Gasoline Range Organics	s C ₆ -C ₁₂							⁸ na - not ai	nalyzed						
⁴ DRO-Diesel Range Organics C	12-C35							⁹ BTEX - M	ass sum of l	oenzene, tolu	iene, ethylbo	enzene, and	xylenes		
Reported detection limits are con	nsidered "de minin	nus" values a	and are included in t	he GRO/D	RO summa	tions.									



Plains All American Pipeline Young Deep to Lynch 8" #2004-00180 Total Petroleum Hydrocarbon 8015M Delineation

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Plains All American Pipeline Young Deep to Lynch 8" #2004-00180 BTEX Delineation





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Analytical Report

Prenared for:

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

Project: Young Deep to Lynch Project Number: 2004-00180 Location: None Given

Lab Order Number: 4102009

Report Date: 09/09/04

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476	Project: Young Deep to Lynch Project Number: 2004-00180 Project Manager: Jeff Dann						
	ANALYTICAL REPORT FOR SA	MPLES	·····				
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received			
SLYD83104BHC	4102009-01	Soil	08/31/04 08:30	09/02/04 16:48			
SLYD83104NSW	4102009-02	Soil	08/31/04 08:40	09/02/04 16:48			
SLYD83104SSW	4102009-03	Soil	08/31/04 08:50	09/02/04 16:48			
SLYD83104ESW	4102009-04	Soil	08/31/04 09:00	09/02/04 16:48			
SLYD83104WSW	4102009-05	Soil	08/31/04 09:10	09/02/04 16:48			

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Midland TX, 79706-4476			umber: 200 anager: Jeff				10-	Repor 09/09/04	
		Oı Environı	rganics b mental L	•	XAS				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SLY D83104BHC (4102009-01) Soil									
Benzene	1.42	0.100	mg/kg dry	100	E140710	09/06/04	09/06/04	EPA 8021B	
Toluene	13.3	0.100			*	•	*		
Ethylbenzene	9.35	0.100					•	•	
Xylene (p/m)	21.2	0.100				•		•	
Xylene (o)	9.34	0.100					•		
Surrogate: a,a,a-Trifluorotohuene		214 %	80-1	20	~			*	S-0
Surrogate: 4-Bromofluorobenzene		115%	80-1		~	-	~		
Gasoline Range Organics C6-C12	1290	10.0	mg/kg dry	1	E140801	09/02/04	09/08/04	EPA 8015M	
Diesel Range Organics >C12-C35	10800	10.0	*		*	•		"	
Total Hydrocarbon C6-C35	12100	10.0		R				•	
Surrogate: 1-Chlorooctane		129 %	70-1	30	~	~ ~	"	"	
Surrogate: 1-Chlorooctadecane		370 %	70-1		~	~	"	*	S-0-
SLY D83104INSW (4102009-02) Sail									
Benzene	ND	0.0250	mg/kg dry	25	E140710	09/06/04	09/07/04	EPA 8021B	
Toluene	ND	0.0250		•		•		•	
Ethylbenzene	ND	0.0250				•		•	
Xyiene (p/m)	ND	0.0250		•	н	•			
Xylene (o)	ND	0.0250		•	*	•		•	
Surrogate: a,a,a-Trifluorotohuene		81.1 %	80-1	20	"	#	"		
Surrogate: 4-Bromofluorobenzene		82.2 %	80-1		"		"	*	
Gasoline Range Organics C6-C12	11.2	10.0	mg/kg dry	1	E140811	09/02/04	09/09/04	EPA 8015M	
Diesel Range Organics >C12-C35	90.0	10.0					•	н	
Total Hydrocarbon C6-C35	101	10.0	u	n					
Surrogate: 1-Chlorooctane		124 %		30	"	"		"	
Surrogate: 1-Chlorooctadecane		128 %	70-1		~	"	"	*	
SLY D83104SSW (4102009-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	E140710	09/06/04	09/07/04	EPA 8021B	
Toluene			ungrag uny ⊮	•	E-F-0710	*	*	LIN 0021D	
Ethylbenzene	ND ND	0.0250	B.				и		
Xylene (p/m)	ND ND	0.0250	в		μ		u		
Xylene (0)	ND	0.0250			μ				
Surrogate: a,a,a-Trifluorotohuene	1117	82.2 %	80-1	20	"	···		"	
Surrogate: a,a,a- i rijauoroioituene Surrogate: 4-Bromofluorobenzene		82.2 % 83.9 %	80-1 80-1		,,				
Gasoline Range Organics C6-C12	14.0					00/02/24		EPA 8015M	
Diesel Range Organics >C12-C35	70.4	10.0 10.0	ապտոցաց "	1	E140811	09/02/04	09/09/04	LFA 00121VI	
TYPE INTER OF SUIT 2 SO 17-033	70.4 84.4	10.0		-	-	-	-		

