Basin Environmental Service Technologies, LLC

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

Effective Solutions

APPROVED (12-20-05
VERBAL BY PC 12.21.05

PRELIMINARY SITE INVESTIGATION REPORT
and
REMEDIATION/CLOSURE PLAN

PLAINS MARKETING, L.P.
Lynch Station Lusk A & B 8" Loop Line
Lea County, New Mexico
Plains EMS # 2004-00114
UNIT B (NW/NE), Section 34, Township 20 South, Range 34 East
Latitude 32°, 31', 59.8" North, Longitude 103°, 32', 48.6" West

Prepared For:

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

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

12 December 2005

Ken Dutton
Basin Environmental Service Technologies, LLC

Table of Contents

Introduction	1
Summary of Field Activities	1
New Mexico Oil Conservation Division (NMOCD) Soil Classification	2
Distribution of Hydrocarbons in the Unsaturated Zone	2
Recommendations for Remediation	3
Limitations	3
Distribution	5

Tables

Table 1:	Soil Chemistry Table

Figures

Figure 1:	Site Location Map
Figure 2:	Delineation Trenches
Figure 3:	Excavation Limits & Sampling Locations
Figure 4:	Digital Photos of Site

Appendices

Appendix A:	New Mexico Office of the State Engineer Water Well Database Report
Appendix B:	Environmental Laboratory of Texas Analytical Results
Appendix C:	NMOCD C-141

INTRODUCTION

Environmental Plus, Inc., (EPI), responded to a crude oil pipeline release for Plains Marketing, L.P. (Plains), located on the Lynch Station Lusk A & B 8" Pipeline, located in the Lynch Pump Station on 01 April 2004. The Lynch Station Lusk A & B 8" Pipeline release was clamped and excavation of the impacted soil was initiated and impacted soil was stockpiled on a 6-mil poly-liner. Basin Environmental Service Technologies, LLC (Basin), will perform subsequent remediation of the site at the request of Plains.

This site is located in Unit B (NW/NE), Section 34, Township 20 South, Range 34 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The latitude is 32°, 31', 59.8" North, and longitude is 103°, 32', 48.6" West. The site is characterized as a large operational pipeline pumping station containing various pieces of crude oil pumping equipment, numerous pipelines and high capacity steel tanks. The visually stained area included the release point and covered an area approximately 140 feet long by 85 feet wide. It is estimated 175 barrels of crude oil were released from the Lynch Station Lusk A & B 8" Pipeline and 125 barrels were recovered.

Plains Pipeline operations personnel marked their respective lines inside the pumping station before excavation activities commenced.

Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1 was verbally notified of the release on 01 April 2004. The landowner, Mr. Danny Berry was verbally notified of the release on 01 April 2004.

SUMMARY OF FIELD ACTIVITIES

Approximately 512 cubic yards of impacted soil was transported to Plains Lea Station Land Farm due to the excavation activities conducted by EPI. The remaining excavated soil, which was approximately 100 cubic yards, was stockpiled on-site by EPI adjacent to the excavation.

On 14 April 2005, Basin mobilized to Lynch Station Lusk A & B 8" Pipeline crude oil release site to delineate the horizontal and vertical extent of crude oil release utilizing delineation trenches at the release point and throughout the visually stained flow path area. The visually stained area was approximately 140 feet long by 85 feet wide and extended to approximately 3 feet below ground surface (bgs) at the release point.

Lynch Station is a large high volume pumping station containing numerous large diameter gathering pipelines and high capacity steel tanks. Due to the safety concerns of the numerous pipelines entering Lynch Station, mechanical and manual excavation of the visually stained area was conducted. The five delineation trenches were installed at depths ranging from 1 foot bgs to 6 feet bgs (see Site Map, Figure

2). Photoionization Detector (PID) readings indicate elevated concentrations of Volatile Organic Compounds (VOC) remain in place at the release point.

On 12 May 2005, Basin continued excavating the visually stained crude oil impacted release site and flow path based on the previous delineation activities. The release point was mechanically and manually excavated to approximately 10 feet bgs. Further excavation of the release point area was suspended due to safety concerns of the numerous pipelines encountered. The remaining crude oil impacted flow path area was excavated to a depth ranging from 2 feet bgs to 3 feet bgs. Approximately 500 cubic yards of impacted soil was excavated and stockpiled on-site as a result of this excavation activity. PID readings indicate elevated concentrations of VOC's remain in place at the release point and header floor.

On 05 June 2005, confirmation soil samples were collected from the excavated area (see Site Map, Figure 3). Each sample was screened with a PID, which was calibrated on 05 June 2005. The selected soil samples were analyzed for concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO).

New Mexico Oil Conservation Division (NMOCD) Soil Classification

A search of the New Mexico State Engineers database revealed no water depth information for that section. However, Section 24 in the same Township and Range contains groundwater information revealing an average depth to groundwater of 270 feet bgs. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of 0–9, which sets the remediation levels at:

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

Distribution of Hydrocarbons in the Unsaturated Zone

The release point and flow path areas have been excavated to approximately 140 feet long by 85 feet wide and to a depth of approximately 3 to 10 feet bgs with evidence of crude oil impact still existing at the release point. Continued mechanical and manual excavation was suspended due to safety concerns. Analytical results and PID readings indicate elevated concentrations of VOC's remain in place. The release point and header floor confirmation soil samples were collected at a depth of approximately 10 feet bgs. Analytical results indicated that detectable BTEX concentrations were below NMOCD regulatory standards on both soil samples. Analytical results indicated that detectable TPH concentrations exceeded NMOCD

regulatory standards on the release point and header floor soil samples at 9,730 mg/kg and 12,600 mg/kg, respectively.

Analytical results indicated that detectable BTEX concentrations were below NMOCD regulatory standards on the west header floor, west header floor northwest sidewall and the east header floor. Analytical results indicated BTEX concentrations on the remaining confirmation soil samples were not detected above the laboratory method detection limits. Analytical results indicated that detectable TPH concentrations were below NMOCD regulatory standards on the west header north sidewall, west header west sidewall, east header south sidewall and east header floor soil samples. Analytical results indicated that TPH concentrations were not detected above the laboratory method detection limits on the remaining confirmation soil samples. On Tuesday, 01 November 2005, data presented to Larry Johnson, NMOCD, Hobbs District 1, by Plains and Basin representatives, pertaining to past, current and projected future remedial actions at Lynch Station Site was agreed upon due to Lynch Station being an active site. Approximately 512 cubic yards of impacted soil was excavated and transported to Plains Lea Station by EPI. Approximately 500 cubic yards of impacted soil was excavated by Basin and stockpiled on a 6-mil poly-liner due to the excavation activities.

The visually stained area was mechanically and manually excavated to approximately 140 feet long and 85 feet wide ranging in depth from 3 to 10 feet bgs. Analytical results from the nine (9) confirmation soil samples indicate the sidewalls and floor of the excavation are below NMOCD regulatory standards for concentrations of BTEX and TPH. Analytical results from the two (2) confirmation soils samples at the release point and header floor are above NMOCD regulatory standards for concentrations of TPH and below NMOCD regulatory standards for concentrations of BTEX. Laboratory data sheets and chain-of-custody forms are attached as Appendix B.

