

1R - 385

**GENERAL
CORRESPONDENCE**

YEAR(S):

1R-385

TABLE 5

Summary of Soil Analytical Results

Vacuum 10-Inch to Jal - Ref #2002-10248

Sample ID	Sample Date	Field Analyses (PID) (ppm)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethylbenzene (µg/Kg)	m,p-Xylenes (µg/Kg)	o-Xylene (µg/Kg)	Total BTEX (µg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)
SLEVI022504W-NE5W	25-Feb-04		<20	312	1,920	2,910	1,800	6,942	608	18,400	19,008
SLEVI022504W-F5W	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504W-W5W	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	7.31	7
SLEVI022504W-SE5W	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504W-SBH	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504W-SWSW	25-Feb-04		<20	52	177	205	396	830	106	3,690	3,796
SLEVI022504W-NBH	25-Feb-04		<20	<20	<20	<40	<20	<120	179	8,690	8,869
SLEVI022504W-NWSW	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504E-NWSW	25-Feb-04		<20	<20	<20	<40	<20	<120	7.15	1,980	1,987
SLEVI022504E-SBH	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	4.78	5
SLEVI022504E-W5W	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504E-NBH	25-Feb-04		<20	181	769	1,270	714	2,934	337	9,640	9,977
SLEVI022504E-NE5W	25-Feb-04		<20	<20	34.4	47	168	249	136	6,580	6,716
SLEVI022504W-SWSW	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	<2.5	<7.5
SLEVI022504W-SE5W	25-Feb-04		<20	<20	<20	<40	<20	<120	<5	13.3	13
EE Bottom SXP 1	5-May-05		<25	26.8	38.2	209	49	323	208	2,170	2,378
EE Bottom SXP 1-B	17-May-05		<25	<25	<25	<25	<25	<125	<10.0	35.4	35.4
EE Wall SXP1	5-May-05		<25	15 ⁴	37.2	97.3	37.6	187	<10.0	<10.0	<10.0
EE Bottom SXP 2	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	<10.0	<10.0
EE Wall SXP 2	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	<10.0	<10.0
EE Bottom SXP 3	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	<10.0	<10.0
EE Wall SXP 3	5-May-05		<25	<25	<25	53.7	<25	53.7	<10.0	<10.0	<10.0
EE SXP 4	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	<10.0	<10.0
EE SXP 5	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	11.6	11.6
EE SXP 6	5-May-05		<25	<25	<25	62.9	<25	62.9	12.1	181	193
EE SXP 6-B	17-May-05		<25	<25	<25	44.1	28.1	72.2	<10.0	<10.0	<10.0
EE SXP 7	5-May-05		<25	<25	<25	46.0	<25	46.0	6.88 ⁴	139	139
EE SXP 7-B	17-May-05		<25	<25	<25	<25	<25	<125	<10.0	<10.0	<10.0
EE SXP 8	5-May-05		<25	<25	<25	<25	<25	<125	<10.0	9.66 ⁴	<10.0
EE SXP 9	5-May-05		<25	<25	<25	<25	<25	<125	86.4	879	965
EE SXP -9	17-May-05		<25	<25	<25	<25	<25	<125	<10.0	76.8	76.8
EE SXP 10	5-May-05		<25	<25	<25	45.0	<25	<125	7.43 ⁴	80.8	80.8
WE S-1	23-Jun-05	0.0									
WE S-2	23-Jun-05	0.0									
WE S-3	23-Jun-05	0.0									
WE W-1	23-Jun-05	0.0									
WE W-2	23-Jun-05	1.9									