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

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Plains All American EH & S		I	Project: Yo	ung Deep to	o Lynch			Fax: (432) 687-4914		
1301 S. County Road 1150			umber: 200					Report	ed:	
Midland TX, 79706-4476		Project M	anager: Jef	fDann				09/09/04	19:05	
		O	ganics b	y GC						
		Environ	mental L	ab of Te	exas					
	D	Reporting								
Analyte	Result	Limit	Units	Dilution	B atch	Prepared	Analyzed	Method	Note	
SLYD83104SSW (4I02009-03) Soil										
Surrogate: 1-Chlorooctane		120 %	70	130	E140811	09/02/04	09/09/04	BPA 8015M		
Surrogate: 1-Chlorooctadecane		128 %	70	130	~	"	"	"		
SLY D83104ESW (4102009-04) Soil										
Benzene	0.207	0.100	mg/kg dry	100	E140710	09/06/04	09/07/04	EPA 8021B		
Toluene	5.62	0.100		•	•	•	•	•		
Ethylbenzene	6.40	0.100			•	•	•	•		
Xylene (p/m)	14.7	0.100		п	•					
Xylene (o)	5.89	0.100	9	"		•				
Surrogate: a,a,a-Trifhuorotohuene		121 %	80-	120	~	"	"	"	S-	
Surrogate: 4-Bromofluorobenzene		99.8 %	80-	120	~	*	"	"		
Gasoline Range Organics C6-C12	2590	50.0	mg/kg dry	5	E [4080]	09/02/04	09/08/04	EPA 8015M		
Diesel Range Organics >C12-C35	19700	50.0		•	•			•		
Total Hydrocarbon C6-C35	22300	50.0		*	•	•	•	•		
Surrogate: 1-Chlorooctane		35.8 %	70-	130	~	#	"	"	5-	
Surrogate: 1-Chlorooctadecane		31.2 %	70-	130	~	~	"	"	S -	
SLYD83104WSW (4102009-05) Soil										
Benzene	1.12	0.200	mg/kg dry	200	E140710	09/06/04	09/07/04	EPA 8021B		
Toluene	8.78	0.200	н	٠	•	•	•			
Ethylbenzene	7.04	0.200			•	•	•	•		
Xylene (p/m)	14.4	0.200	н	н	•	•	•	N		
Xylene (0)	6.0 7	0.200	u	н	*	•	•	н		
Surrogate: a,a,o-Trifluorotoluene		135%	80-	120	"	"	"	"	S-	
Surrogate: 4-Bromofluorobenzene		95.8%	80-	120	"	"	"	"		
Gasoline Range Organics C6-C12	3070	50.0	mg/kg dry	5	E140801	09/02/04	09/08/04	EPA 8015M		
Diesel Range Organics >C12-C35	35600	50.0	н		•		•	•		
Total Hydrocarbon C6-C35	38700	50.0	R	H	•			я		
Surrogate: 1-Chlorooctane		44.0 %	70-	130	"	"	"	~	5-	
Surrogate: 1-Chlorooctadecane		30.0 %	70-	120	"	"	"	"	5-	