RECOMMENDATIONS FOR DELINEATION/REMEDIATION

Approximately 500 cubic yards of impacted soil has been excavated and stockpiled on-site resulting from the emergency response and excavation activities. Based on the results of the soil delineation investigation and excavation activities, which indicate the impacted soils are limited in extent and Lynch Station being an operational location, Plains requests approval from the NMOCD to install a 2 foot impermeable clay barrier at the release point and header floor area. The impermeable clay barrier will be backfilled from depth to approximately 8 feet bgs and 8 feet of caliche backfilled on top of the clay barrier to the surface. The clay barrier will mitigate vertical migration of contaminates and allow natural attenuation of the limited impacted soils. Analytical results indicate that the remainder of the excavation is below NMOCD regulatory standards. Caliche backfill will be utilized in the excavation areas that exhibited BTEX and TPH concentrations below NMOCD regulatory standards. The stockpiled material will be transported to the Lazy Ace Landfarm and clean caliche will be transported to the site and utilized as backfill

material. Upon cessation of operational activities at Lynch Pump Station, Plains will remediate the area to NMOCD regulatory standards as required.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Preliminary Investigation Report and Work Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and Plains Marketing, L.P.

12.20.05

- LEAVE AREA UNDER LINES (12K) LIMIT (5K) WILL REMOVE WHEN LINES ARE INACTIVE.
- CLOSED AS A RISK

DISTRIBUTION

Copy 1:
Jeff Dann
Plains All American
333 Clay Street
Suite 1600
Houston, Texas 77002
jpdann@paalp.com

Copy 2:
Camille Reynolds
Plains All American
3112 West Highway 82
Lovington, New Mexico 88260
cjreynolds@paalp.com

Copy 3:
Mr. Larry Johnson
New Mexico Oil Conservation Division
1625 N. French Dr.
Hobbs, New Mexico 88240
Larry.Johnson@state.nm.us

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

Copy 3

TABLE 1

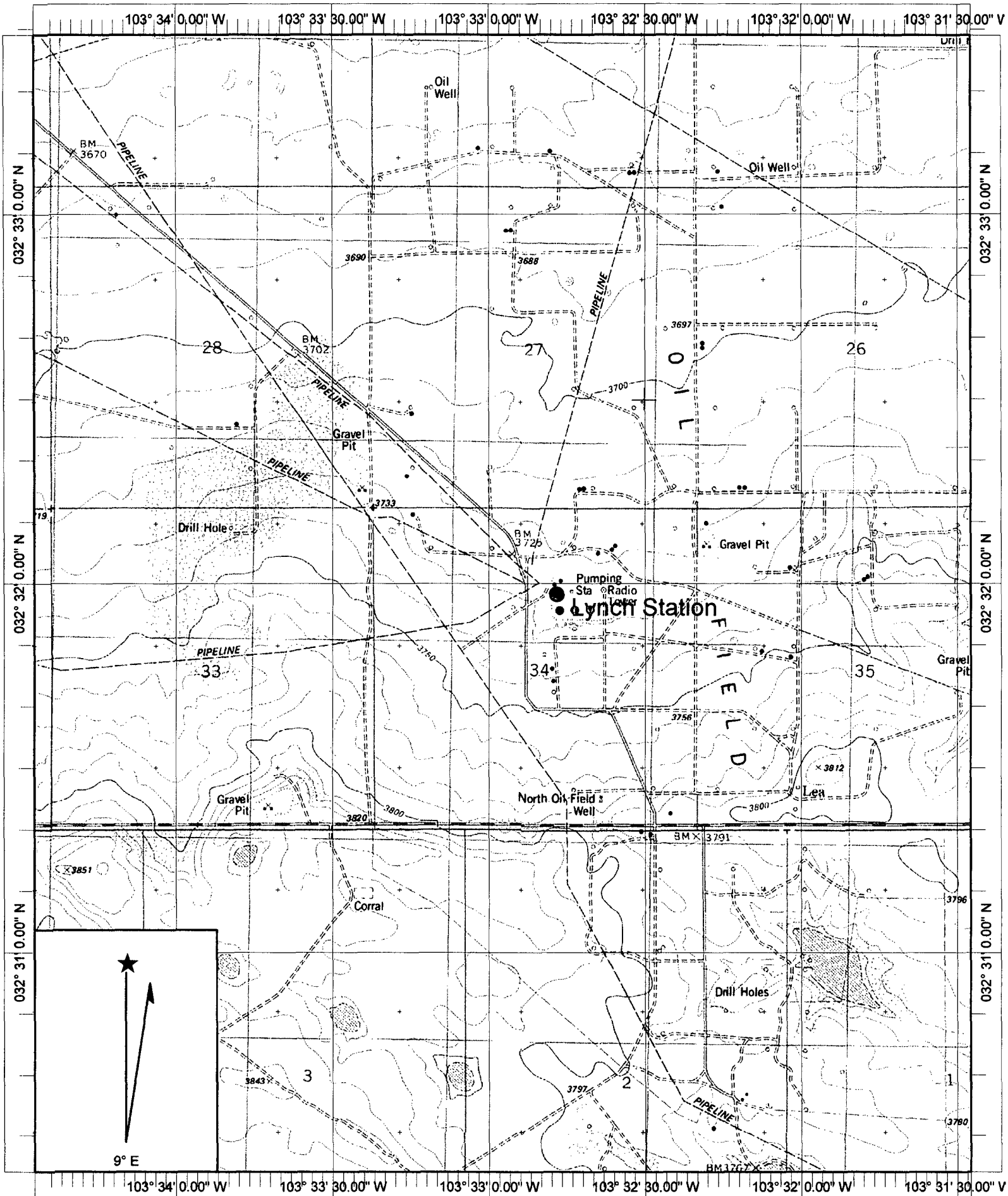
SOIL CHEMISTRY, EXCAVATION

PLAINS MARKETING L.P.
LYNCH STATION LUSK A & B 8" LOOPLINE
LEA COUNTY, NEW MEXICO
EMS: 2004-00114

SAMPLE LOCATION	SAMPLE DEPTH (Below Normal Surface Grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL TPH
			BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENE	GRO	DRO	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
RP	10' bgs	06/03/05	0.049	0.238	0.220	0.340	0.229	1490	8240	9730
HDR FLR	10' bgs	06/03/05	0.201	7.59	3.35	15.1	6.13	2070	10550	12600
W-HDR-FLR	3' bgs	06/03/05	<0.025	<0.025	<0.025	0.085	0.046	<10.0	<10.0	<10.0
W-HDR-NW/SW	1' bgs	06/03/05	<0.025	<0.025	<0.025	0.027	<0.025	<10.0	<10.0	<10.0
W-HDR-N/SW	1' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	21.3	21.3
W-HDR-S/SW	1' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
W-EXCV-FLR	2' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
W-HDR-W/SW	1' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	42.3	42.3
E-HDR-E/SW	1' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
E-HDR-N/SW	2' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
E-HDR-S/SW	2' bgs	06/03/05	<0.025	<0.025	<0.025	<0.025	<0.025	34.3	323	357
E-HDR-FLR	4' bgs	06/03/05	<0.025	0.042	0.071	0.156	0.035	21.4	481	502
Stock Pile		05/12/05	0.058	0.435	0.787	1.56	0.647	477	2920	3400
NMOCD CRITERIA			**10**	**TOTAL BTEX 50**						**5000**