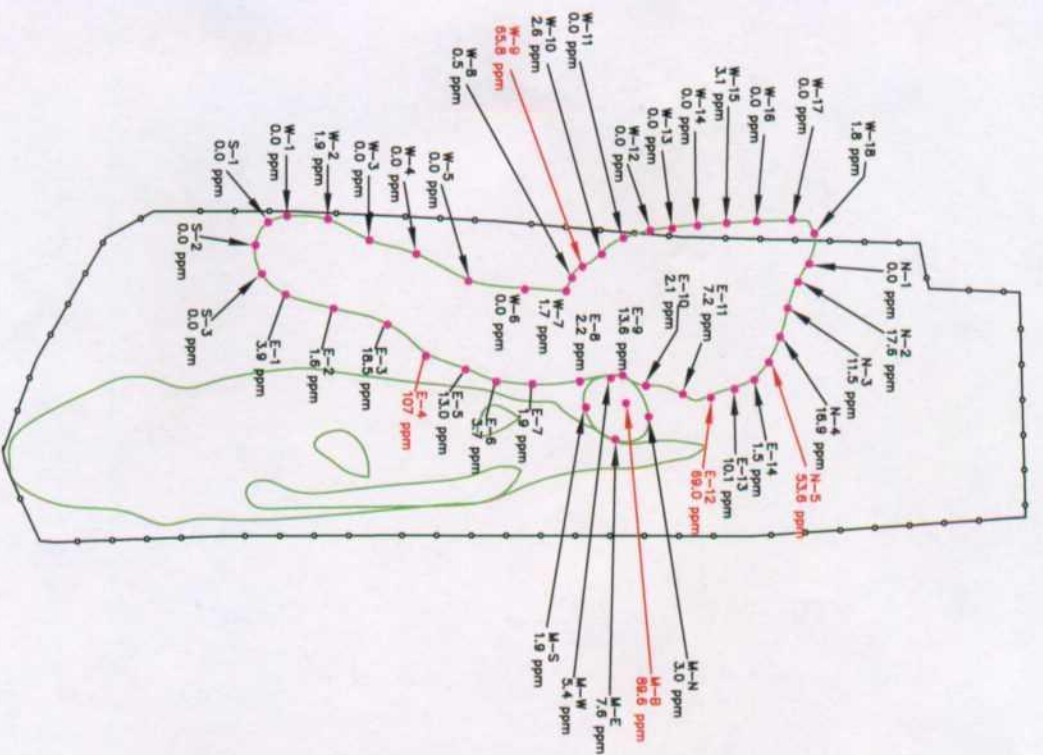
TABLE 5

Summary of Soil Analytical Results

Vacuum 10-Inch to Jal - Ref #2002-10248

Sample ID	Sample Date	Field Analyses (PID) (ppm)	Benzene ($\mu\text{g}/\text{Kg}$)	Toluene ($\mu\text{g}/\text{Kg}$)	Ethylbenzene ($\mu\text{g}/\text{Kg}$)	m,p-Xylenes ($\mu\text{g}/\text{Kg}$)	o-Xylene ($\mu\text{g}/\text{Kg}$)	Total BTEX ($\mu\text{g}/\text{Kg}$)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)
WE-M-S	23-Jun-05	1.9									
WE-M-W	23-Jun-05	5.4									
WE-M-B	23-Jun-05	89.6									
NMOC Remedial Thresholds			10,000					50,000			100

¹ Bolded values are in excess of the NMOC Remedial Thresholds² NA : Not Analyzed³ NS : Not Sampled⁴ Detected, but below the Reporting Limit; therefore, result is an estimated concentration.



LEGEND

Overhead Utilities

Fence

Figure 1

West Excavation Sampling Locations
Plains All American Pipeline, L.P.
Vacuum 10" to Jal

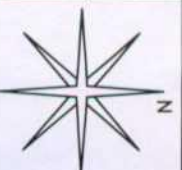
Leas County, New Mexico
SW 1/4 of the SW 1/4, Sec. 20, T19S, R37E
N 32° 38' 21.3" W 103° 16' 46.2"
Elevation: 3,627 feet amsl