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Plains All American EH & S	······································									
1301 S. County Road 1150		Project Nu	mber: 20	04-00180				Repor	ted :	
Midland TX, 79706-4476		Project Ma	nager: Jei	fDann				09/09/04	19:05	
	General Chen	nistry Para	meters	by EPA /	Standa	rd Method	s			
		Environn	nental I	ab of Te	xas 🛛					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzet	Method	Notes	
SLYD83104BHC (4102009-01) Soil										
% Solids	91.0		%	1	E140711	09/03/04	09/03/04	% calculation		
SLYD83104NSW (4102009-02) Soil										
% Solids	90.0		%	1	E140711	09/03/04	09/03/04	% calculation		
SLYD83104SSW (4102009-03) Sail										
% Solids	89.0		%	1	EI40711	09/03/04	09/03/04	% calculation		
SLYD83104ESW (4102009-04) Soil										
% Solids	96.0		%	1	E140711	09/03/04	09/03/04	% calculation		
SLY D83104WSW (4102009-05) Soil										
% Solids	97.0		%	1	E140711	09/03/04	09/03/04	% calculation		

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Plains All American EH & S Project: Young Deep to Lynch 1301 S. County Road 1150 Project Number: 2004-00180 Midland TX, 79706-4476 Project Manager: Jeff Dann									Fax: (432) 687-4914 Reported: 09/09/04 19:05		
	O	rganics by Environn	-	•							
		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch E140710 - EPA 5030C (GC)											
Blank (EI40710-BLK1)				Prepared 8	Analyzed	09/06/04					
Benzene	ND	0.0250	mg/kg wet				·				
Toluene	ND	0.0250									
Ethylbenzene	ND	0.0250	•								
Xylene (p/m)	ND	0.0250	•								
Xytene (0)	ND	0.0250									
Surrogate: a.a.a-Irifluorotoluene	81.9		ug/kg	100		81.9	80-120				
Surrogate: 4-Bromofluorobenzene	80.8		"	100		80.8	80-120				
LCS (E140710-BS1)				Prepared 8	د Analyzed	09/06/04					
Benzene	111		ug/kg	100		111	80-120				
Toluene	105		•	100		105	80-120				
Ethylbenzene	103		•	100		103	80-120				
Xylene (p/m)	224		•	200		112	80-120				
Xylene (o)	112		*	100		112	80-120				
Surrogate: a,a, a-Irifivorotoluene	86.3		"	100		86.3	80-120			_	
Surrogate: 4-Bromostuorobenzene	91.5		#	100		91.5	80-120				
Calibration Check (EI40710-CCV1)				Prepared: (09/06/04 A	nalvzed: 05	9/07/04				
Benzene	106		ug/kg	100		106	80-120				
Toluene	98.4		,	100		98.4	80-120				
Ethylbenzene	93.0		4	100		93.0	80-120				
- Xylene (p/m)	203		н	200		102	80-120				
Xylene (o)	102		•	100		102	80-120				
Surrogate: a.a.a-Iristuorotoluene	99.6			100		99.6	80-120				
Surrogate: 4-Bromofluorobenzene	84.4		*	100		84.4	80-120				
Matrix Spike (EI40710-MS1)	Source: 4103007-05 Prepared: 09/06/04 Analyzed: 09/07/04										
Benzene	105		ug/kg	100	ND	105	80-120				
Toluene	99 .8		•	100	ND	99.8	80-120				
Ethylbenzene	97.9		•	100	ND	97.9	80-120				
Xyiene (p/m)	215		•	200	ND	108	80-120				
Xylane (0)	108			100	ND	108	80-120				
Surrogate: a,a,a-Irifluorotoluene	89.7		"	100		89.7	80-120				
Surrogate: 4-Bromofluorobenzene	90.3		"	100		90.3	80-120				