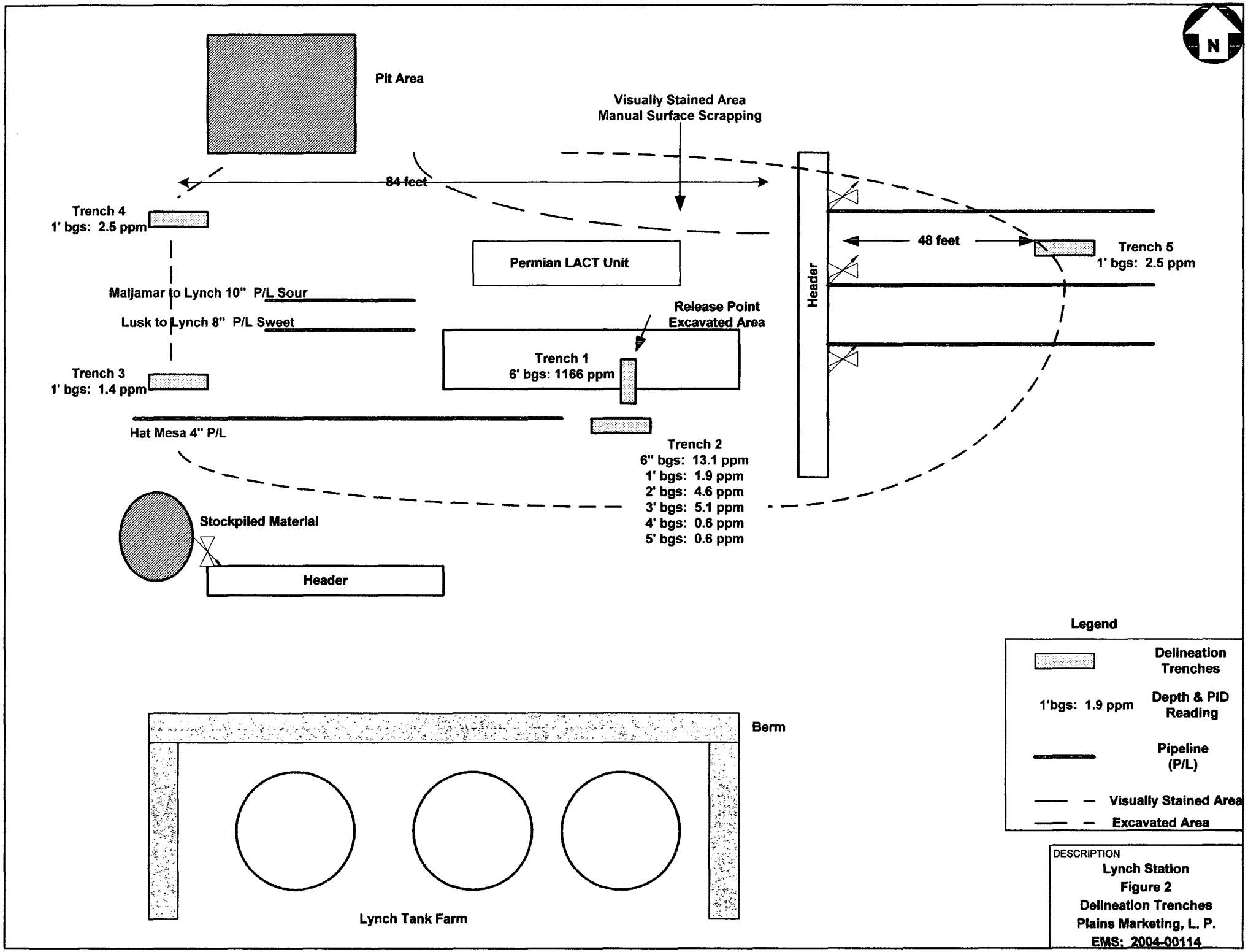
SAMPLE LOCATION

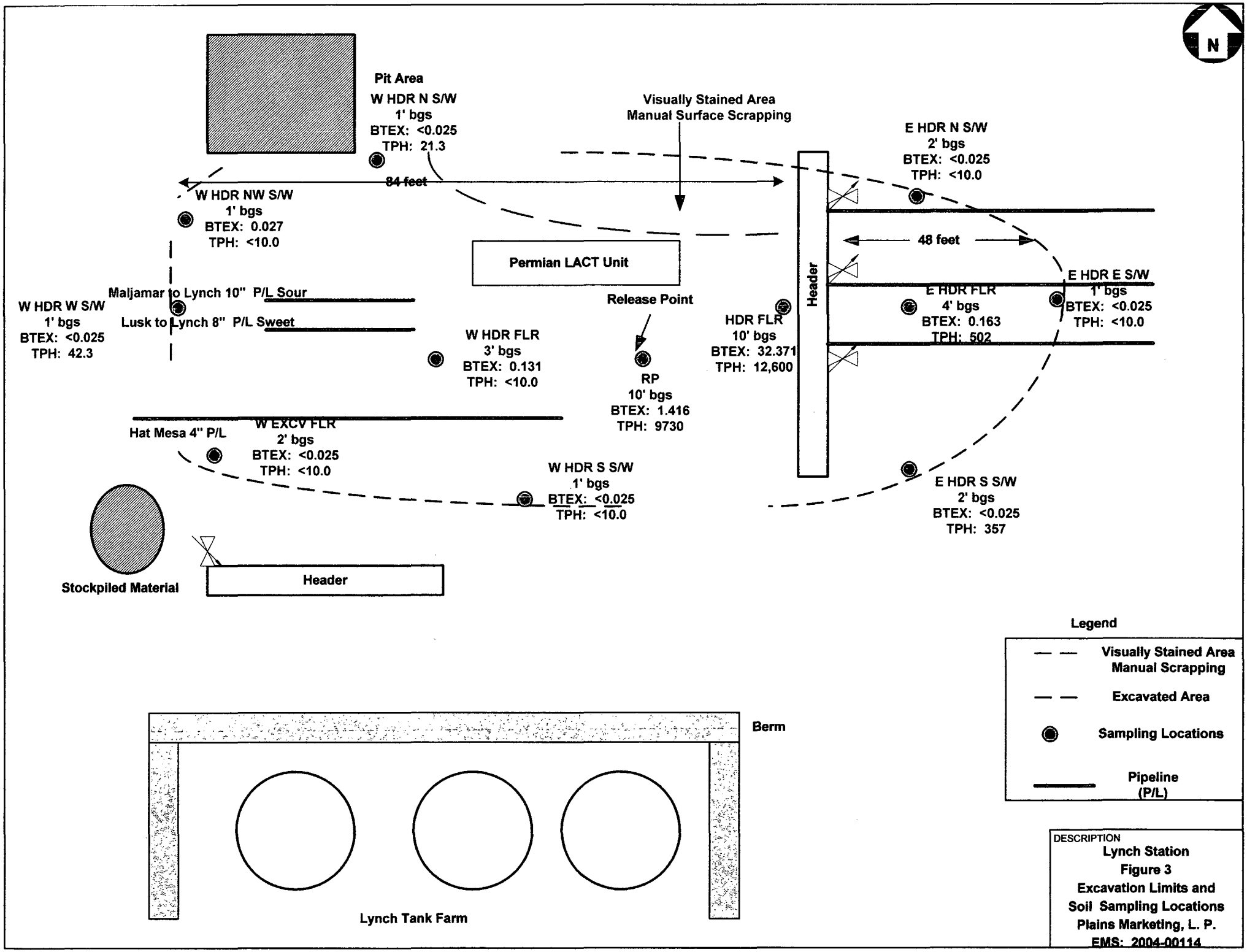
RP: Release Point
HDR FLR: Header Floor
W-HDR-FLR: West-Header-Floor
W-HDR-NW/SW: West-Header-Northwest/Sidewall
W-HDR-N/SW West-Header-North/Sidewall
W-HDR-S/SW West-Header-South/Sidewall
W-EXCV-FLR West-Excation-Floor
W-HDR-W/SW West-Header-West/Sidewall
E-HDR-E/SW East-Header-East/Sidewall
E-HDR-N/SW East-Header-North/Sidewall
E-HDR-S/SW East-Header-South/Sidewall
E-HDR-FLR East-Header-Floor



