

C-141

FINAL

REPORT

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

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

Release Notification and Corrective Action **IRP-377**

OPERATOR

Initial Report Final Report

Name of Company: Plains Pipeline, L.P.	Contact: Jason Henry - Remediation Coordinator
Address: 2530 St. Hwy. 214, Denver City, Tx. 79323	Telephone No.: (575) 441-1099 (cellular)
Facility Name: Vacuum to Jal 14" Mainline #1	Facility Type: Crude oil transmission pipeline

Surface Owner: State of New Mexico	Mineral Owner:	API No.: 30.025.12803
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	25	23S	37E					Lea

Latitude: N32° 16' 18.83" Longitude: W103° 07' 01.62"

NATURE OF RELEASE

Type of Release: Crude oil	Volume of Release: 1,510 bbls	Volume Recovered: 1,360 bbls
Source of Release: 14" dia. steel transmission pipeline	Date and Hour of Occurrence: 2-01-03 @ 0200 hrs	Date and Hour of Discovery: 2-01-03 @ 0800 hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Gary Wink (NMOCD - Hobbs)	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: 2-01-03 @ 1000 hrs	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: Not Applicable	

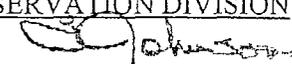
If a Watercourse was Impacted, Describe Fully.* Not Applicable

Depth to Groundwater: ~ 30 feet

Describe Cause of Problem and Remedial Action Taken.* Cause of leak was internal/external corrosion of pipeline; free standing liquid was recovered and reintroduced into the system; repair clamp installed over leak area; contaminated soil will be classified in accordance with RCRA 40 CFR 261 and treated/disposed accordingly

Describe Area Affected and Cleanup Action Taken.* From 2-04-03 through 3-14-03, ±2,900 yds³ of severely impacted material were excavated from an area of ±69,800 ft² to an avg. depth of 2.5 v f. and transported to EPI Landfarm for treatment; an additional ±3,500 yds³ of slightly impacted material were reclaimed in a Soil Remediation Area adjacent to the release site; from 2003 through 2008 impacted soil was tilled and disked with soil samples collected and analyzed at an independent laboratory for BTEX and TPH concentrations; in April 2008 lab analyses indicated impacted soil was slightly elevated in TPH concentrations, but deemed manageable and verbal approval was granted by NMOCD for closure; from 1-28-09 through 1-30-09, EPI imported soil from the Soil Remediation Area and backfilled excavation around transmission line; disturbed areas were contoured to allow natural drainage and prevent pooling of water; remaining remedial activities include contouring and disking all disturbed areas with seeding of same in accordance with NMSLO preferred seed mixture and re-vegetation procedural requirements

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: Jason Henry	 Approved by District Supervisor	
Title: Remediation Coordinator	Approval Date: 10.15.10	Expiration Date: —
E-mail Address: jhenry@paalp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 3-09-09	Phone: (575) 441-1099 (cell)	IRP# 377

* Attach Additional Sheets If Necessary

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Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
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Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate
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with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR "INFORMATION ONLY NON-REPORTABLE" Initial Report Final Report

Name of Company EOTT Energy Pipeline	Contact Frank Hernandez
Address 5805 East Highway 80 / P.O. Box 1660, Midland, TX 79703	Telephone No. 915.638.3799
Facility Name: Jal 14" Mainline #2003-00019	Facility Type Crude Oil Pipeline

Surface Owner State of New Mexico	Mineral Owner	API Lease No. 30.025-12803
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LOCATION OF RELEASE

Unit Letter K	Section 25	Township 23S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat : 32°16'18.896"N Lon: 103°07'01.585"W
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NATURE OF RELEASE

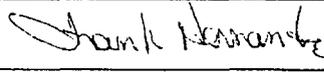
Type of Release Crude Oil	Volume of Release 1510 bbls	Volume Recovered 1360 bbls
Source of Release 14" steel pipeline	Date and Hour of Occurrence 2-01-03 2:00 AM	Date and Hour of Discovery 2-01-03 8:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Gary Wink, NMOCD Hobbs	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: NMOCD notified on 2-01-03 10:00 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The cause of the leak was internal/external corrosion. The free liquid was recovered and reintroduced to the system, a leak repair clamp installed. The upper 18" of contaminated soil will be disposed of in the EPI Landfarm. Soil will be characterized in accordance with RCRA 40 CFR 261 protocols.

Describe Area Affected and Cleanup Action Taken.*
Spill Area = ~67,050 ft² ~500' x 200' Preliminary delineation of the site shows vertical contamination to ~7'bgs. Soil below the 1.5'bgs interval will be excavated to a 200'x200' blending cell south of the site and blended and tested to acceptable levels. After laboratory verification, the blended soil will be used to backfill the excavation, the site contoured to grade and reseeded with a seed mix approved by the New Mexico State Land Office.

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: Frank Hernandez	 Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Title: EOTT District Environmental Supervisor	Approval Date: 2-1-03	Expiration Date:
Date: February 12, 2003 Phone: 915.638.3799	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

CLOSURE REPORT

VACUUM TO JAL 14" MAINLINE #1

PLAINS SRS: #2003-00019

NMOCD REF: 1RP #377

UL-K (NE¼ OF THE SW¼) OF SECTION 25, T 23 S, R 37 E

~11.5 MILES SOUTHEAST OF EUNICE,

LEA COUNTY, NEW MEXICO

LATITUDE: N 32° 16' 18.82"

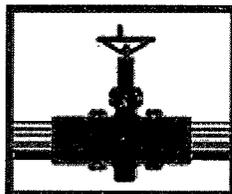
LONGITUDE: W 103° 07' 01.62"

MARCH 2009

PREPARED BY:

ENVIRONMENTAL PLUS, INC.
P.O. BOX 1558
2100 AVENUE O
EUNICE, NEW MEXICO 88231

PREPARED FOR:



PLAINS
ALL AMERICAN
PIPELINE, L.P.

RECEIVED
OCT 15 2010
HOBSOCD



ENVIRONMENTAL PLUS, INC.
CONSULTING AND ENVIRONMENTAL REMEDIATION

09 March 2009

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

RE: **Closure Report**

Plains Pipeline, L.P. – Vacuum to Jal 14” Mainline #1
UL-K (NE ¼ of the SW ¼), Section 25, T 23 S, R 37 E
Longitude: 32° 16’ 18.82”; Latitude: 103° 07’ 01.62”
Plains SRS #2003-00019; NMOCD 1RP #377

Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of Mr. Jason Henry, Plains Pipeline, L.P. (Plains), submits this letter form *Closure Report* for the above referenced Site.

The release of crude oil at this site occurred when the pipeline was owned and operated by EOTT Energy. EPI submitted the Initial NMOCD Form C-141 and Remediation Proposal dated 12 February 2003 on behalf of EOTT Energy. Activities were initiated to bring the impacted area into conformance with NMOCD requirements per articles in the initial Remediation Proposal. For clarity and cross reference elimination purposes, the following *Closure Proposal* letter offers Site Background History, Site Delineation and Remediation Activities.

Site Background History

The Site is located in Unit Letter (UL)-K (NE ¼ of the SW ¼) of Section 25, T 23 S, R 37 E at an elevation of approximately 3,195-feet above mean sea level (amsl). The property is part of the State of New Mexico Land Trust and managed by the New Mexico State Land Office (NMSLO). A search for water wells was completed utilizing the New Mexico Office of the State Engineer’s website and a database maintained by the United States Geological Survey (USGS). Groundwater data taken from domestic and USGS water wells within a one 1.0-mile radius of the release site indicates an average water depth of approximately thirty (30) feet below ground surface (bgs) (reference *Figure 2* and *Table 1*). Utilizing these parameters, New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site were determined as follows:

Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	100 parts per million

ENVIRONMENTAL PLUS, INC.



Site Delineation

On February 1, 200 EPI conducted site assessment and photographed the release area with GPS survey conducted on February 2, 2003. EPI mobilized at the site on February 3-4, 2003 to direct the location and depth of five (5) soil borings advanced within confines of the release area (reference Figure 4, *Soil Boring Map*). During advancement of soil borings, soil samples were collected at two (2) and five (5) feet below ground surface (bgs) initially then at five (5) feet increments thereafter to total depth (TD) of each respective soil boring. Information regarding lithology of soil borings is provided in Attachment III, *Soil Boring Logs*.

Laboratory analysis on soil boring soil samples indicated elevated TPH and BTEX constituent concentrations existed two (2) feet bgs. Thereafter, BTEX and TPH constituent concentrations were reported below NMOCD remedial threshold goals to TD of the soil borings (reference *Table 2*). Due to the release being petroleum products, no field or laboratory analyses were conducted for chloride concentrations.

Remedial Activities

During excavation and remedial activity period from February 4, 2003, through March 14, 2003 approximately 2,900 cubic yards (yd³) of contaminated soil were removed from an area of approximately 69,800 square feet (ft²) to an average depth of 2.5 vertical feet. Coinciding with excavation activities, sidewalls and bottom were analyzed in the field for TPH concentrations. Areas with elevated TPH concentrations were excavated until NMOCD Remedial Threshold Goals were achieved (reference *Table #3*). Severely contaminated material was transported to EPI Land Farm (#NM 01-0013) for reclamation. In addition to disposed contaminated soil, approximately 3,500 yd³ of slightly contaminated material were reclaimed in a Soil Remediation Area adjacent to the release area (reference *Figure 7*). The excavated material was blended with native material free of contamination. Coincidental with blending activities, remedial soil was tilled to allow aeration of TPH constituents.

In March 2006 soil samples were collected from sidewalls and bottom of the leak origin excavation. Similarly, a test trench was excavated to a depth of 18-feet bgs with soil samples collected at 6-, 10-, 15- and 18-feet bgs. BTEX and TPH constituent concentrations were non-detectable (ND) at or below both laboratory MDL and NMOCD remedial threshold goals (reference *Table 3* and *Figure 6*). Based on final soil sample results, no additional excavation activities were warranted in this region.

From 2003 through 2008 soil samples collected from the Soil Remediation Area were analyzed for BTEX and TPH constituent concentrations. Laboratory analysis for soil samples collected in April 2008 indicated BTEX concentrations were below NMOCD remedial threshold goal of 50 mg/Kg. TPH concentrations were reported slightly above NMOCD remedial goals of 100 mg/Kg. However, TPH concentrations were deemed manageable and verbal approval for closure was granted by the NMOCD (reference *Table 3*).

EPI mobilized to the release site on 28 January 2009 to commence remediation activities. An existing metallic barricade fence around the excavation was removed. Vegetative growth in the excavation sidewalls and bottom was removed and disposed at a State approved land farm. An undetermined volume of treated soil was loaded and transported from the adjacent Soil Remediation Area for backfilling the excavation. During backfill operations, the steel pipeline was protected to prevent damage to the exterior coating and excessive sagging. Care was



to the exterior coating and excessive sagging. Care was taken to prevent rocks or large clumps of soil from coming into contact with the steel pipeline. Upon completion of backfill activities, the area was contoured to promote natural drainage and prevent water pooling.

Final restoration activities will consist of discing and drill seeding disturbed backfill areas and Soil Remediation Area. These activities will be accomplished in strict conformance with NMSLO preferred seed mixture and re-vegetation procedural requirements. EPI proposes initiating and completing said activities in late spring 2009 when weather and ground conditions are conducive to vegetation growth.

Questions, concerns and/or need for additional technical information should be referred to David P. Duncan at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at dduncan@envplus.net.