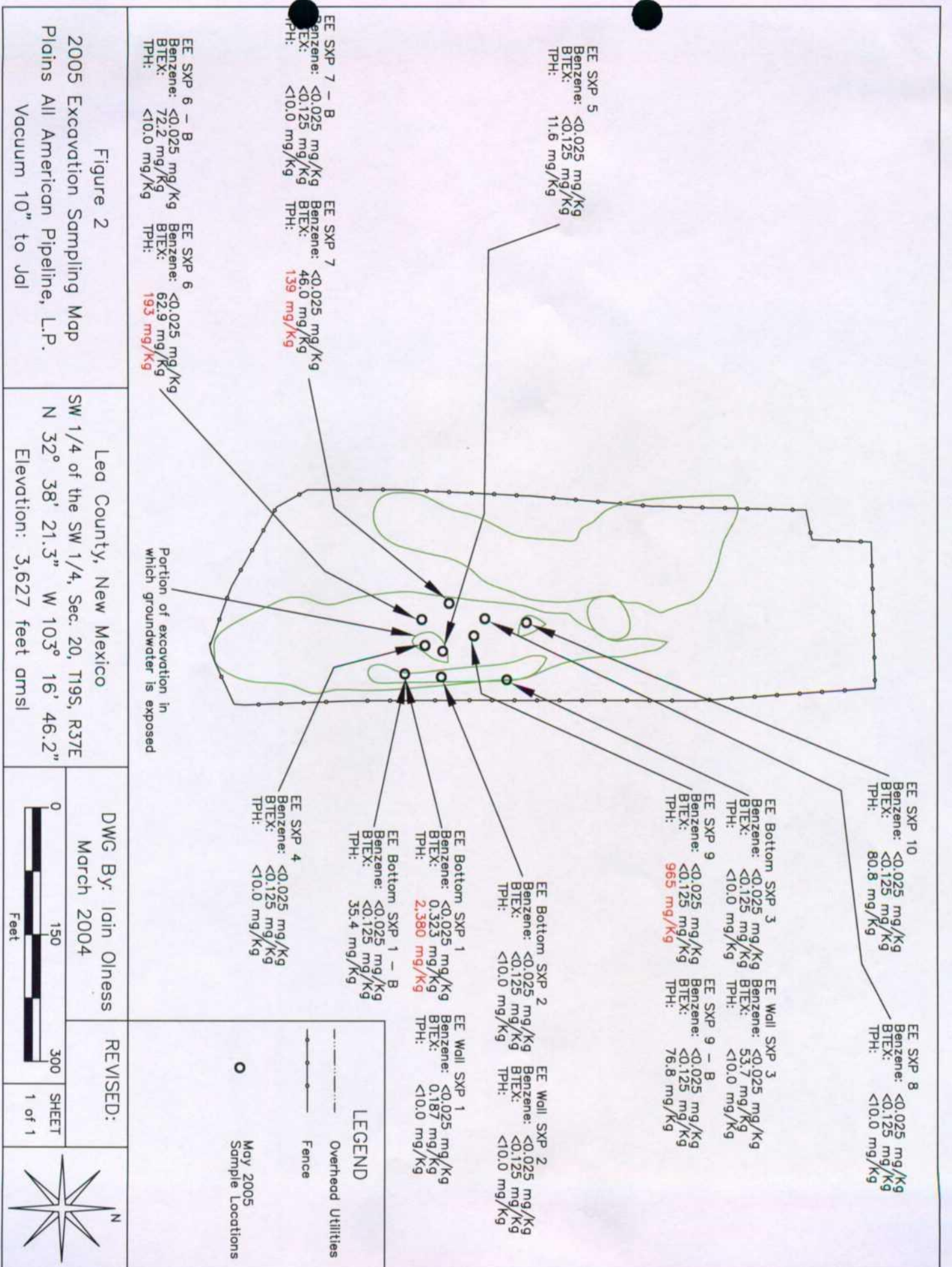
DWG By: Iain Olness
March 2004

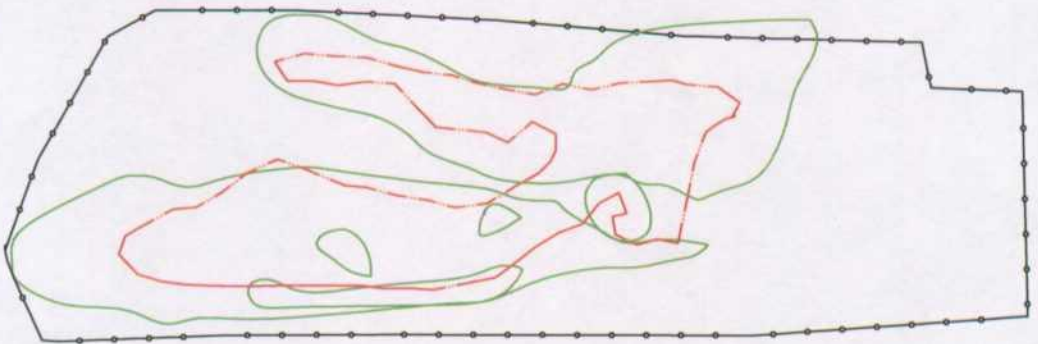
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1 of 1