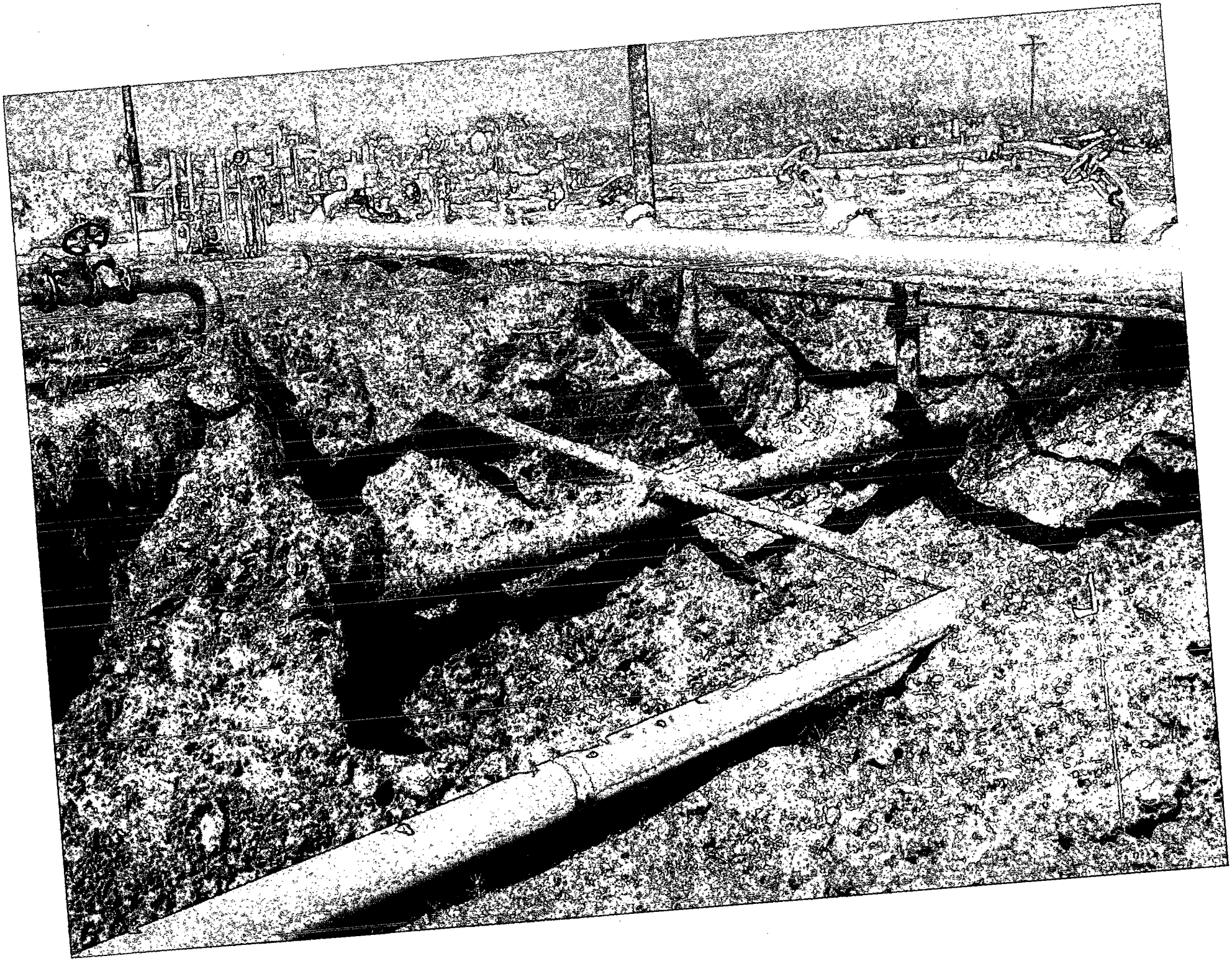
Name: LEA
Date: 12/17/2005
Scale: 1 inch equals 2000 feet

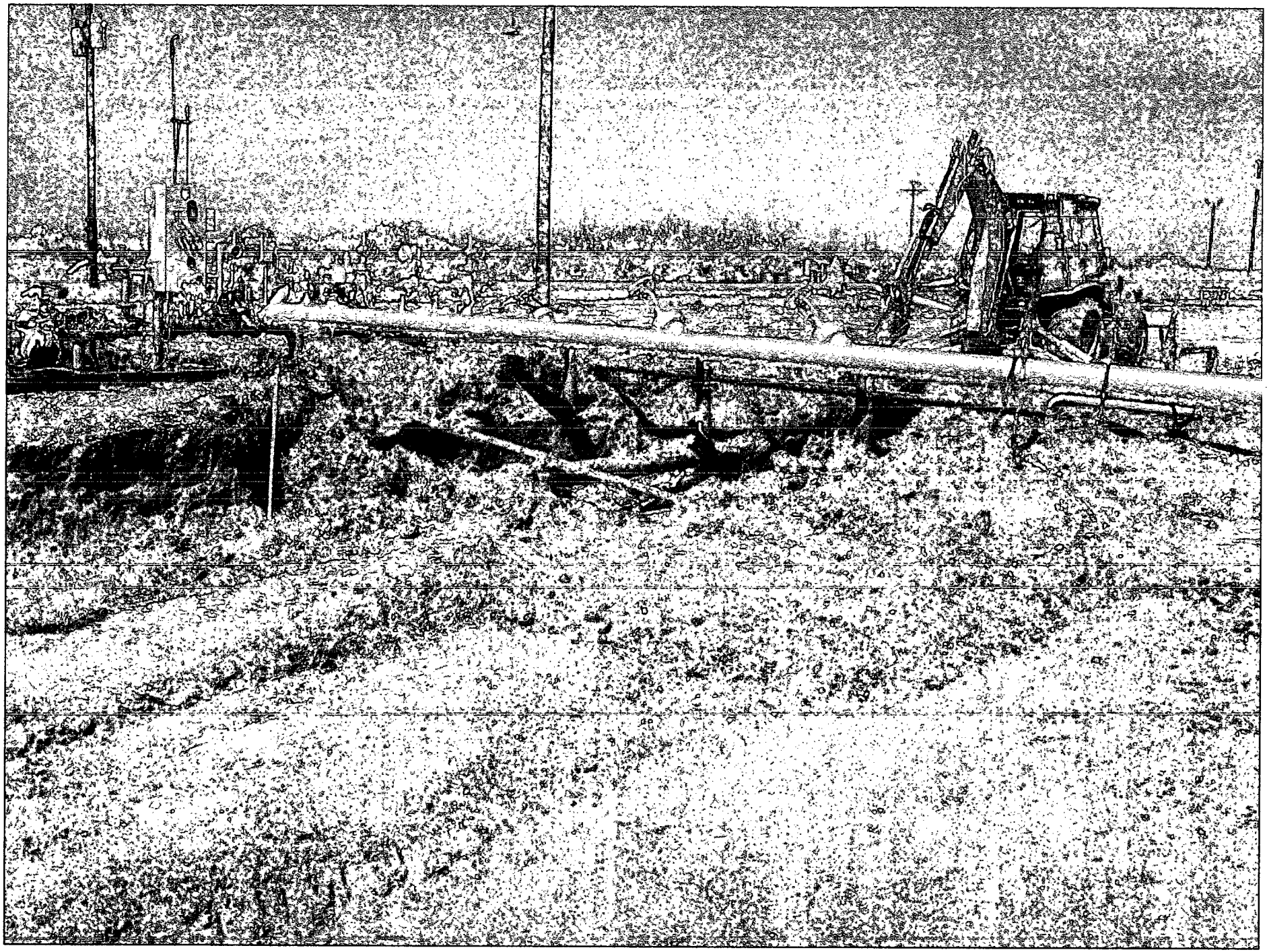
Location: 032° 31' 56.50" N 103° 32' 57.33" W
Caption: Figure 1, Site Location Map
Plains Marketing, L. P.
Lynch Station