Official communications should be directed to Mr. Jason Henry at (806) 592-8305 (office), (575) 441-1099 (cellular) or via e-mail at jhenry@paalp.com with correspondence addressed to:

Mr. Jason Henry – Remediation Coordinator
Plains Pipeline, L.P.
2530 State Highway 214
Denver City, Texas 79323

Sincerely,

ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant

cc: Jeff Dann, Plains Pipeline, L.P. – Houston, TX
Jason Henry, Plains Pipeline, L.P. – Denver City, Texas
Myra Harrison, NMSLO – Hobbs, New Mexico
Thaddeus Kostrubala, NMSLO – Santa Fe, NM

Encl: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Site Map
Figure 4 – Soil Boring Map
Table 1 – Well Information Report
Table 2 – Summary of Soil Boring Laboratory Analytical Results
Table 3 – Summary of Soil Remediation Area Laboratory Analytical Results
Attachment I – Site Photographs
Attachment II – Laboratory Analytical Results and Chain-of-Custody Form
Attachment III – Soil Boring Logs
Attachment IV – Information and Metrics
Initial NMOCD Form C-141
Final NMOCD Form C-141

FIGURES

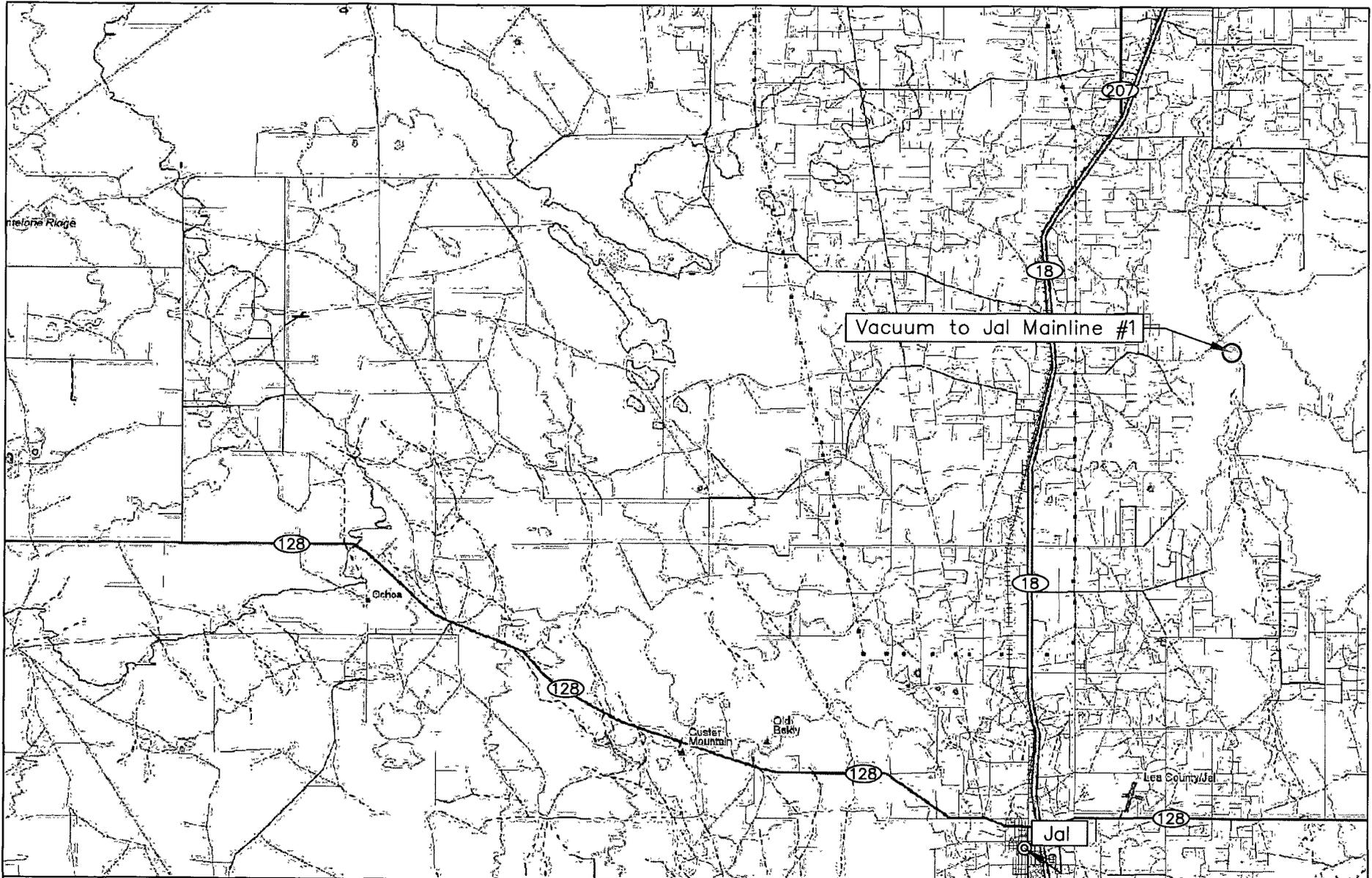
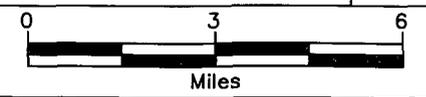


Figure 1
 Area Map
 Plains Pipeline, L.P.
 Vacuum to Jal Mainline #1

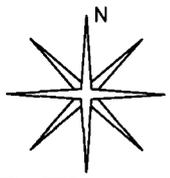
Lea County, New Mexico
 NE 1/4 of the SW 1/4, Sec. 25, T23S, R37E
 N 32° 16' 18.82" W 103° 07' 01.62"
 Elevation: 3,195 feet amsl

DWG By: D Dominguez
 August 2008

REVISED:



SHEET
 1 of 1



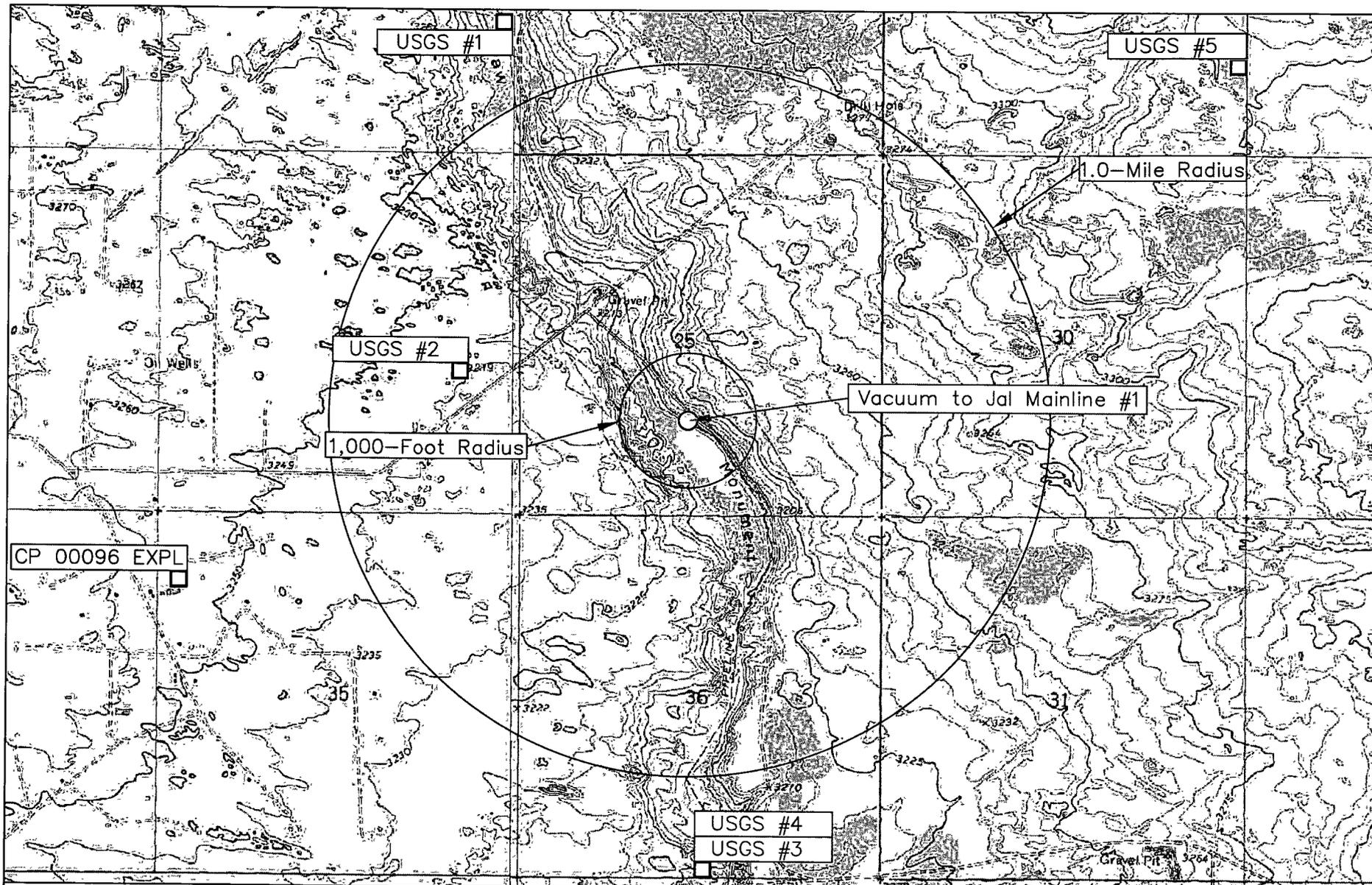
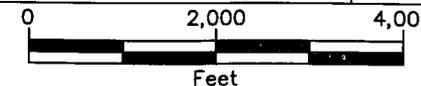


Figure 2
 Site Location Map
 Plains Pipeline, L.P.
 Vacuum to Jal Mainline #1

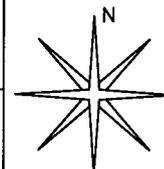
Lea County, New Mexico
 NE 1/4 of the SW 1/4, Sec. 25, T23S, R37E
 N 32° 16' 18.82" W 103° 07' 01.62"
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DWG By: D Dominguez
 August 2008