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Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Project N	Project: You umber 200 mager: Jeff	4-00180	Lynch				Fax: (432) Repo 09/09/04	rted:
		-	r GC - Qi	-						
		Environn	nental La	ab of Tex	CAS	-				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E140710 - EPA 5030C (GC)										
Matrix Spike Dup (E140710-MSD1)	Sourc	e: 4103007-	-05	Prepared: 0	9/06/04 A	nalyzed: 09	/07/04			
Benzene	108		ug/kg	100	ND	108	80-120	2.82	20	
Toluene	102		•	100	ND	102	80-120	2.18	20	
Ethylbenzene	99.4			100	ND	99.4	80-120	1.52	20	
Xylene (p/m)	218		•	200	ND	109	80-120	0.922	20	
Xyiene (o)	109			100	ND	109	80-120	0.922	20	
Surrogate: a,a,a-Irifluorotoluene	88.8		N	100		88.8	80-120			
Surrogate: 4-Bromofluorobenzene	90.1		~	100		90.1	80-120			
Blank (EI40801-RLK1)		10.0		Prepared: 0	18/30/04 A	nalyzed: 09	/07/04			
Gasoline Range Organics C6-C12	ND	10.0 10.0	mg/kg wet							
	ND		-							
Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND	10.0	n							
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooc tane	ND 61.4		ng/kg	50.0		123	70-130			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooc tane	ND		mg/kg "	50.0 50.0		123 129	70-130 70-130			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane	ND 61.4				08/30/04 A	129	70-130			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane LCS (EI40801-BS1)	ND 61.4			50.0	08/30/04 A	129	70-130			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane LCS (EI40801-BS1) Gasoline Range Organics C6-C12	ND 61.4 64.5	10.0	"	50.0 Prepared: (18/30/04 A	<i>129</i> nalyzed: 05	70-130 0107/04			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane LCS (EI40801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35	ND 61.4 64.5 569	10.0	"	50.0 Prepared: 0 500)8/30/04 A	<i>129</i> nalyzed: 09 114	70-130 0/07/04 75-125			
	ND 61.4 64.5 569 590	10.0 10.0 10.0 10.0	" mg/kg wet	50.0 Prepared: (500 500)8/30/04 A	729 nalyzed: 09 114 118	70-130 2/07/04 75-125 75-125			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane LCS (EI40801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35	ND 61.4 64.5 569 590 1160	10.0 10.0 10.0 10.0	" mg/kg wet	<i>50.0</i> Prepared: 0 500 500 1000)8/30/04 A	729 nalyzed: 09 114 118 116	70-130 2007/04 75-125 75-125 75-125			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctadecane LCS (EI40801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane	ND 61.4 64.5 569 590 1160 57.5	10.0 10.0 10.0 10.0	" mg/kg wet " mg/kg	50.0 Prepared: 0 500 500 1000 50.0 50.0	08/30/04 A	729 nalyzed: 09 114 118 116 775 728	70-130 W07/04 75-125 75-125 75-125 70-130 70-130			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 1-Chlorooctane LCS (E140801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS Dup (E140801-BSD1)	ND 61.4 64.5 569 590 1160 57.5	10.0 10.0 10.0 10.0	" mg/kg wet " mg/kg	50.0 Prepared: 0 500 500 1000 50.0 50.0		729 nalyzed: 09 114 118 116 775 728	70-130 W07/04 75-125 75-125 75-125 70-130 70-130	1.95	20	
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (E140801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 1-Chlorooctadecane LCS Dup (E140801-BSD1) Gasoline Range Organics C6-C12	ND 61.4 64.5 569 590 1160 57.5 63.9	10.0	" mg/kg wet " " <i>mg/kg</i> "	50.0 Prepared: 0 500 500 1000 50.0 50.0 9 Prepared: 0		729 nalyzed: 05 114 118 116 775 728 nalyzed: 05	70-130 0/07/04 75-125 75-125 75-125 70-130 70-130 0/07/04	1.95	20 20 20	
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 1-Chlorooctadecane LCS (E140801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane LCS Dup (E140801-BSD1) Gasoline Range Organics >C12-C35	ND 61.4 64.5 569 590 1160 37.5 63.9 558	10.0 10.0 10.0 10.0 10.0	" mg/kg wet " " <i>mg/kg</i> wet	50.0 Prepared: (500 500 1000 50.0 50.0 Prepared: (500		729 nalyzed: 05 114 118 116 775 728 nalyzed: 05 112	70-130 0/07/04 75-125 75-125 75-125 70-130 70-130 0/07/04 75-125			
Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctane LCS (E140801-BS1) Gasoline Range Organics C6-C12 Diesel Range Organics >C12-C35 Total Hydrocarbon C6-C35 Surrogate: 7-Chlorooctane Surrogate: 7-Chlorooctane	ND 61.4 64.5 569 590 1160 57.5 63.9 558 580	10.0 10.0 10.0 10.0 10.0 10.0	" mg/kg wet " " <i>mg/kg</i> wet "	50.0 Prepared: 0 500 500 1000 50.0 50.0 Prepared: 0 500 500		729 nalyzed: 05 114 118 116 775 728 nalyzed: 05 112 116	70-130 W07/04 75-125 75-125 75-125 70-130 70-130 W07/04 75-125 75-125	1.71	20	