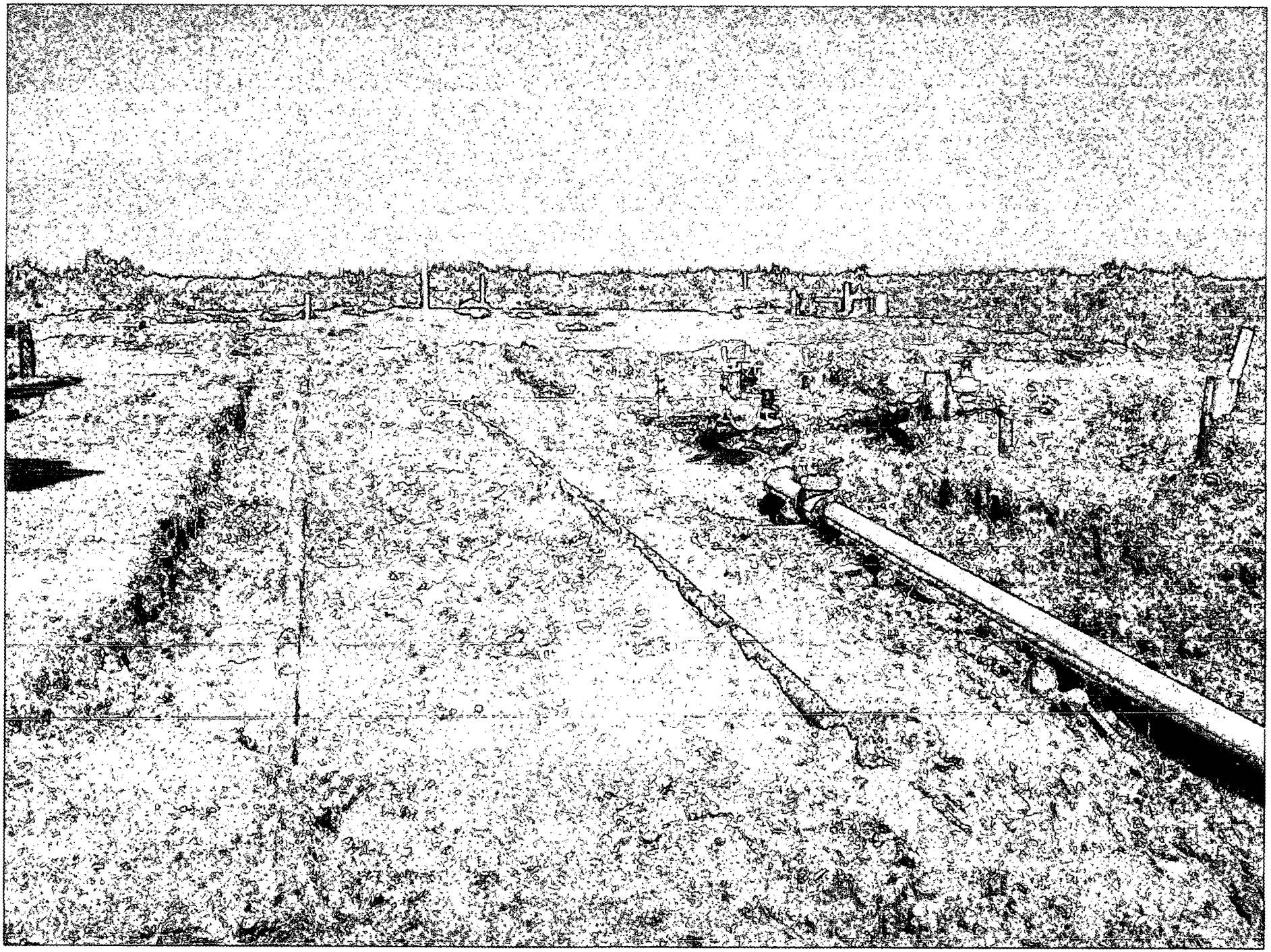

N
Pit Area
Visually Stained Area
Manual Surface Scrapping
84 feet
Trench 4
1' bgs: 2.5 ppm
Permian LACT Unit
48 feet
Trench 5
1' bgs: 2.5 ppm
Header
Maljamar to Lynch 10" P/L Sour
Lusk to Lynch 8" P/L Sweet
Release Point
Excavated Area
Trench 1
6' bgs: 1166 ppm
Trench 3
1' bgs: 1.4 ppm
Hat Mesa 4" P/L
Trench 2
6" bgs: 13.1 ppm
1' bgs: 1.9 ppm
2' bgs: 4.6 ppm
3' bgs: 5.1 ppm
4' bgs: 0.6 ppm
5' bgs: 0.6 ppm
Stockpiled Material
Header
Berm
Lynch Tank Farm
Legend
Delineation Trenches
1'bgs: 1.9 ppm
Depth & PID Reading
Pipeline (P/L)
Visually Stained Area
Excavated Area
DESCRIPTION
Lynch Station
Figure 2
Delineation Trenches
Plains Marketing, L. P.
EMS: 2004-00114



DESCRIPTION
Lynch Station
Figure 3
Excavation Limits and
Soil Sampling Locations
Plains Marketing, L. P.
EMS: 2004-00114







New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 20S Range: 34E Sections: 34

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

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

Clear Form | WATERS Menu | Help

WELL / SURFACE DATA REPORT 12/16/2

DB File Nbr	Use	(acre ft per annum) Diversion	Owner	Well N

No Records found, try again

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 20S Range: 34E Sections: 24

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

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

Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 12/16/2005

								(Depth Water in Feet)		
Bsn	**Tws**	**Rng**	**Sec**	**Zone**	**X**	**Y**	**Wells**	**Min**	**Max**	**Avg**
CP	20S	34E	24				1	270	270	270