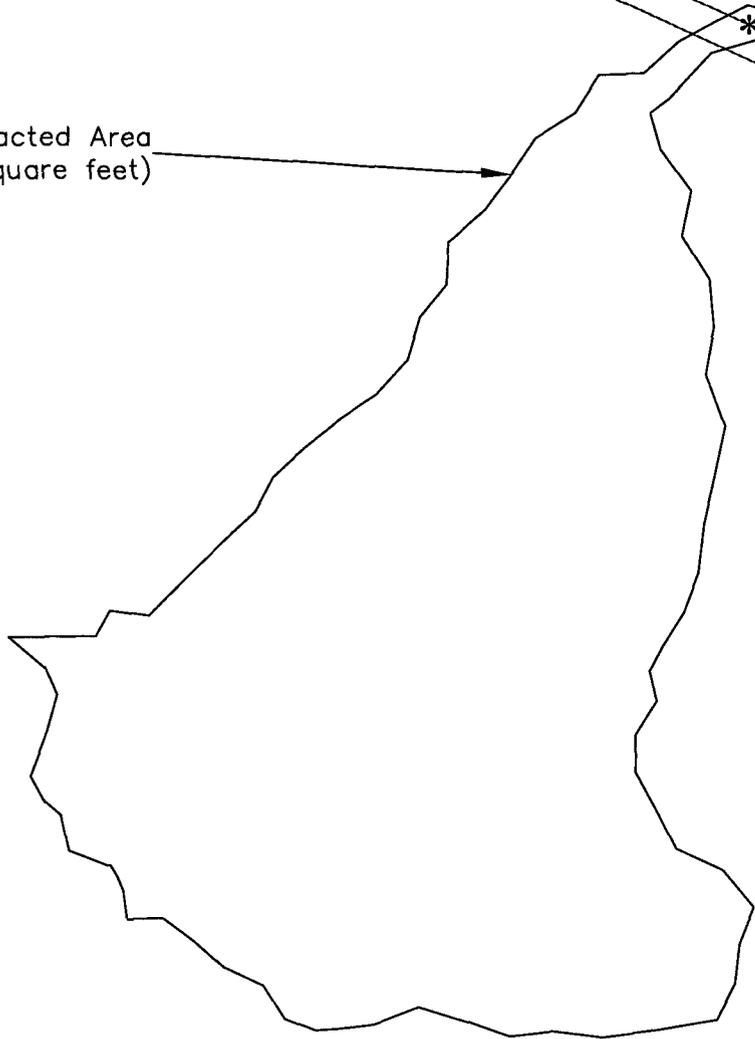
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Surface Impacted Area
(~67,300-square feet)



Pipeline

Pipeline

LEGEND

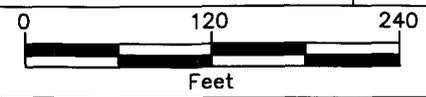
* Release Point

Figure 3
Site Map
Plains Pipeline, L.P.
Vacuum to Jal Mainline #1

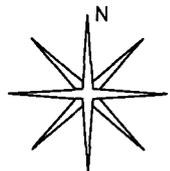
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DWG By: D Dominguez
August 2008

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Sept 2008



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1 of 1



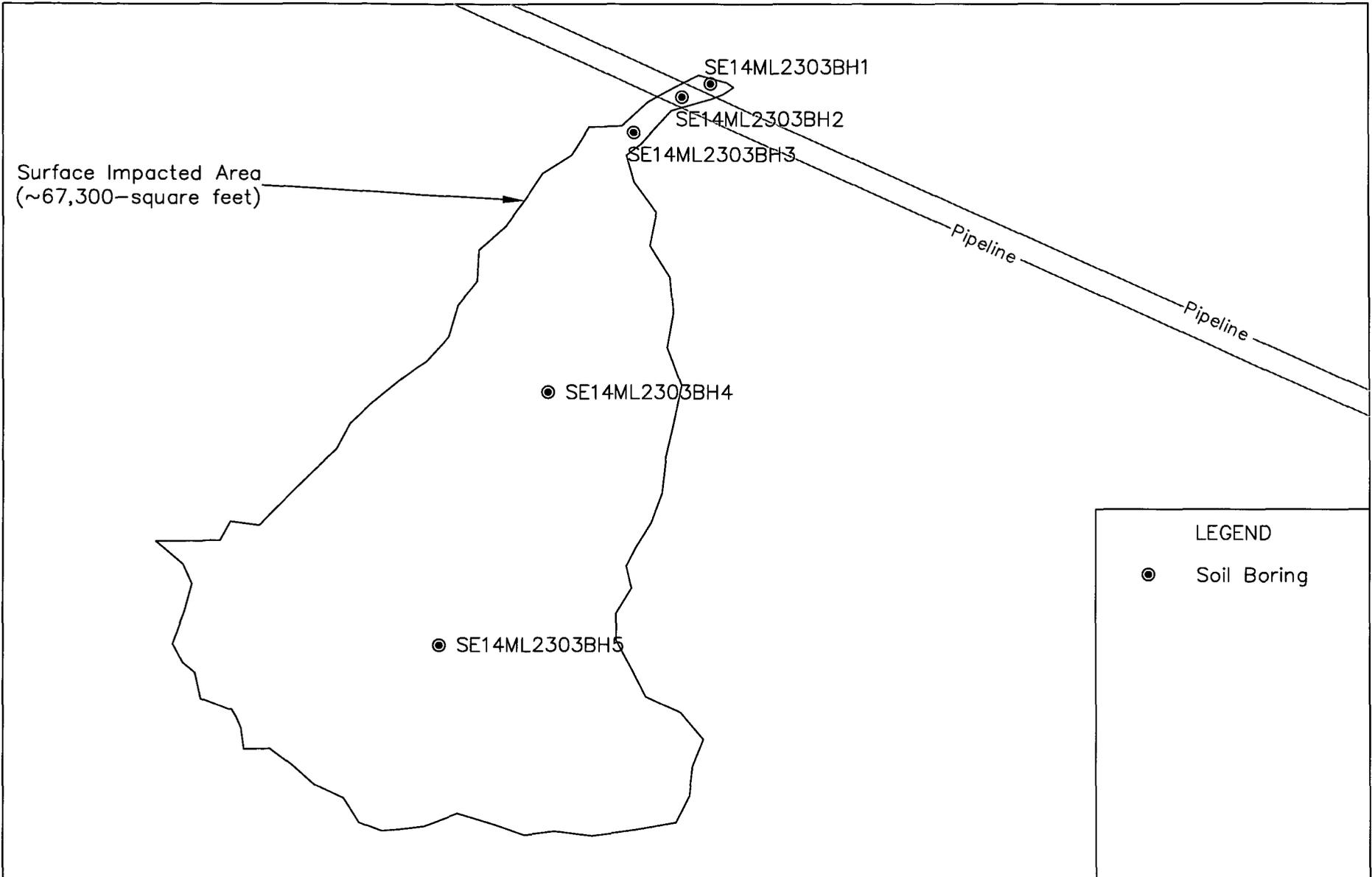


Figure 4
 Soil Boring Map - 2/3-4/2003
 Plains Pipeline, L.P.
 Vacuum to Jal Mainline #1

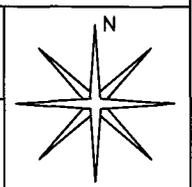
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DWG By: D Dominguez
 August 2008

0 80 160
 Feet

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 1 of 1



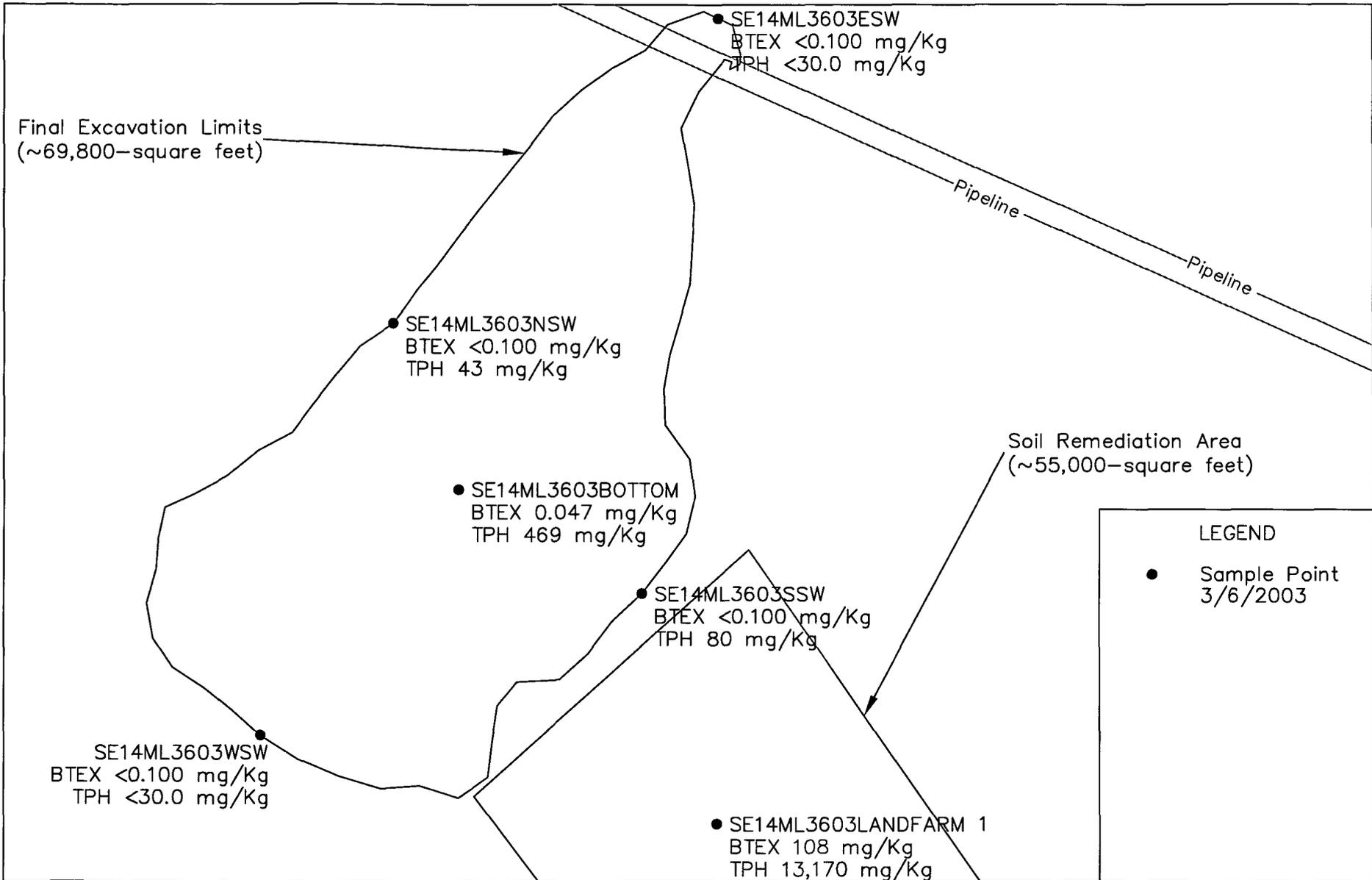


Figure 5
Excavation/Sample Map
Plains Pipeline, L.P.
Vacuum to Jal Mainline #1

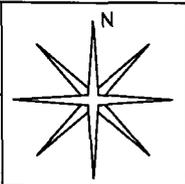
Lea County, New Mexico
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Elevation: 3,195 feet amsl