LEGEND

--- Overhead Utilities

--- Fence

Figure 3
Site Map

Plains All American Pipeline, L.P.
Vacuum 10" to Jol

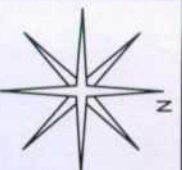
Lea County, New Mexico
SW 1/4 of the SW 1/4, Sec. 20, T19S, R37E
N 32° 38' 21.3" W 103° 16' 46.2"
Elevation: 3,627 feet amsl

DWG By: Iain Olness
March 2004

REVISED:



SHEET
1 of 1





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

November 22, 2005

Ms. Camille Reynolds
Plains All American Pipeline
3112 West Highway 82
Lovington, NM 88260

RE: Plains Vacuum 10" to Jal Abatement Site
SW/4 SW/4 of Section 20, Township 19 South, Range 37 East
Plains Ref 2002-10248, NMOCD Ref 1R-0385

Dear Ms. Reynolds:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the analyses submitted by Environmental Plus, Inc. (EPI) on behalf of Plains All American Pipeline (Plains) for the above-referenced site. Backfilling operations at this site may commence. Such backfilling activities are to be described in the next report submitted by EPI on behalf of Plains, under the report heading summarizing "Field Activities" since the last report.

All other items under Section VIII "Recommendations" included in the annual monitoring report, dated March 29, 2004, shall be completed as shown.

NMOCD approval of backfilling at this site does not relieve Plains should its operations prove to have been harmful to public health or the environment. Nor does it relieve Plains of its responsibility to comply with the rules and regulations of any other local, state or federal governmental agency.

If you have any questions, contact me at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin
Environmental Bureau

Copy: Iain Olness, EPI

Martin, Ed, EMNRD

From: Iain Olness [iolness@envplus.net]
Sent: Monday, November 21, 2005 2:23 PM
To: Martin, Ed, EMNRD
Cc: Camille (Plains)
Subject: Plains Vacuum 10" to Jal (Ref. #2002-10248)
Attachments: Excavation Data Table.pdf; WE ANALYTICAL RESULTS.pdf; EE Analytical Results.pdf; 2004 Sampling.pdf; MW-9 Soil Analytical.pdf; MW-9 Groundwater Analytical.pdf; MW Location Map (103105).pdf; MW-9 Construction Diagram.pdf; MW-9 Soil Boring (1).pdf; MW-9 Soil Boring (2).pdf

Dear Mr. Martin:

Per Camille Reynolds (Plains) request, EPI submits the attached table documenting analytical results for samples collected from the excavation and maps documenting the sample locations. I have also attached a site map showing the locations of all the monitoring/recovery wells, MW-9 monitoring well construction diagram and soil boring logs. In addition, attached are the analytical results for the soil samples collected during the installation of groundwater monitoring well MW-9 and groundwater sample collected from the aforementioned well on September 20, 2005.

Should you have any questions or concerns, please feel free to contact me at (505) 394-3481 or via e-mail at iolness@envplus.net.

Sincerely,

ENVIRONMENTAL PLUS, INC.

Iain A. Olness, P.G.
Hydrogeologist

Environmental Plus, Inc.
P.O. Box 1558
Eunice, NM 88231

(505) 394-3481
(505) 394-2601 (facsimile)