Record Count: 1

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Lynch Station

Project Number: EMS: 2004-00114

Location: Lea County, NM

Lab Order Number: 5E13020

Report Date: 05/17/05

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/17/05 09:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile	5E13020-01	Soil	05/12/05 16:00	05/13/05 09:40

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

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/17/05 09:09

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile (5E13020-01) Soil									
Benzene	**0.0582**	0.0250	mg/kg dry	25	EE51401	05/14/05	05/14/05	EPA 8021B	
Toluene	**0.435**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.787**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**1.56**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.647**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*121 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**477**	10.0	mg/kg dry	1	EE51305	05/13/05	05/14/05	EPA 8015M	
Diesel Range Organics >C12-C35	**2920**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**3400**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*95.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.4 %*	*70-130*		"	"	"	"	

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

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	05/17/05 09:09

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Stockpile (5E13020-01) Soil									
% Moisture	**3.3**	0.1	%	1	EE51301	05/13/05	05/13/05	% calculation	

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

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE51305 - Solvent Extraction (GC)										
Blank (EE51305-BLK1)				Prepared: 05/13/05 Analyzed: 05/14/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*39.4*		*mg/kg*	*50.0*		*78.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.6*		*"*	*50.0*		*75.2*	*70-130*			
LCS (EE51305-BS1)				Prepared: 05/13/05 Analyzed: 05/14/05						
Gasoline Range Organics C6-C12	475	10.0	mg/kg wet	500		95.0	75-125			
Diesel Range Organics >C12-C35	505	10.0	"	500		101	75-125			
Total Hydrocarbon C6-C35	980	10.0	"	1000		98.0	75-125			
Surrogate: 1-Chlorooctane	*38.6*		*mg/kg*	*50.0*		*77.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.2*		*"*	*50.0*		*72.4*	*70-130*			
Calibration Check (EE51305-CCV1)				Prepared: 05/13/05 Analyzed: 05/14/05						
Gasoline Range Organics C6-C12	499		mg/kg	500		99.8	80-120			
Diesel Range Organics >C12-C35	530		"	500		106	80-120			
Total Hydrocarbon C6-C35	1030		"	1000		103	80-120			
Surrogate: 1-Chlorooctane	*48.4*		*"*	*50.0*		*96.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.2*		*"*	*50.0*		*82.4*	*70-130*			
Matrix Spike (EE51305-MS1)	**Source: 5E13021-02**			Prepared: 05/13/05 Analyzed: 05/14/05						
Gasoline Range Organics C6-C12	477	10.0	mg/kg dry	517	ND	92.3	75-125			
Diesel Range Organics >C12-C35	502	10.0	"	517	ND	97.1	75-125			
Total Hydrocarbon C6-C35	979	10.0	"	1030	ND	95.0	75-125			
Surrogate: 1-Chlorooctane	*52.8*		*mg/kg*	*50.0*		*106*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.0*		*"*	*50.0*		*94.0*	*70-130*			
Matrix Spike Dup (EE51305-MSD1)	**Source: 5E13021-02**			Prepared: 05/13/05 Analyzed: 05/14/05						
Gasoline Range Organics C6-C12	488	10.0	mg/kg dry	517	ND	94.4	75-125	2.28	20	
Diesel Range Organics >C12-C35	511	10.0	"	517	ND	98.8	75-125	1.78	20	
Total Hydrocarbon C6-C35	999	10.0	"	1030	ND	97.0	75-125	2.02	20	
Surrogate: 1-Chlorooctane	*53.3*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.5*		*"*	*50.0*		*97.0*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE51401 - EPA 5030C (GC)										
Blank (EE51401-BLK1)				Prepared & Analyzed: 05/14/05						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*90.0*		*ug/kg*	*100*		*90.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*92.4*		*"*	*100*		*92.4*	*80-120*			
LCS (EE51401-BS1)				Prepared & Analyzed: 05/14/05						
Benzene	85.3		ug/kg	100		85.3	80-120			
Toluene	82.9		"	100		82.9	80-120			
Ethylbenzene	86.9		"	100		86.9	80-120			
Xylene (p/m)	200		"	200		100	80-120			
Xylene (o)	91.1		"	100		91.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	*104*		*"*	*100*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		*"*	*100*		*114*	*80-120*			
Calibration Check (EE51401-CCV1)				Prepared: 05/14/05 Analyzed: 05/15/05						
Benzene	98.5		ug/kg	100		98.5	80-120			
Toluene	93.6		"	100		93.6	80-120			
Ethylbenzene	88.8		"	100		88.8	80-120			
Xylene (p/m)	200		"	200		100	80-120			
Xylene (o)	96.2		"	100		96.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*115*		*"*	*100*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*103*		*"*	*100*		*103*	*80-120*			
Matrix Spike (EE51401-MS1)	**Source: 5E13021-01**			Prepared & Analyzed: 05/14/05						
Benzene	87.4		ug/kg	100	ND	87.4	80-120			
Toluene	86.5		"	100	ND	86.5	80-120			
Ethylbenzene	86.8		"	100	ND	86.8	80-120			
Xylene (p/m)	198		"	200	ND	99.0	80-120			
Xylene (o)	92.0		"	100	ND	92.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*107*		*"*	*100*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*114*		*"*	*100*		*114*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE51401 - EPA 5030C (GC)										
Matrix Spike Dup (EE51401-MSD1)	**Source: 5E13021-01**			Prepared & Analyzed: 05/14/05						
Benzene	90.9		ug/kg	100	ND	90.9	80-120	3.93	20	
Toluene	90.7		"	100	ND	90.7	80-120	4.74	20	
Ethylbenzene	93.4		"	100	ND	93.4	80-120	7.33	20	
Xylene (p/m)	215		"	200	ND	108	80-120	8.70	20	
Xylene (o)	98.1		"	100	ND	98.1	80-120	6.42	20	
Surrogate: a,a,a-Trifluorotoluene	*108*		"	*100*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*116*		"	*100*		*116*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE51301 - General Preparation (Prep)										
Blank (EE51301-BLK1)				Prepared & Analyzed: 05/13/05						
% Moisture	ND	0.1	%							
Duplicate (EE51301-DUP1)	**Source: 5E12011-01**			Prepared & Analyzed: 05/13/05						
% Solids	98.2		%		97.4			0.818	20	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 5/17/2005

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

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: LYNCH STATION
Project #: EMS: 2004-00114
Project Loc: LEA COUNTY, NM
PO #: PAA / C. REYNOLDS

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TCLP:	Analyze For: TOTAL: TPH: 418.1 / 8015M / 1005 / 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.					PUSH TAT (Pre-Schedule)	Standard TAT
5E13020 01	STOCKPILE	12 MAY	1600	1	X									X			X							X								X

Special Instructions:

Sample Containers Intact? Y (N)
Temperature Upon Receipt: 0.0
Laboratory Comments: seals/labels 402

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	13 MAY 05	0920			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Carrie Kelly	5/13/05	9:40

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

Client: Plains Pipeline

Date/Time: 5/13/05 9:50

Order #: 5E13026

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Variance Documentation:

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

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Lynch Station

Project Number: EMS: 2004-00114

Location: Lea County, NM

Lab Order Number: 5F06001

Report Date: 06/08/05

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/08/05 15:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RP	5F06001-01	Soil	06/03/05 09:55	06/06/05 08:05
HDR FLR	5F06001-02	Soil	06/03/05 09:45	06/06/05 08:05
W-HDR-FLR	5F06001-03	Soil	06/03/05 10:25	06/06/05 08:05
W-HDR-NW/SW	5F06001-04	Soil	06/03/05 11:05	06/06/05 08:05
W-HDR-N/SW	5F06001-05	Soil	06/03/05 11:20	06/06/05 08:05
W-HDR-S/SW	5F06001-06	Soil	06/03/05 10:15	06/06/05 08:05
W-EXCV-FLR	5F06001-07	Soil	06/03/05 11:45	06/06/05 08:05
W-HDR-W/SW	5F06001-08	Soil	06/03/05 10:45	06/06/05 08:05
E-HDR-E/SW	5F06001-09	Soil	06/03/05 12:00	06/06/05 08:05
E-HDR-N/SW	5F06001-10	Soil	06/03/05 12:15	06/06/05 08:05
E-HDR-S/SW	5F06001-11	Soil	06/03/05 12:30	06/06/05 08:05
E-HDR-FLR	5F06001-12	Soil	06/03/05 11:45	06/06/05 08:05

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

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/08/05 15:58

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RP (5F06001-01) Soil									
Benzene	**0.0494**	0.0250	mg/kg dry	25	EF50602	06/06/05	06/06/05	EPA 8021B	
Toluene	**0.238**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.220**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.340**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.229**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*123 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*119 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**1490**	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	**8240**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**9730**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*125 %*	*70-130*		"	"	"	"	
HDR FLR (5F06001-02) Soil									
Benzene	**0.201**	0.0250	mg/kg dry	25	EF50602	06/06/05	06/06/05	EPA 8021B	
Toluene	**7.59**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**3.35**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**15.1**	0.0250	"	"	"	"	"	"	
Xylene (o)	**6.13**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*326 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*139 %*	*80-120*		"	"	"	"	*S-04*
Gasoline Range Organics C6-C12	**2070**	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	**10500**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**12600**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*115 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.6 %*	*70-130*		"	"	"	"	
W-HDR-FLR (5F06001-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/06/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0154]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0858**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0463**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-HDR-FLR (5F06001-03) Soil									
Surrogate: 1-Chlorooctane		*96.0 %*	*70-130*		*EF50601*	*06/06/05*	*06/06/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*101 %*	*70-130*		"	"	"	"	
W-HDR-NW/SW (5F06001-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0278**	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.6 %*	*70-130*		"	"	"	"	
W-HDR-N/SW (5F06001-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/06/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	**21.3**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**21.3**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*80.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.2 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-HDR-S/SW (5F06001-06) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*115 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.6 %*	*70-130*		"	"	"	"	
W-EXCV-FLR (5F06001-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/06/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.4 %*	*70-130*		"	"	"	"	
W-HDR-W/SW (5F06001-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	**42.3**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**42.3**	10.0	"	"	"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W-HDR-W/SW (5F06001-08) Soil									
Surrogate: 1-Chlorooctane		*80.2 %*	*70-130*		*EF50601*	*06/06/05*	*06/07/05*	*EPA 8015M*	
Surrogate: 1-Chlorooctadecane		*100 %*	*70-130*		"	"	"	"	
E-HDR-E/SW (5F06001-09) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*108 %*	*70-130*		"	"	"	"	
E-HDR-N/SW (5F06001-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF50601	06/06/05	06/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*78.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*97.0 %*	*70-130*		"	"	"	"	

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/08/05 15:58

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E-HDR-S/SW (5F06001-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**J [0.0237]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**ND**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0210]**	0.0250	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*93.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**34.3**	10.0	mg/kg dry	1	EF50601	06/06/05	06/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	**323**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**357**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	
E-HDR-FLR (5F06001-12) Soil									
Benzene	**J [0.0213]**	0.0250	mg/kg dry	25	EF50602	06/06/05	06/07/05	EPA 8021B	J
Toluene	**0.0423**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0715**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.156**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0357**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**21.4**	10.0	mg/kg dry	1	EF50601	06/06/05	06/07/05	EPA 8015M	
Diesel Range Organics >C12-C35	**481**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**502**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*107 %*	*70-130*		"	"	"	"	

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

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RP (5F06001-01) Soil									
% Moisture	**11.3**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
HDR FLR (5F06001-02) Soil									
% Moisture	**9.3**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-HDR-FLR (5F06001-03) Soil									
% Moisture	**10.6**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-HDR-NW/SW (5F06001-04) Soil									
% Moisture	**11.1**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-HDR-N/SW (5F06001-05) Soil									
% Moisture	**11.9**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-HDR-S/SW (5F06001-06) Soil									
% Moisture	**9.2**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-EXCV-FLR (5F06001-07) Soil									
% Moisture	**13.9**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
W-HDR-W/SW (5F06001-08) Soil									
% Moisture	**8.6**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
E-HDR-E/SW (5F06001-09) Soil									
% Moisture	**11.1**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
E-HDR-N/SW (5F06001-10) Soil									
% Moisture	**9.9**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	
E-HDR-S/SW (5F06001-11) Soil									
% Moisture	**14.2**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/08/05 15:58

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E-HDR-FLR (5F06001-12) Soil									
% Moisture	**9.7**	0.1	%	1	EF50701	06/06/05	06/07/05	% calculation	