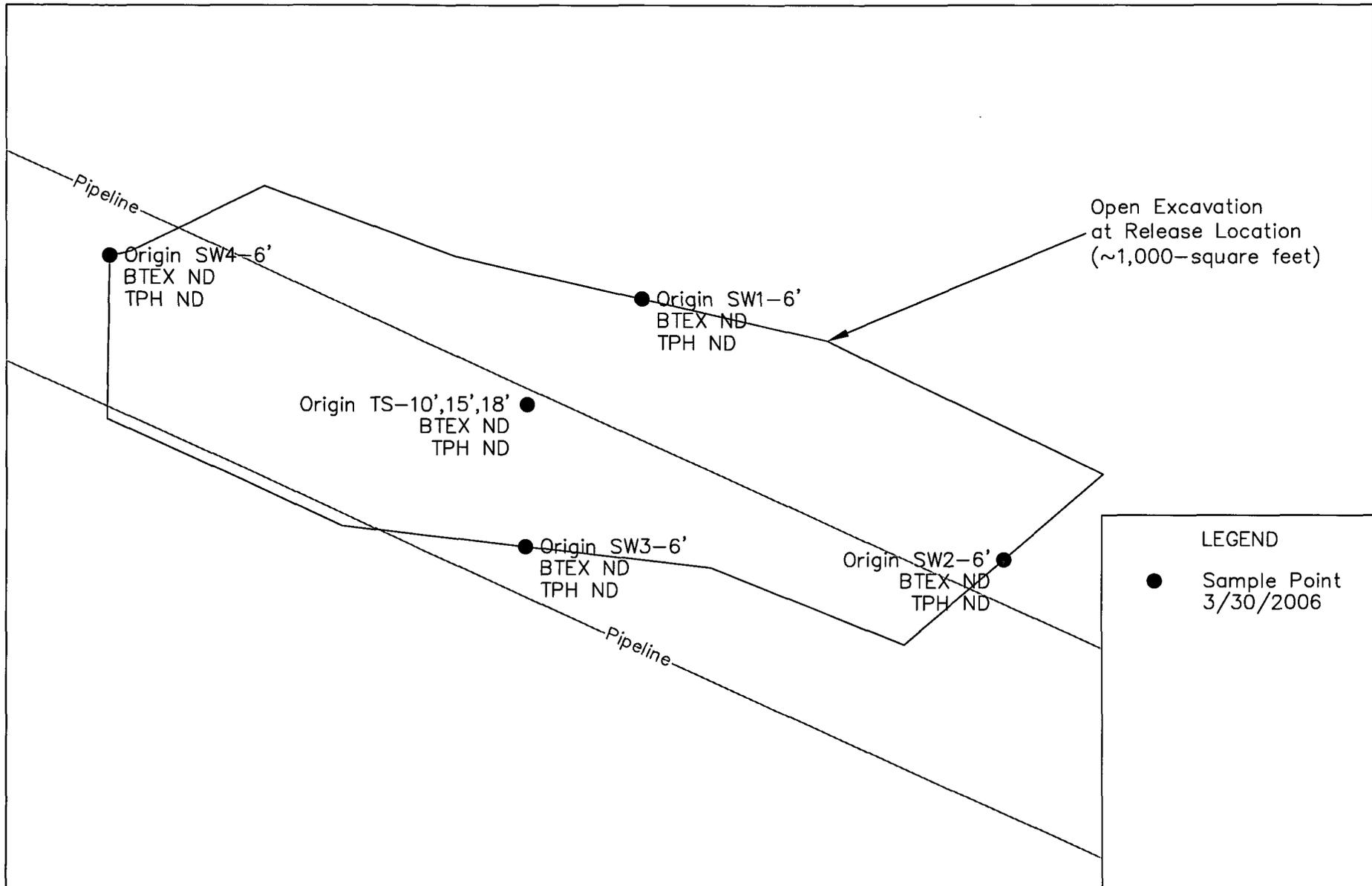
DWG By: D Dominguez
August 2008

0 120 240
Feet

REVISED:
Sept 2008

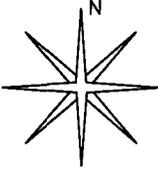
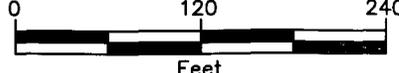
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1 of 1





LEGEND

- Sample Point 3/30/2006

<p>Figure 6 Excavation Sample Map Plains Pipeline, L.P. Vacuum to Jal Mainline #1</p>	<p>Lea County, New Mexico NE 1/4 of the SW 1/4, Sec. 25, T23S, R37E N 32° 16' 18.82" W 103° 07' 01.62" Elevation: 3,195 feet amsl</p>	<p>DWG By: D Dominguez August 2008</p>	<p>REVISED: Sept 2008</p>	
			<p>SHEET 1 of 1</p>	

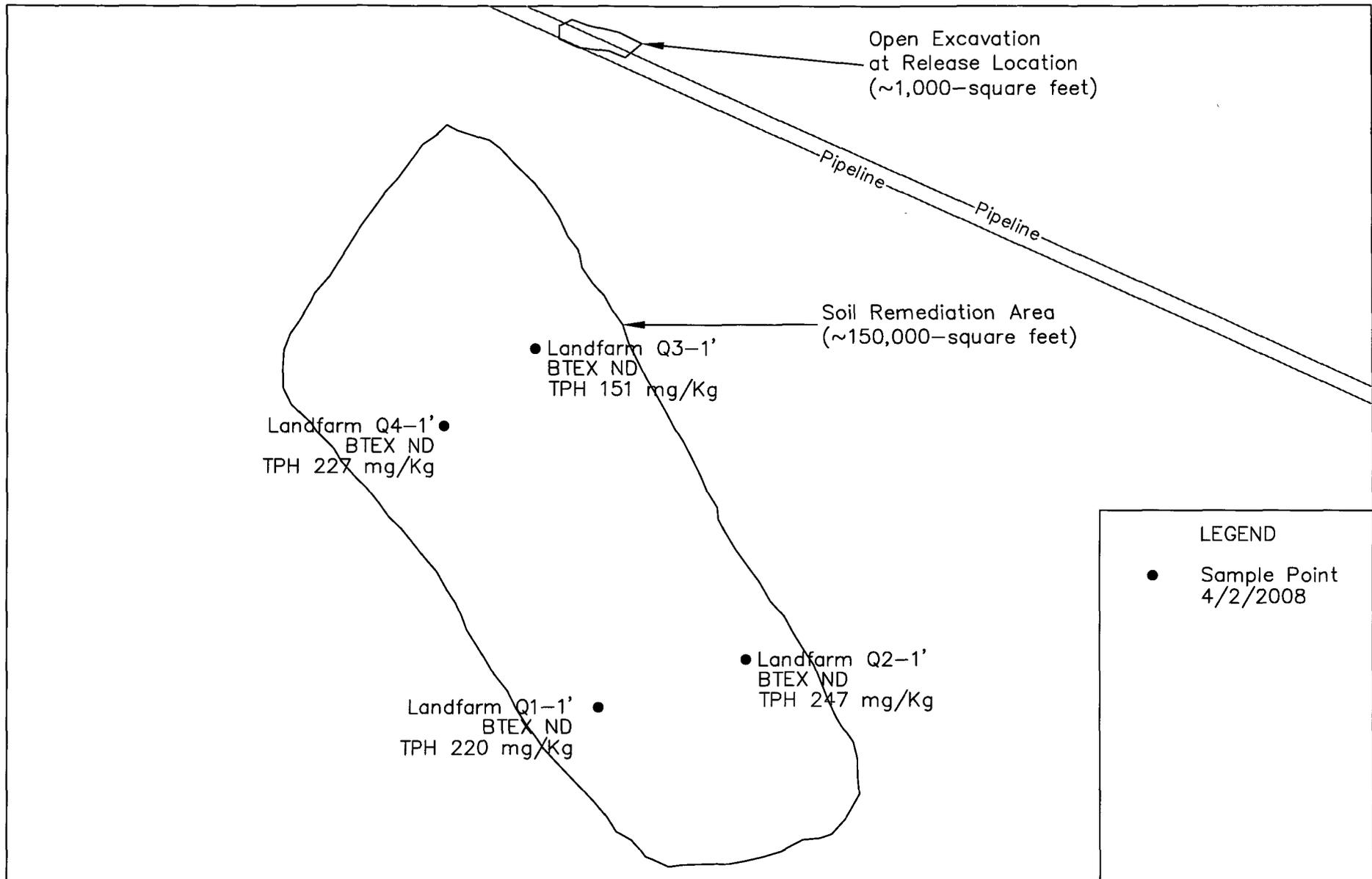
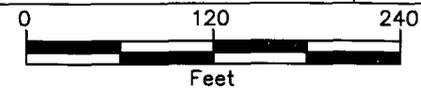


Figure 7
Current Status Map
Plains Pipeline, L.P.
Vacuum to Jal Mainline #1

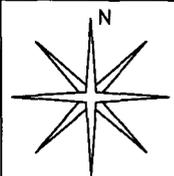
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Elevation: 3,195 feet amsl

DWG By: D Dominguez
August 2008

REVISED:
Sept 2008



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TABLES

TABLE 1

Well Data

Plains Pipeline, LP - Vac to Jal Mainline #1 (NMOCD Ref. 1RP#377; Plains SRS #2003-00019)

Well Number	Diversion ^A	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation ^B	Depth to Water
											(ft bgs)
CP_00096 EXPL	0	CARTER FOUNDATION PRODUCTION	EXP	23S	37E	35 1 1 3	N32° 16' 16.33"	W103° 06' 58.37"		3,255	
USGS #1				23S	37E	23 4 2 4			15-Jan-76	3,212	29.55
USGS #2				23S	37E	26 4 2 1			08-May-91	3,239	65.5
USGS #3				23S	37E	36 4 3 3			16-Jun-66	3,200	20.99
USGS #4				23S	37E	36 4 3 3			21-Jan-76	3,200	20.43
USGS #5				23S	38E	19 4 4 2			29-Feb-96	3,333	173.9

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1) and USGS Database

^A = In acre feet per annum

^B = Elevation interpolated from USGS topographical map based on referenced location.

EXP = Exploration

Quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

Shaded area indicates wells not shown in Figure 2

Table 2
Summary of Soil Boring Laboratory Analytical Results

Plains Pipeline, L.P. - Vacuum to Jal 14 #1 (NMOCD Ref. IRP#377; Plains SRS #2003-00019)

Borehole	Sampling Interval (ft. bgs ¹)	Sample Identification Number	Sample Date	Lithology	Benzene	Ethylbenzene	Toluene	m/p-Xylene	o-Xylene	BTEX ⁶	GRO ³ C6-C12	DRO ⁴ C12-C35	TPH ⁵ C6-C35
					µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	mg/Kg	mg/Kg	mg/Kg
1	2	SE14ML2303BH1-2'	2/3/2003	Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	5	SE14ML2303BH1-5'	2/3/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	10	SE14ML2303BH1-10'	2/3/2003	Light Brown Sandy Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
	15	SE14ML2303BH1-15'	2/3/2003	Fine Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
2	2	SE14ML2303BH2-2'	2/3/2003	Dark Brown Oily Sand	2,920	31,100	34,600	57,100	19,600	145,320	2,590	4,350	6,940
	5	SE14ML2303BH2-5'	2/3/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	10	SE14ML2303BH2-10'	2/3/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	15	SE14ML2303BH2-15'	2/3/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
3	2	SE14ML2403BH3-2'	2/4/2003	Dark Brown Oily Sand	2,740	63,300	55,300	121,000	42,600	284,940	3,080	5,130	8,210
	5	SE14ML2403BH3-5'	2/4/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	10	SE14ML2403BH3-10'	2/4/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	15	SE14ML2403BH3-15'	2/4/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
4	2	SE14ML2403BH4-2'	2/4/2003	Dark Brown Oily Sand	12,300	94,400	104,000	162,000	57,800	430,500	4,920	8,370	13,290
	5	SE14ML2403BH4-5'	2/4/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	10	SE14ML2403BH4-10'	2/4/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
	15	SE14ML2403BH4-15'	2/4/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
5	2	SE14ML2403BH5-2'	2/4/2003	Dark Brown Oily Sand	152,000	357,000	566,000	579,000	202,000	1,856,000	16,100	14,500	30,600
	5	SE14ML2403BH5-5'	2/4/2003	Light Brown Sand	<20	<20	<20	<20	<20	<100	<5	<5	<10
	10	SE14ML2403BH5-10'	2/4/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
	15	SE14ML2403BH5-15'	2/4/2003	Red Clay	<20	<20	<20	<20	<20	<100	<5	<5	<10
NMOCD Remedial Threshold Goals					10					50			100

100 ppm Isobutylene calibration gas = 101 ppm

¹bgs - below ground surface

²VOC - Volatile Organic Contaminants/Constituents

³GRO - Gasoline Range Organics

⁴DRO - Diesel Range Organics

⁵TPH - Total Petroleum Hydrocarbon = GRO + DRO

⁶Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

⁷Italicized values are < the instrument detection limit.