Scanned by McAfee e250 Appliance

11/22/2005

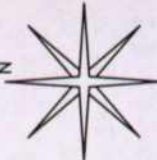
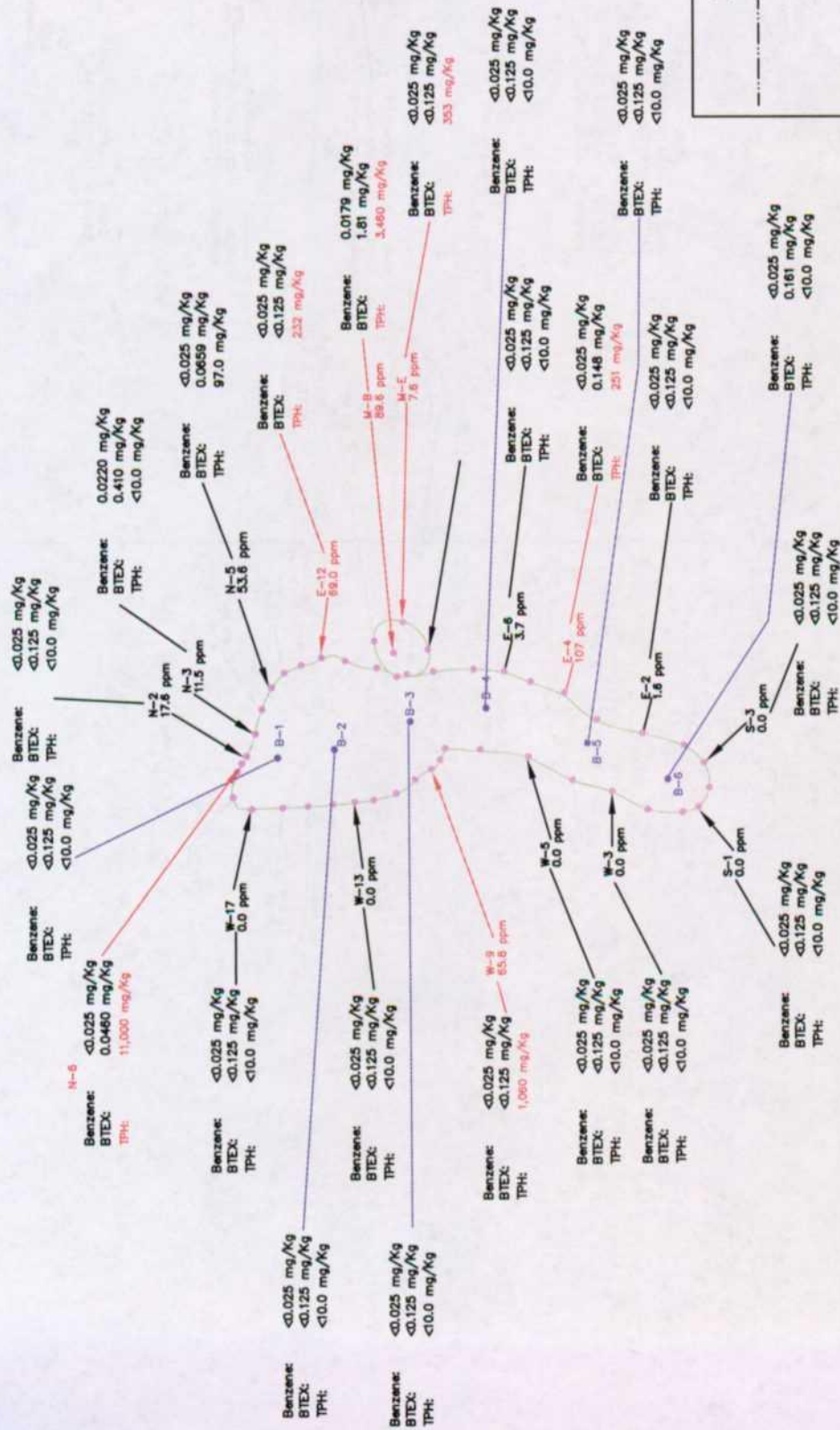
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Vacuum 10-Inch to Jal - Ref #2002-10248

Sample ID	Sample Date	Field Analyses (PID)	Benzene ($\mu\text{g/Kg}$)	Toluene ($\mu\text{g/Kg}$)	Ethylbenzene ($\mu\text{g/Kg}$)	m,p-Xylenes ($\mu\text{g/Kg}$)	o-Xylene ($\mu\text{g/Kg}$)	Total BTEX ($\mu\text{g/Kg}$)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)
WE M-E	23-Jun-05	7.6									
WE M-S	23-Jun-05	1.9									
WE M-W	23-Jun-05	5.4									
WE M-B	23-Jun-05	89.6									
NMOCD Remedial Thresholds			10,000					50,000			100

¹ *Italicized* values are in excess of the NMOCD Remediation Thresholds² NA : Not Analyzed³ NS : Not Sampled⁴ Detected, but below the Reporting Limit; therefore, result is an estimated concentration.