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Plains All American EH & S			roject: You	•••	Lynch				Fax: (432)	687-4914
1301 S. County Road 1150			amber: 200						Repo	rted:
Midland TX, 79706-4476		Project Ma	mager: Jeff	Dann					09/09/04	4 19:05
	0	rganics by	GC - Q	uality Co	ontrol					
		Environ	nental La	ab of Tes	KAS					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E140901 - Solvent Extraction (GC)										
Calibration Check (EI40801-CCV1)				Prepared: 0	08/30/04 A	nalyzed: 09	/07/04			
Gasoline Range Organics C6-C12	414		mg/kg	500		82.8	80-120			
Diesel Range Organics >C12-C35	521		•	500		104	80-120			
Total Hydrocarbon C6-C35	9 35		•	1000		93.5	80-120			
Surrogate: 1-Chlorooctane	35.6		"	50.0		71.2	70-130			
Surrogate: 1-Chlorooctadecane	35.5		•	50.0		71.0	70-130			
Batch EI40811 - Solvent Extraction (GC)										
Blank (E140811-BLK1)				Prepared: 0	09/02/04 A	nalyzed: 09	/08/04			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	•							
Total Hydrocarbon C6-C35	ND	10.0	•							
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.2	70-130			
Surrogate: 1-Chlorooctadecane	44.8		"	50.0		89.6	70-130			
LCS (E140811-BS1)				Prepared: (09/02/04 A	nalyzed: 09	0/08/04			
Gasoline Range Organics C6-C12	440	10.0	mg/kg wet	500		88.0	75-125			-
Diesel Range Organics >C12-C35	556	10.0	•	500		111	75-125			
Total Hydrocarbon C6-C35	996	1 0 .0	•	1000		99.6	75-125			
Surrogate: 1-Chlorooctane	45.2		mg/kg	50.0		90.4	70-130			
Surrogate: I-Chlorooctadecane	50.1		~	50.0		100	70-130			
Calibration Check (EI40811-CCVI)				Prepared: (09/02/04 A	nalyzed: 09	0/08/04			
Gasoline Range Organics C6-C12	422		mg/kg	500		84.4	80-120			
	538			500		108	80-120			
Diesel Range Organics >C12-C35				1000		96.0	80-120			
Diesel Range Organics >C 12-C35 Total Hydrocarbon C6-C35	960			1000			••••			
	960 53.2		"	50.0		106	70-130			

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Plains All American EH & S	Project:	Young Deep to Lynch	Fax: (432) 687-4914					
1301 S. County Road 1150	Project Number:	2004-00180	Reported:					
Midland TX, 79706-4476	Project Manager:	Jeff Dann	09/09/04 19:05					
Organics by GC - Quality Control								

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI40811 - Solvent Extraction (GC)									_	

Matrix Spike (EI40811-MS1)	Sourc	e: 4102001-	07	Prepared: 0	9/02/04 A	nalyzed: 0	9/08/04			
Gasoline Range Organics C6-C12	518	10.0	mg/kg dry	549	ND	94.4	75-125			
Diesel Range Organics >C12-C35	641	10.0	•	549	ND	117	75-125			
Total Hydrocarbon C6-C35	1160	10.0	•	1100	ND	105	75-125			
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	64.5		~	50.0		129	70-130			
Matrix Spike Dup (E140811-MSD1)	Sourc	e: 4102001-	07	Prepared: 0	9/02/04 A	nalyzed: 0:	9/08/04			
Gasoline Range Organics C6-C12	517	10.0	mg/kg áry	549	ND	94.2	75-125	0.193	20	
Diesel Range Organics >C12-C35	611	10.0	•	549	ND	111	75-125	4.79	20	
Total Hydrocarbon C6-C35	1130	10.0	•	1100	ND	103	75-125	2.62	20	
Surrogate: 1-Chlorooctane	58.6		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	64.8		~	50.0		130	70-130			