⁸N/A Not Analyzed

Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.

TABLE 3

Summary of Soil Remediation Area Laboratory Analytical Results

Plains Pipeline, L.P. - Vacuum to Jal 14 #1 (NMOCD Ref. 1RP#377; Plains SRS #2003-00019)

Sample I.D.	Depth (feet)	Soil Status	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (p/m and o) (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C12 mg/Kg	DRO >C12-C28 mg/Kg	ORO >C28 C35 mg/Kg	TPH (C6-C35) (mg/Kg)
2003												
SEJ142103SP		Excavated	01-Feb-03	0.0676	--	--	--	--	--	--	--	--
SEJ142103COMP		Excavated	04-Feb-03	63	187	109.0	217.3	576.3	7,710	11,200	--	18,910
SE14ML21302COMP-SP		Excavated	13-Feb-03	0.01	0.027	0.027	0.08	0.144	--	--	--	--
SE14ML3603FLOWP 1		Excavated	06-Mar-03	<0.025	<0.025	0.035	0.18	0.216	23	153	--	176
SE14ML3603FLOWP 2		Excavated	06-Mar-03	<0.025	0.027	0.033	0.16	0.220	25	181	--	206
SE14ML3603FLOWP 3		Excavated	06-Mar-03	<0.025	0.029	0.026	0.12	0.176	16	102	--	118
SE14ML3603FLOWP 4		Excavated	06-Mar-03	<0.025	<0.025	0.030	0.16	0.193	20	121	--	141
SE14ML3603FLOWP 5		Excavated	06-Mar-03	<0.025	<0.025	<0.025	0.12	0.121	38	200	--	238
Final Excavation Limits	SE14ML3603NSW	In situ	06-Mar-03	<0.025	<0.025	<0.025	<0.025	0	<10.0	42.6	--	43
	SE14ML3603SSW	In situ	06-Mar-03	<0.025	<0.025	<0.025	<0.025	0	<10.0	80	--	80
	SE14ML3603WSW	In situ	06-Mar-03	<0.025	<0.025	<0.025	<0.025	0	<10.0	<10.0	--	0
	SE14ML3603ESW	In situ	06-Mar-03	<0.025	<0.025	<0.025	<0.025	0	<10.0	<10.0	--	0
	SE14ML3603BOTTOM	In situ	06-Mar-03	<0.025	<0.025	<0.025	0.047	0.047	29.5	439	--	469
SE14ML3603LANDFARM 1		In situ	06-Mar-03	0.814	17.3	24.4	65.6	108	3,070	10,100	--	13,170
SE14ML31703NWLF		In situ	17-Mar-03	0.067	1.64	4.8	15.5	21.9	1,570	8,131	--	9,701
SE14ML31703NELF		In situ	17-Mar-03	0.058	1.13	3.7	12.5	17.4	1,260	7,330	--	8,590
SE14ML31703SWLF		In situ	17-Mar-03	0.074	1.04	3.5	12.0	16.6	1,470	8,880	--	10,350
SE14ML31703SELF		In situ	17-Mar-03	0.06	1.36	4.2	13.8	19.5	1,780	10,000	--	11,780
SEL14ML42903LFCOMP		In situ	29-Apr-03	<0.025	<0.025	0.064	0.432	0.496	243	3,850	--	4,093
SEL14ML62503LFCOMP		In situ	25-Jun-03	<0.025	<0.025	<0.025	0.075	0.075	40	2,520	--	2,560
SE14M181903NWCOMP		In situ	19-Aug-03	<0.025	<0.025	<0.025	0.145	0.145	53.8	5,710	--	5,764
SE14M181903NECOMP		In situ	19-Aug-03	<0.025	<0.025	<0.025	0.050	0.050	64	5,460	--	5,524
SE14M181903SWCOMP		In situ	19-Aug-03	<0.025	<0.025	<0.025	0.110	0.110	104	6,170	--	6,274
SE14M181903SECOMP		In situ	19-Aug-03	<0.025	0.029	0.048	0.117	0.194	162	8,990	--	9,152
SE14M#1101403NWCOMP		In situ	14-Oct-03	<.020	<.020	<.020	<.060	<0.100	<5	1,960	--	1,960
SE14M#1101403NECOMP		In situ	14-Oct-03	<.020	<.020	<.020	<.060	<0.100	8.3	4,050	--	4,058
SE14M#1101403SWCOMP		In situ	14-Oct-03	<.020	<.020	<.020	<.060	<0.100	<5	1,720	--	1,720
SE14M#1101403SECOMP		In situ	14-Oct-03	<.020	<.020	<.020	<.060	<0.100	9.16	4,130	--	4,139

TABLE 3

Summary of Soil Remediation Area Laboratory Analytical Results

Plains Pipeline, L.P. - Vacuum to Jal 14 #1 (NMOCD Ref. 1RP#377; Plains SRS #2003-00019)

Sample I.D.	Depth (feet)	Soil Status	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (p/m and o) (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C12 mg/Kg	DRO >C12-C28 mg/Kg	ORO >C28 C35 mg/Kg	TPH (C6-C35) (mg/Kg)
2007												
Landfarm Q1-1'	1	In situ	01-Aug-07	ND	ND	ND	ND	ND	ND	240	--	240
Landfarm Q2-1'	1	In situ	01-Aug-07	ND	ND	ND	ND	ND	ND	513	--	513
Landfarm Q3-1'	1	In situ	01-Aug-07	ND	ND	ND	ND	ND	ND	525	--	525
Landfarm Q4-1'	1	In situ	01-Aug-07	ND	ND	ND	ND	ND	ND	266	--	266
2008												
Landfarm Q1-1' (SW)	1	In situ	02-Apr-08	<0.001	<0.001	<0.001	<0.003	<0.006	<10.0	220	--	220
Landfarm Q2-1' (SE)	1	In situ	02-Apr-08	<0.001	<0.001	<0.001	<0.003	<0.006	<10.0	247	--	247
Landfarm Q3-1' (NE)	1	In situ	02-Apr-08	<0.001	<0.001	<0.001	<0.003	<0.006	<10.0	151	--	151
Landfarm Q4-1' (NW)	1	In situ	02-Apr-08	<0.001	<0.001	<0.001	<0.003	<0.006	<10.0	227	--	227
NMOCD Remedial Threshold Goals				10				50				100

Bolded values are in excess of NMOCD Remediation Threshold Goals

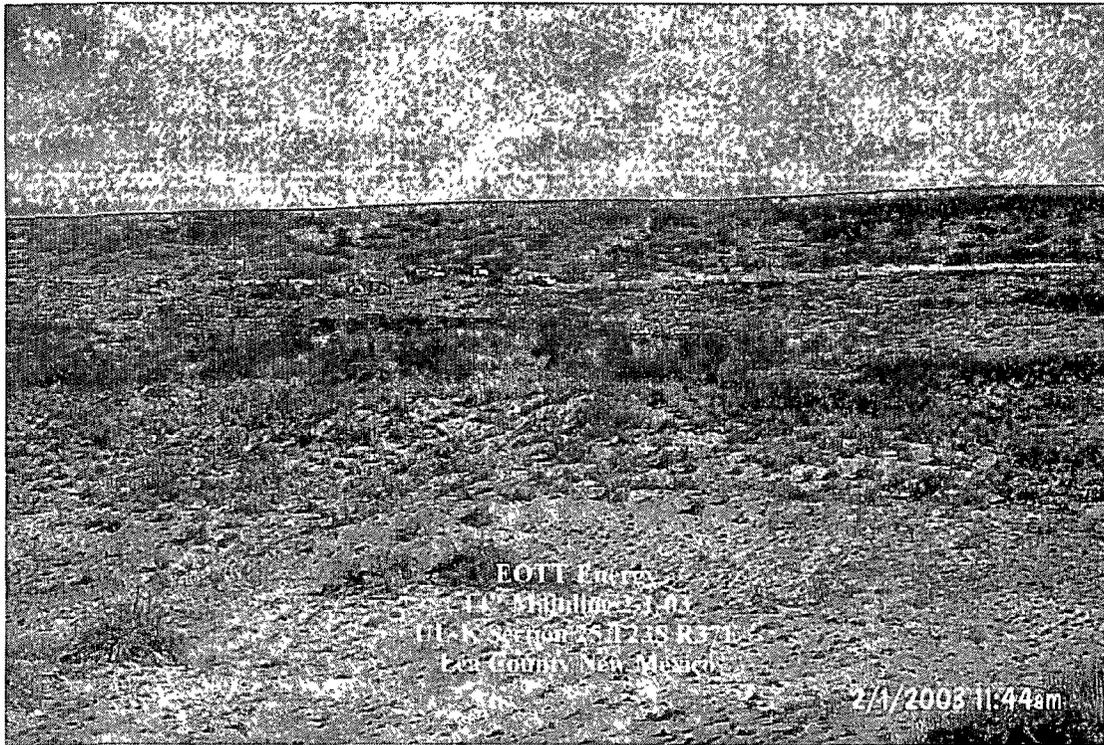
-- = Not Analyzed

J = Detected, but below the Reporting Limit. Therefore, result is an estimated concentration (CPL J-Flag)

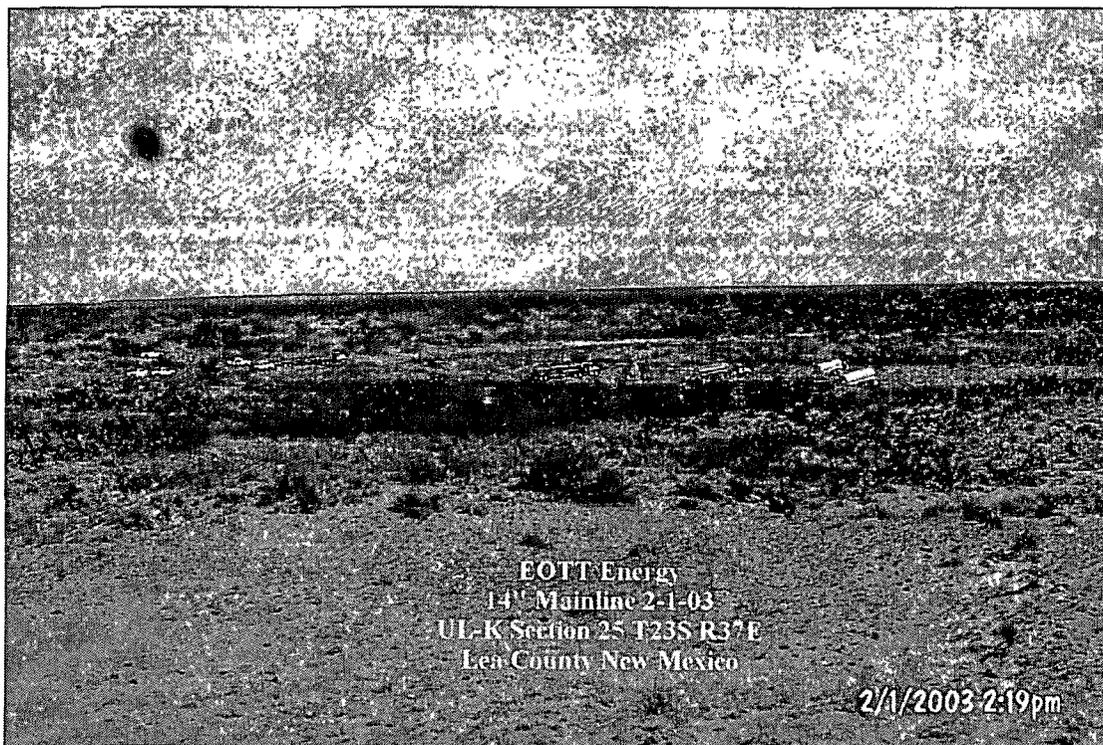
Nomenclature: BG = Background Soil Boring; BH=Bottom Hole; SW=Sidewall (E=east,W=west, S=south and N=north)