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

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF50601 - Solvent Extraction (GC)										
Blank (EF50601-BLK1)				Prepared & Analyzed: 06/06/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*36.3*		*mg/kg*	*50.0*		*72.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.5*		*"*	*50.0*		*77.0*	*70-130*			
LCS (EF50601-BS1)				Prepared & Analyzed: 06/06/05						
Gasoline Range Organics C6-C12	445	10.0	mg/kg wet	500		89.0	75-125			
Diesel Range Organics >C12-C35	459	10.0	"	500		91.8	75-125			
Total Hydrocarbon C6-C35	904	10.0	"	1000		90.4	75-125			
Surrogate: 1-Chlorooctane	*36.1*		*mg/kg*	*50.0*		*72.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.2*		*"*	*50.0*		*74.4*	*70-130*			
Calibration Check (EF50601-CCV1)				Prepared & Analyzed: 06/06/05						
Gasoline Range Organics C6-C12	471		mg/kg	500		94.2	80-120			
Diesel Range Organics >C12-C35	494		"	500		98.8	80-120			
Total Hydrocarbon C6-C35	965		"	1000		96.5	80-120			
Surrogate: 1-Chlorooctane	*49.2*		*"*	*50.0*		*98.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.4*		*"*	*50.0*		*92.8*	*70-130*			
Matrix Spike (EF50601-MS1)	**Source: 5F06001-09**			Prepared: 06/06/05 Analyzed: 06/07/05						
Gasoline Range Organics C6-C12	558	10.0	mg/kg dry	562	ND	99.3	75-125			
Diesel Range Organics >C12-C35	592	10.0	"	562	ND	105	75-125			
Total Hydrocarbon C6-C35	1150	10.0	"	1120	ND	103	75-125			
Surrogate: 1-Chlorooctane	*53.4*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.5*		*"*	*50.0*		*113*	*70-130*			
Matrix Spike Dup (EF50601-MSD1)	**Source: 5F06001-09**			Prepared: 06/06/05 Analyzed: 06/07/05						
Gasoline Range Organics C6-C12	533	10.0	mg/kg dry	562	ND	94.8	75-125	4.58	20	
Diesel Range Organics >C12-C35	586	10.0	"	562	ND	104	75-125	1.02	20	
Total Hydrocarbon C6-C35	1120	10.0	"	1120	ND	100	75-125	2.64	20	
Surrogate: 1-Chlorooctane	*53.9*		*mg/kg*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.4*		*"*	*50.0*		*113*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF50602 - EPA 5030C (GC)										
Blank (EF50602-BLK1)				Prepared: 06/06/05 Analyzed: 06/07/05						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*90.5*		*ug/kg*	*100*		*90.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*106*		*"*	*100*		*106*	*80-120*			
LCS (EF50602-BS1)				Prepared: 06/06/05 Analyzed: 06/07/05						
Benzene	102		ug/kg	100		102	80-120			
Toluene	94.5		"	100		94.5	80-120			
Ethylbenzene	98.2		"	100		98.2	80-120			
Xylene (p/m)	214		"	200		107	80-120			
Xylene (o)	106		"	100		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*105*		*"*	*100*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*100*		*117*	*80-120*			
Calibration Check (EF50602-CCV1)				Prepared: 06/06/05 Analyzed: 06/07/05						
Benzene	103		ug/kg	100		103	80-120			
Toluene	99.2		"	100		99.2	80-120			
Ethylbenzene	90.1		"	100		90.1	80-120			
Xylene (p/m)	200		"	200		100	80-120			
Xylene (o)	93.4		"	100		93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*110*		*"*	*100*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*119*		*"*	*100*		*119*	*80-120*			
Matrix Spike (EF50602-MS1)	**Source: 5F06001-09**			Prepared: 06/06/05 Analyzed: 06/07/05						
Benzene	97.1		ug/kg	100	ND	97.1	80-120			
Toluene	95.1		"	100	ND	95.1	80-120			
Ethylbenzene	95.1		"	100	ND	95.1	80-120			
Xylene (p/m)	237		"	200	ND	118	80-120			
Xylene (o)	117		"	100	ND	117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*105*		*"*	*100*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*115*		*"*	*100*		*115*	*80-120*			

Plains All American EH & S	Project: Lynch Station	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00114	**Reported:**
Midland TX, 79706-4476	Project Manager: Camille Reynolds	06/08/05 15:58

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 EF50602 - EPA 5030C (GC)										
Matrix Spike Dup (EF50602-MSD1)	**Source: 5F06001-09**			Prepared: 06/06/05 Analyzed: 06/07/05						
Benzene	93.9		ug/kg	100	ND	93.9	80-120	3.35	20	
Toluene	91.2		"	100	ND	91.2	80-120	4.19	20	
Ethylbenzene	104		"	100	ND	104	80-120	8.94	20	
Xylene (p/m)	227		"	200	ND	114	80-120	3.45	20	
Xylene (o)	118		"	100	ND	118	80-120	0.851	20	
Surrogate: a,a,a-Trifluorotoluene	*97.4*		"	*100*		*97.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*113*		"	*100*		*113*	*80-120*			

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

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF50701 - General Preparation (Prep)										
Blank (EF50701-BLK1)				Prepared: 06/06/05 Analyzed: 06/07/05						
% Moisture	ND	0.1	%							
Duplicate (EF50701-DUP1)	**Source: 5F06001-01**			Prepared: 06/06/05 Analyzed: 06/07/05						
% Moisture	10.7	0.1	%		11.3			5.45	20	

Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 6/8/2005

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

Environmental Lab of Texas I, Ltd.

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: LYNCH STATION
Project #: EMS: 2004-00114
Project Loc: LEA COUNTY, NM
PO #: PAA / C. REYNOLDS

SFO 001

LAB # (lab use only)	FIELD CODE	Date Sampled (2005)	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TPH: 418.1 (8015M) 1005 1006	TOTAL: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT
-01	RP	05JUN	0955	1	X									X		X								X					X
-02	HDR FLR		0945																										
-03	W-HDR-FLR		1025																										
-04	W-HDR-NW/SW		1105																										
-05	W-HDR-N/SW		1120																										
-06	W-HDR-S/SW		1015																										
-07	W-EXCV-FLR		1145																										
-08	W-HDR-W/SW		1045																										
-09	E-HDR-E/SW		1200																										
-10	E-HDR-N/SW		1215																										

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments: Ice -2.0°C

Relinquished by:	Date	Time	Received by:	Date	Time
Dan Dutton	05 Jun 05	1620	Jamie Johnson	06/05/05	16:21
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
James Johnson	6-6-05	8:05	Rebekah	6/6/05	0805

2 OF 2

Environmental Lab of Texas I, Ltd.

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: LYNCH STATION
Project #: EMS: 2004-00114
Project Loc: LEA COUNTY, NM
PO #: PAR/C. REYNOLDS

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 (TCLP: / TOTAL: X)	RCI	N.O.R.M.	Total Gamma			RUSH TAT (Pre-Schedule)	Standard TAT
71	E-HDR-SFSW	2005 06 JUN	1230	1	X									X		X							X							X
72	E-HDR-FLR	06 JUN	1145	1	X									X		X							X							X

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
ice -2.0°C

Relinquished by:	Date	Time	Received by:	Date	Time
Ken Dutton	06 Jun 05	1620	James Johnson	06/05/05	1620
James Johnson	6-6-05	8:05	Received by ELOT: Kal. Kalo	60505	0805

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

Client: Plains

Date/Time: 4/6/05 8:10

Order #: 5F06001

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	-2.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	OK Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

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

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Link Energy**	Contact: **Frank Hernandez**
Address **PO Box 1660, 5805 East Highway 80 Midland, Texas 79702**	Telephone No. **505.631.3095**
Facility Name **Lynch Station Lusk A&B 8" Line #2004-00114**	Facility Type **8" Steel Pipeline**
Surface Owner: **Dan Berry**	Mineral Owner / Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
B	**34**	**T20S**	**R34E**					

Latitude: **32° 31' 59.884"N** Longitude: **103° 32' 48.606"W**

NATURE OF RELEASE

Type of Release **Crude Oil**	Volume of Release **175 barrels**	Volume Recovered **125 barrels**
Source of Release **8" Steel Pipeline**	Date and Hour of Occurrence **4-1-04 @ 5:00 AM**	Date and Hour of Discovery **4-1-04 @ 6:30 AM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Larry Johnson**	
By Whom? **Pat McCasland, EPI**	Date and Hour **4-1-04 @ 10:00 AM**	
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 Pipeline* / The leak occurred when the line was inadvertently over pressured.**

Describe Area Affected and Cleanup Action Taken.*
9523 sqft 170' x 170': Site will be delineated and a remediation plan developed. Remedial Goals: TPH 8015m = 1000 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: F. Hernandez	**OIL CONSERVATION DIVISION**
Printed Name: Frank Hernandez	Approved by District Supervisor:
E-mail Address: frank.hernandez@linkenergy.com	Approval Date: / Expiration Date:
Title: District Environmental Supervisor	Conditions of Approval: / Attached ☐
Date: April 1, 2004 Phone: 505.631.3095	

* Attach Additional Sheets If Necessary