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Mains All American EH & S Project: Young Deep to Lynch 301 S. County Road 1150 Project Number: 2004-00180 Vidland TX, 79706-4476 Project Manager: Jeff Dann									Fax: (432) 687-4914 Reported: 09/09/04 19:05		
General	Chemistry Para	meters by Environm				ls - Qua	lity Cont	trol			
		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Levei	Realit	%REC	Limits	RPD	Limit	Notes	
Batch EI40711 - General Preparation	(Prep)										
Blank (E140711-BLK1)				Prepared &	z Analyzed:	09/02/04					
% Salids	100		%								
Duplicate (EI40711-DUP1)	Sour	rce: 4H310094	01	Prepared &	z Analyzed:	09/02/04					
6 Solids	93.0		%		94.0			1.07	20		

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Plzins Al	l American EH & S	Project	Young Deep to Lynch	Fax. (432) 687-4914
1301 S. C	Sounty Road 1150	Project Number:	2004-00180	Reported:
Midland	TX, 79706-4476	Project Manager.	Jeff Dann	09/09/04 19.05
		Notes and De	finitions	
S-06	The recovery of this surrogate is ou matrix interference's.	utsi de control limits due to sample dil	lution required from high analyte concer	tration and/or
S-04	The surrogate recovery for this sam			
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above	the reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weigh	t baas		
rpd	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland Kulut Date:

9/9/04

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Me Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Biezugbe, Lab Tech.

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State of New Mexico **Energy Minerals and Natural Resources**

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

Form C-141 Revised March 17, 1999

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

Lease No.

Release Notification and Corrective Action

OPERATOR	🛛 Initial Report 🔲 Final Report
Name of Company	Contact
Plains All American	Camille Reynolds
Address	Telephone No.
PO Box 1660 5805 East Highway 80 Midland, Texas 79702	505.393.5611
Facility Name	Facility Type
Young Deep to Lynch 8" #2004-00180	8" Steel Pipeline

Surface Owner: Bureau of Land Management

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County:	Lea			
Н	11	T20S										
			R33E									

Latitude: 32° 35' 27.30"N

Mineral Owner

Longitude: 103° 37' 41.48"W

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Sweet Crude Oil	10 barrels	0 bbls barrels
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
8" Steel Pipeline	8-5-04@7:30AM	8-5-04@8:00AM
Was Immediate Notice Given?	If YES, To Whom?	
🛛 Yes 🗌 No 🔲 Not Required	Larry Johnson	
By Whom?	Date and Hour	
	8-05-04@2:15PM	
Was a Watercourse Reached? 🔲 Yes 🛛 No	If YES, Volume Impacting the Watercourse.	
	NA	
If a Watercourse was Impacted, Describe Fully.*		
NA		
Describe Cause of Problem and Remedial Action Taken.*8" Steel Transmission Pipeline; Leak was due to internal corrosion; Temporary repair		
clamp installed; Operating Pressure = 100-120 psi; API Gravity = 38-42 degrees; H ₂ S = <10 ppm; Daily volume = ~2,600 bbls.		
Describe Area Affected and Cleanup Action Taken.* Usibly contaminated soil was excavated and stored on plastic to await analytical results. The		
soil will be blended to below the NMOCD remedial goals on site or taken to the Plains Lea Station Landfarm for remediation. Remedial Goals:		
TPH 8015m = 5000 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 ground water, surface water, human		
health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any		
other federal, state, or local laws and/or regulations.		
Signature:	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds (e-mail: CJReynolds@paalp.com)	Approved by District Supervisor:	•
Title District Environmental Summing		
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: August 16, 2004 Phone: 505 393 5611	Conditions of Approval	Attached

* Attach Additional Sheets If Necessary