ATTACHMENTS

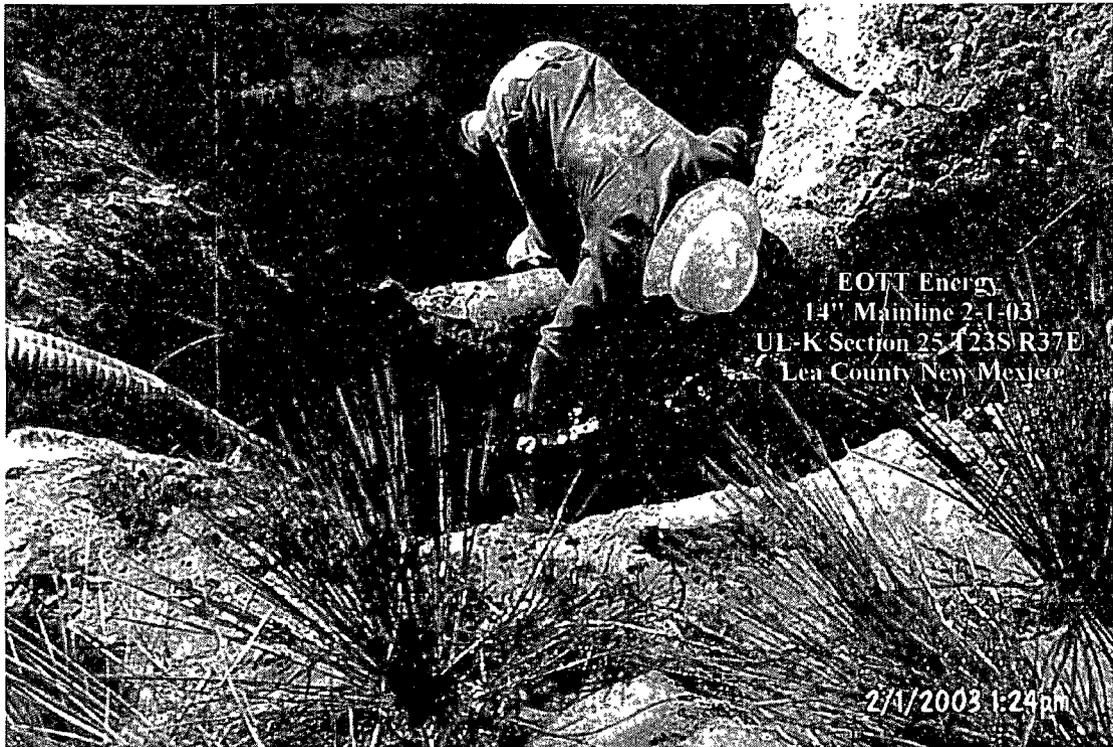
ATTACHMENT I
SITE PHOTOGRAPHS



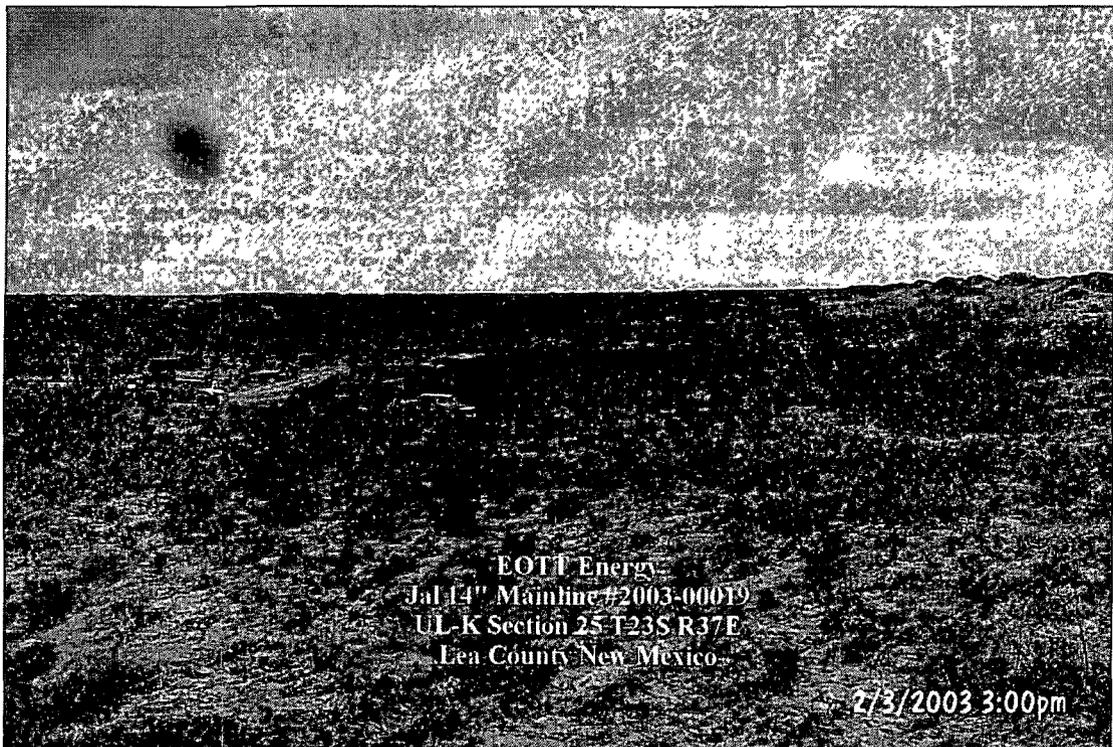
Photograph No. 1 – Southeasterly view across release area



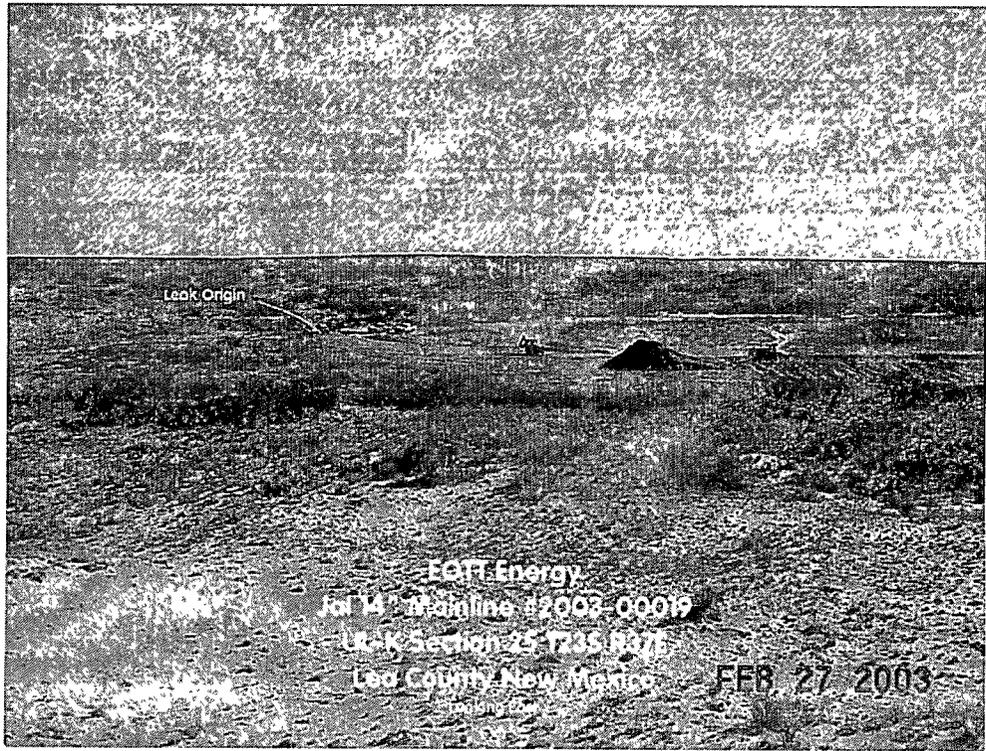
Photograph No. 2 – Southeasterly view across release area



Photograph No. 3 – Release point



Photograph No. 4 – Southerly view across release area



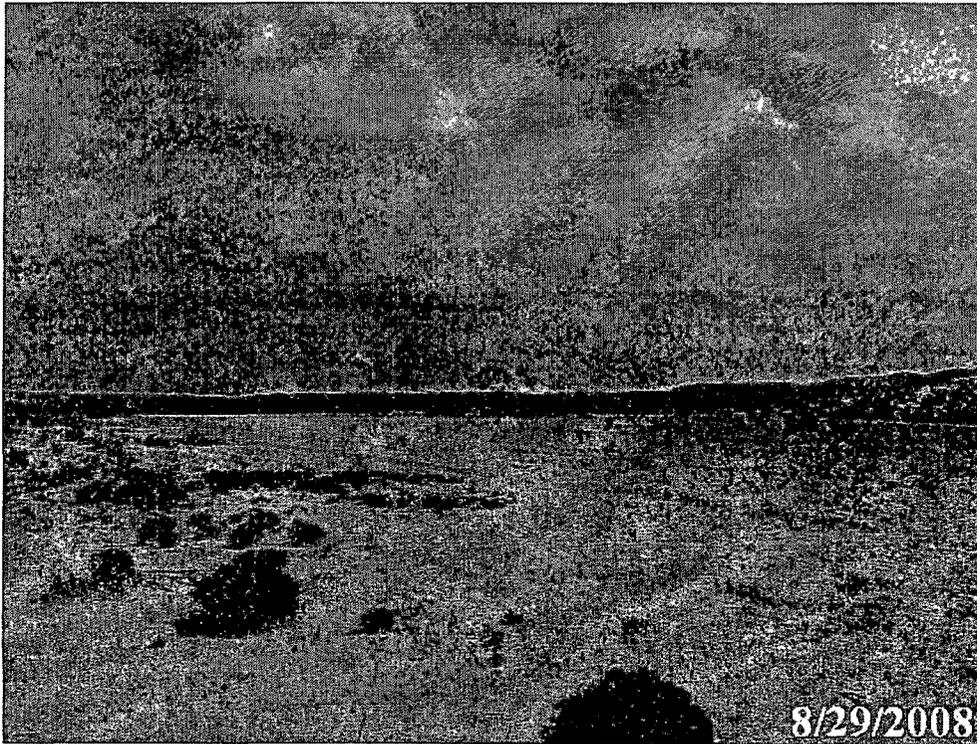
Photograph No. 5 – Easterly view across release area



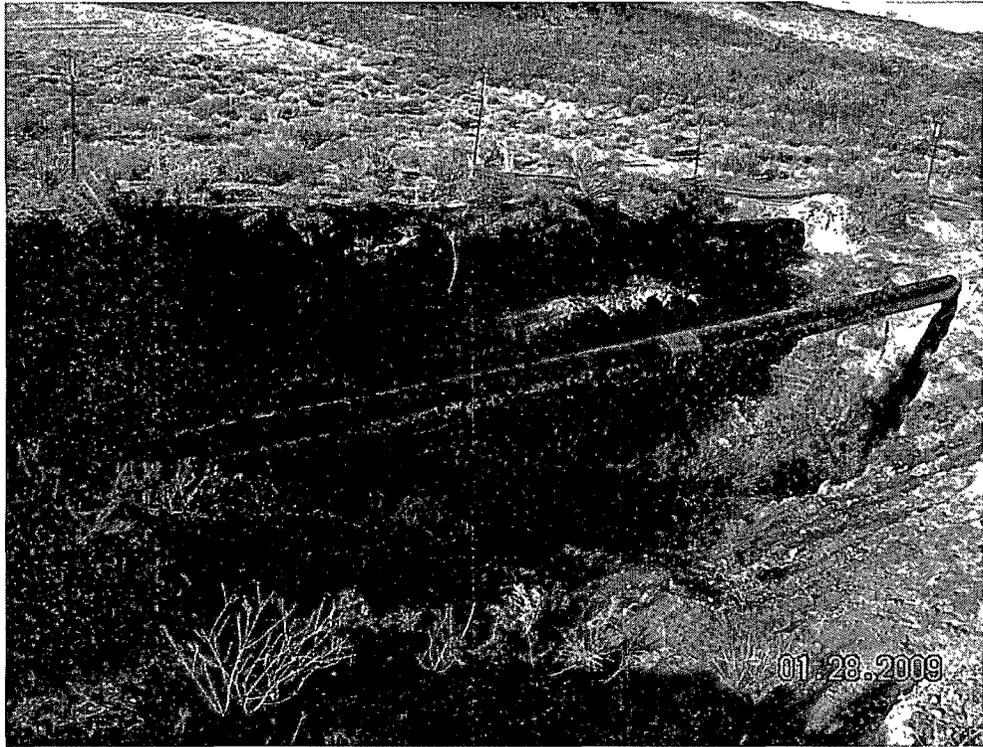
Photograph No. 6 – Southerly view across Soil Remediation Area



Photograph No. 7 – Northerly view across excavation



Photograph No. 8 – Southwesterly across Soil Remediation Area



Photograph No. 9 – Northerly across excavation and steel pipeline



Photograph No. 10 – Westerly across backfilled excavation and contoured Soil Remediation Area

ATTACHMENT II

**LABORATORY ANALYTICAL RESULTS
AND
CHAIN-OF-CUSTODY FORM**

ANALYTICAL DATA INCLUDED ON ATTACHED CD

ATTACHMENT III
SOIL BORING LOGS

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 2003-00019

Project Name: Plains - Vacuum to Jal 14' Mainline #1

Location: UL-K, Section 25, Township 23 South, Range 37 East

Boring Number: SB-1

Surface Elevation: 3,195-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
								Start Date: 2-3-03 Time: 1015 hrs Completion Date: 2-3-03 Time: 1140 hrs
1015			no	3.2			2'	2' SAND, Brown
1040			no	3.1			5'	5' SAND, Lt. Brown
1115			no	1.9			10'	10' SAND/Clay, Lt. Brown
1140			no	2.8			15'	15' SAND, Lt. Brown - fine End of Soil Boring at 15' bgs
							20'	
							25'	
							30'	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-In Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Drill Trailer

Backfill Method: Bentonite

Field Representative:

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 2003-00019

Project Name: Plains - Vacuum to Jal 14' Mainline #1

Location: UL-K, Section 25, Township 23 South, Range 37 East

Boring Number: SB-2

Surface Elevation: 3,195-feet amsl

Time	Sample Type	Recovery (Inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
1250			no	785			2'	2' SAND, Dark Brown Dily
1310			no	28.3			5'	5' SAND, Lt. Brown
1340			no	9.4			10'	10' SAND, Lt. Brown
1410			no	5.8			15'	15' CLAY, Red
								End of Soil Boring at 15' bgs

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level	Drilling Method:
-	-	-	-	-	-	Drill Trailer
-	-	-	-	-	-	Backfill Method: Bentonite
-	-	-	-	-	-	Field Representative:

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
 CONSULTING AND
 REMEDIAL CONSTRUCTION
 EUNICE, NEW MEXICO
 505-394-3481

Project Number: 2003-00019

Project Name: Plains - Vacuum to Jal 14' Mainline #1

Location: UL-K, Section 25, Township 23 South, Range 37 East

Boring Number: SB-3

Surface Elevation: 3,195-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: <u>2-4-03</u> Time: <u>1020 hrs</u>	Completion Date: <u>2-4-03</u> Time: <u>1115 hrs</u>	Description
1020			no	1,120			2'			2' SAND, Dark Brown
1035			no	7.0			5'			5' SAND, Lt. Brown
1055			no	7.4			10'			10' SAND, Lt. Brown
1115			no	1.9			15'			15' CLAY, Red
										End of Soil Boring at 15' bgs

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Drill Trailer

Backfill Method: Bentonite

Field Representative:

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
 CONSULTING AND
 REMEDIAL CONSTRUCTION
 EUNICE, NEW MEXICO
 505-394-3481

Project Number: 2003-00019

Project Name: Plains - Vacuum to Jal 14' Mainline #1

Location: UL-K, Section 25, Township 23 South, Range 37 East

Boring Number: SB-4

Surface Elevation: 3,195-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
								Start Date: 2-4-03 Time: 1130 hrs
								Completion Date: 2-4-03 Time: 1210 hrs
1130			no	688				2' SAND, Dark Oily
1140			no	40.2			5	5' SAND, Lt. Brown
1150			no	7.2			10	10' CLAY, Red
1210			no	7.0			15	15' CLAY, Red
								End of Soil Boring at 15' bgs
							20	
							25	
							30	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level
-	-	-	-	-	-
-	-	-	-	-	-

Drilling Method: Drill Trailer

Backfill Method: Bentonite

Field Representative:

Log Of Test Borings

(NOTE - Page 1 of 1)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 2003-00019

Project Name: Plains - Vacuum to Jal 14' Mainline #1

Location: UL-K, Section 25, Township 23 South, Range 37 East

Boring Number: SB-5

Surface Elevation: 3,195-feet amsl

Time	Sample Type	Recovery (Inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
1315			no	320			2'	2' SAND, Dark Oily
1325			no	45.7			5'	5' SAND, Lt. Brown
1340			no	9.1			10'	10' CLAY, Red
1400			no	8.3			15'	15' CLAY, Red
								End of Soil Boring at 15' bgs

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level	Drilling Method
-	-	-	-	-	-	Drill Trailer
-	-	-	-	-	-	Backfill Method: Bentonite
-	-	-	-	-	-	Field Representative:

ATTACHMENT IV

**INFORMATION AND METRICS FORM
COPY OF INITIAL NMOCD FORM C-141**



Information and Metrics

Incident Date:
2-1-03

NMOCD Notified:
2-1-03

Site: Vacuum to Jal 14" Mainline #1 **Assigned Site Reference :** #2003-00019

Company: Plains Pipeline, L.P.

Street Address: 3112 West Highway 82

Mailing Address:

City, State, Zip: Lovington NM 88260

Representative: Camille (Reynolds) Bryant

Representative Telephone: (575) 396-3341 (office); (575) 441-0965 (cellular)

Telephone:

Fluid volume released (bbls): 1,510 **Recovered (bbls):** 1,360

>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.
(Also applies to unauthorized releases >500 mcf Natural Gas)

5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)

Leak, Spill, or Pit (LSP) Name: Vacuum to Jal 14" Mainline #1

Source of contamination: crude oil pipeline

Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico

LSP Dimensions : ~500' X 200'

LSP Area: ~67,010 ft²

Location of Reference Point (RP):

Location distance and direction from RP:

Latitude: N 32° 16' 18.82"

Longitude: W 103° 07' 01.62"

Elevation above mean sea level: 3,195 feet

Feet from North Section Line:

Feet from West Section Line:

Location- Unit or ¼¼: NE¼ of the SW¼ **Unit Letter:** K

Location- Section: 25

Location- Township: T23S

Location- Range: R37E

Surface water body within 1000' radius of site: zero (0)

Domestic water wells within 1000' radius of site: zero (0)

Agricultural water wells within 1000' radius of site: zero (0)

Public water supply wells within 1000' radius of site: zero (0)

Depth from land surface to groundwater (DG): ~30'

Depth of contamination (DC): ~2'

Depth to groundwater (DG - DC = DtGW): ~28'

1. Groundwater	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: 20 points	If <1000' from water source, or; <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: 10 points		200-1000 horizontal feet: 10 points
If Depth to GW >100 feet: 0 points	If >1000' from water source, or; >200' from private domestic water source: 0 points	>1000 horizontal feet: 0 points

Site Rank (1+2+3) = 20 + 10 + 0 = 30

Total Site Ranking Score and Acceptable Concentrations

Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

¹100 ppm field VOC headspace measurement may be substituted for lab analysis

New Mexico State Land Office

Field Operations Division

(505) 827-5723 P.O. Box 1148 Santa Fe, NM 87504
 (575) 392-8736 2702-D N. Grimes Hobbs, NM 88240
 (575) 885-1323 N. Canal, Suite B Carlsbad, NM 88220
 (575) 623-4979 1001 S. Atkinson Roswell, NM 88210
 (575) 763-0796 105 E. 6th St. Clovis, NM 88101



REVEGETATION FORM

1. General Information

Site name: Vacuum to Jal 14" Mainline #1		Lease No.:					
U/L or Qtr/Qtr K	Section 25	Township 23S	Range 37E	County Lea	Latitude N32° 16' 18.82"	Longitude W103° 07' 01.62"	
Company Name: Plains All American Pipeline			Contact Name: Jason Henry				
Phone no.: (806) 592-8305		Email: jhenry@paalp.com					
Address: 2530 State Highway 214, Denver City, Texas 79323							
Spill / Release <input checked="" type="checkbox"/>		P&A Well <input type="checkbox"/>		Pit Closure <input type="checkbox"/>		Facility Closure <input type="checkbox"/>	
OCD Spill No. IRP#377		API No.		Type:		Other <input type="checkbox"/>	
Site size: ±3.44 acres		±150,000 square feet		Map detail of site attached <input checked="" type="checkbox"/>			
Additional information:							

3. Soils

**Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input type="checkbox"/>	Bioremediated <input checked="" type="checkbox"/>	Imported <input type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):		
Texture: Rough		Describe soil & subsoil: Bioremediated topsoil & in situ sandy/loamy soil				
Soil prep methods: Rip <input type="checkbox"/>	Depth(in):	Disc <input checked="" type="checkbox"/>	Depth (in): 3-6	Rollerpack <input type="checkbox"/>		
Date completed: 1/29/09	Photos attached <input checked="" type="checkbox"/>		Number of photos: 2			

4. Seeding

**Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: Sandy Land Mix		Seeding date: 06/12/09		
Is seed mix divided into submixes based on seed size?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Drill Seeder <input checked="" type="checkbox"/>		Broadcast <input type="checkbox"/>		Hydroseeding <input type="checkbox"/>		
Drill Type: Rangeland (Truax Model)		Method:				
Soil conditions during seeding: Dry <input type="checkbox"/> Damp <input checked="" type="checkbox"/> Wet <input type="checkbox"/>						
Photos attached <input checked="" type="checkbox"/>		Observations:				
Number of photos: 4						

5. Additional Methods

Mulching <input type="checkbox"/>	Crimping <input type="checkbox"/>	Fertilizer <input type="checkbox"/>	Other <input type="checkbox"/>		
Mulch type:		Type:		Describe:	
Tons/acre:		Lbs/acre:			
Photos attached <input type="checkbox"/>		Observations:			
Number of photos:					

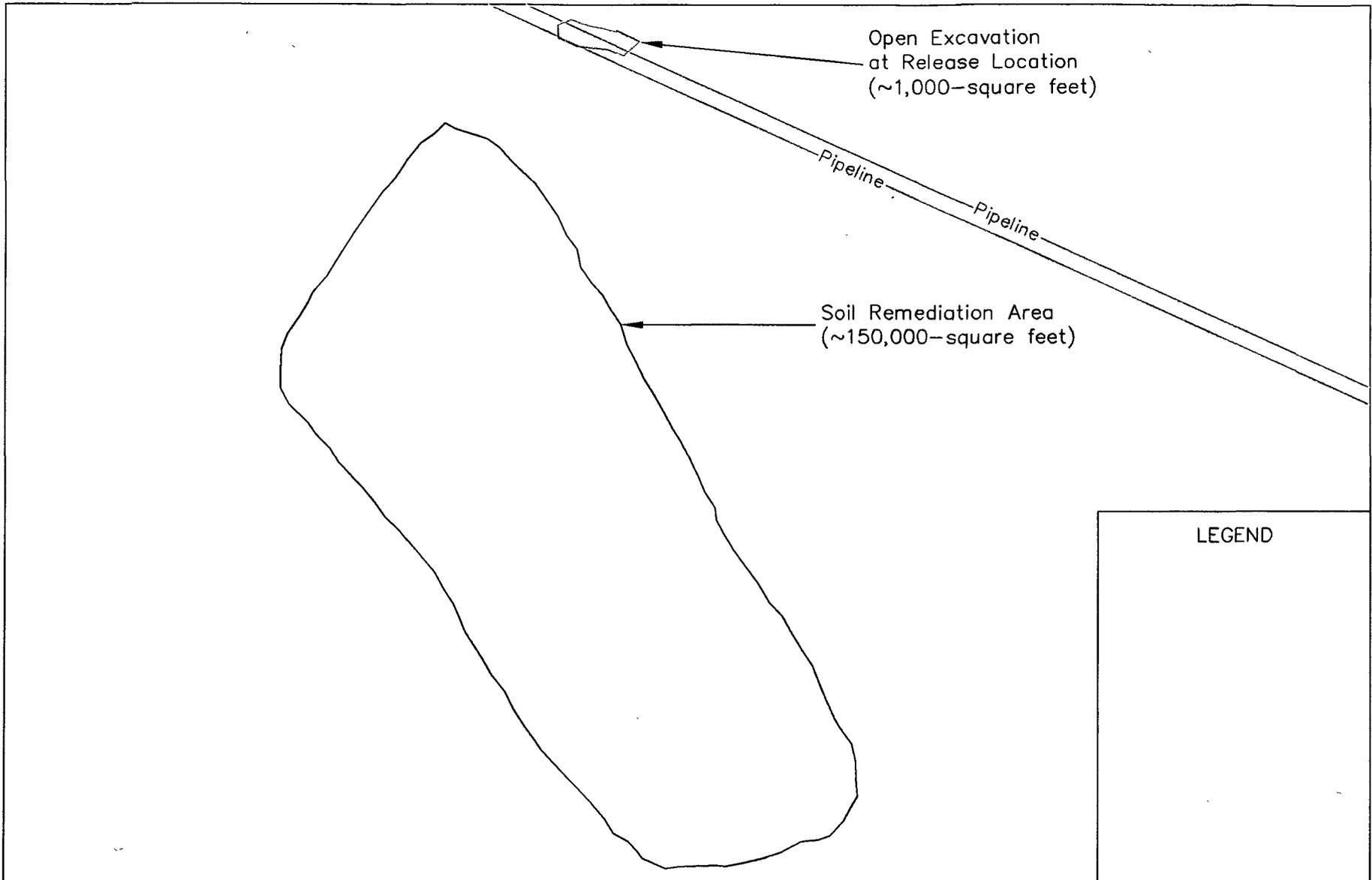
Additional Information: In an endeavor to loosen and aerate the bioremediated soil, disturbed area (±150,000 sq. ft. or ±3.44 acres) was cultivated utilizing a disk-tiller mounted on a farm tractor. Disking also allowed the soil to break into a granular state free of large earthen clumps and clods. Following this activity, the disturbed area was drill seeded utilizing a rangeland type seeder (Truax Company Model Flex-II). Per surface grazer's (D.K. Boyd) instructions, a Sandy Land Seed Mixture was implanted into the disturbed area. Sandy Land Seed Mixture consisted of Pastura Little Bluestem (2.00 PLS/acre), Cheyenne Indiangrass (4.00 PLS/Acre), Kliengrass (0.50 PLS/acre), Sand Dropseed (0.50 PLS/acre) and Plains Bristlegrass (1.0 PLS/acre) for a combined 8.00 PLS/acre. Mixture was drill seeded greater than prescribed rate of one and one-half (1.5) times normal rate or 12.0 PLS/acre for a total usage of 63.2 PLS per disturbed land acreage. Disturbed area soil was damp at time of seeding activities due to intermittent thunder storms.

6. Certification

I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Jason Henry	Title: Remediation Coordinator	Date: 08/06/2009
Signature: <i>Jason Henry</i>		

* Mail form and attachments to the Santa Fe office address listed above, attention: FOD- Environmental.



LEGEND

Figure 8
 Remediation Area Map
 Plains Pipeline, L.P.
 Vacuum to Jal Mainline #1

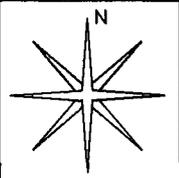
Lea County, New Mexico
 NE 1/4 of the SW 1/4, Sec. 25, T23S, R37E
 N 32° 16' 18.82" W 103° 07' 01.62"
 Elevation: 3,195 feet amsl

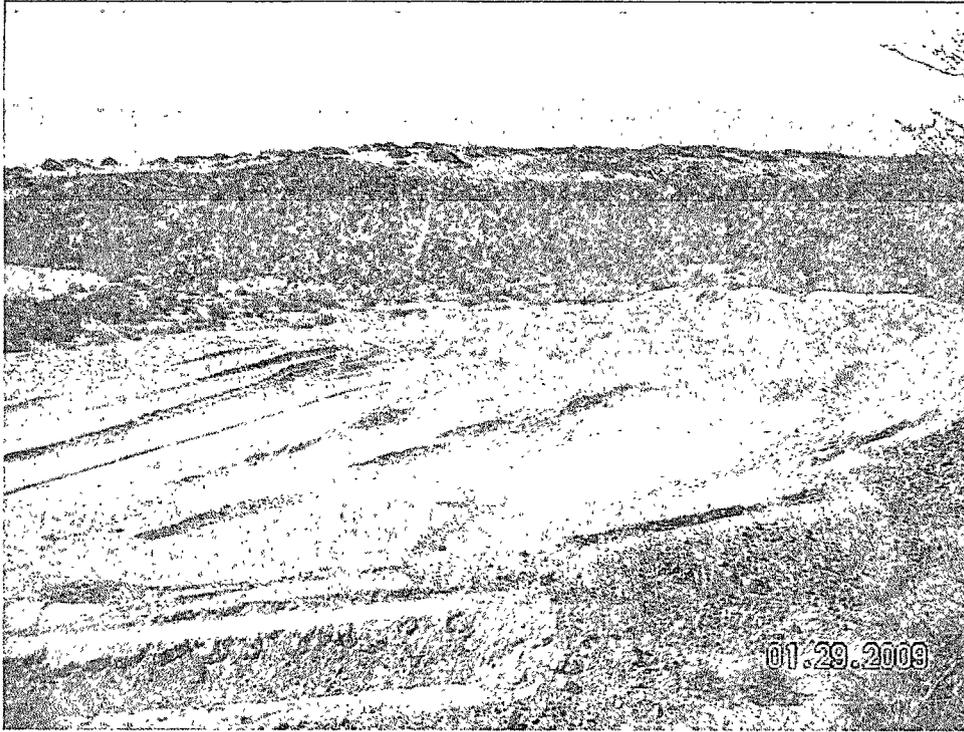
DWG By: D Dominguez
 August 2008

0 120 240
 Feet

REVISED:
 Sept 2008

SHEET
 1 of 1





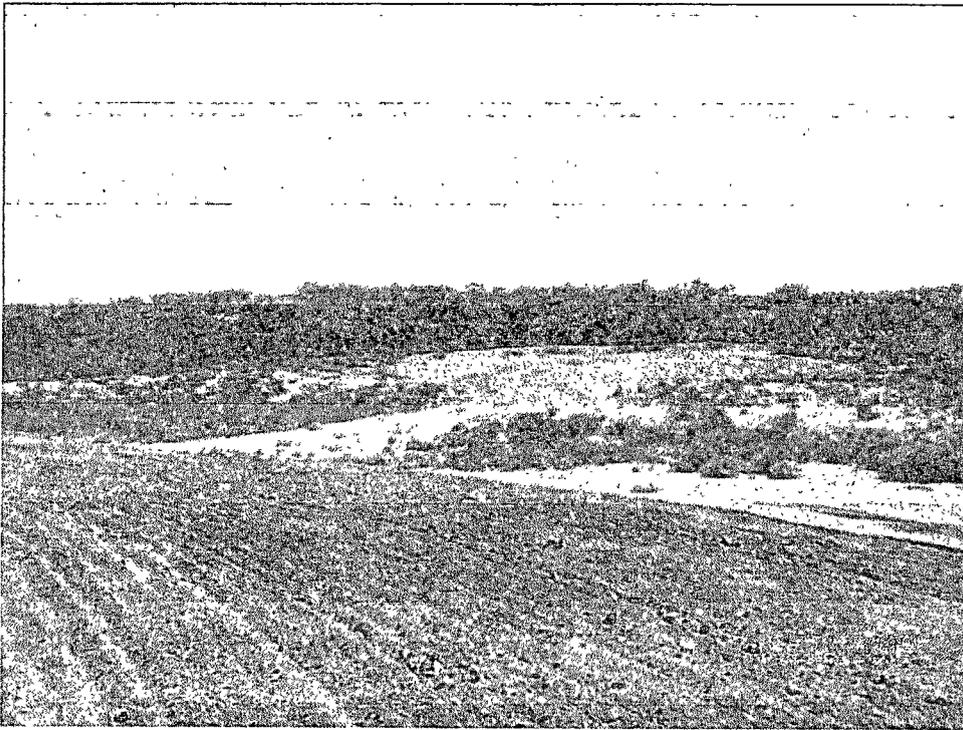
Photograph No.1 - Looking westerly at loose soil and earthen berm at point of release prior to seeding activities



Photograph No. 2 – Looking southerly at bioremediated disturbed area prior to seeding activities



Photograph No. 3 – Looking westerly at disced bioremediated disturbed area



Photograph No. 4 – Looking northerly at disced bioremediated area and point of release



Photograph No. 5 – Looking southerly at disked bioremediated area



Photograph No. 6 – Looking south at disked bioremediated area and parcel of natural flora