REVISED:

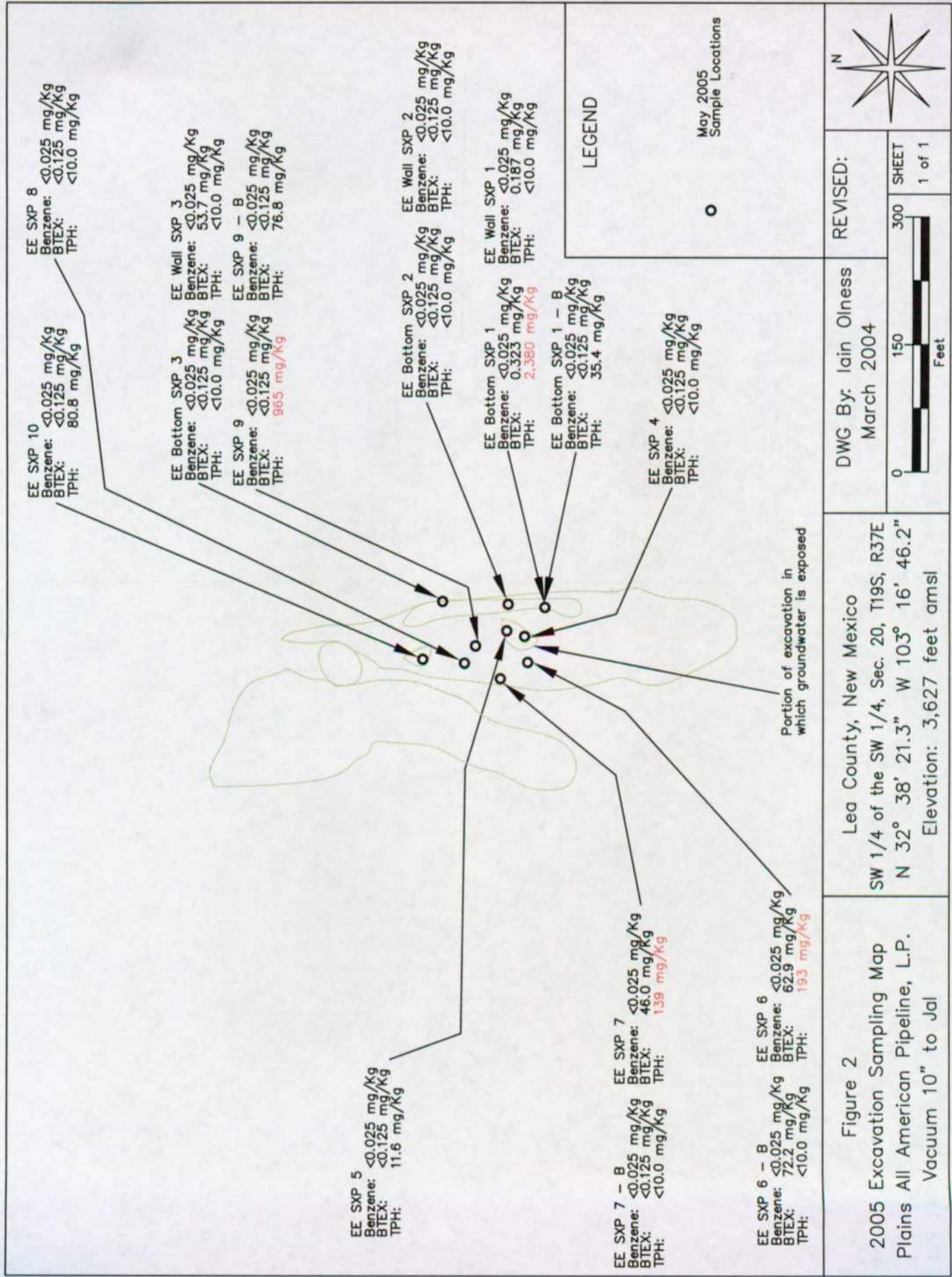
DWG By: Iain Olness
 March 2004

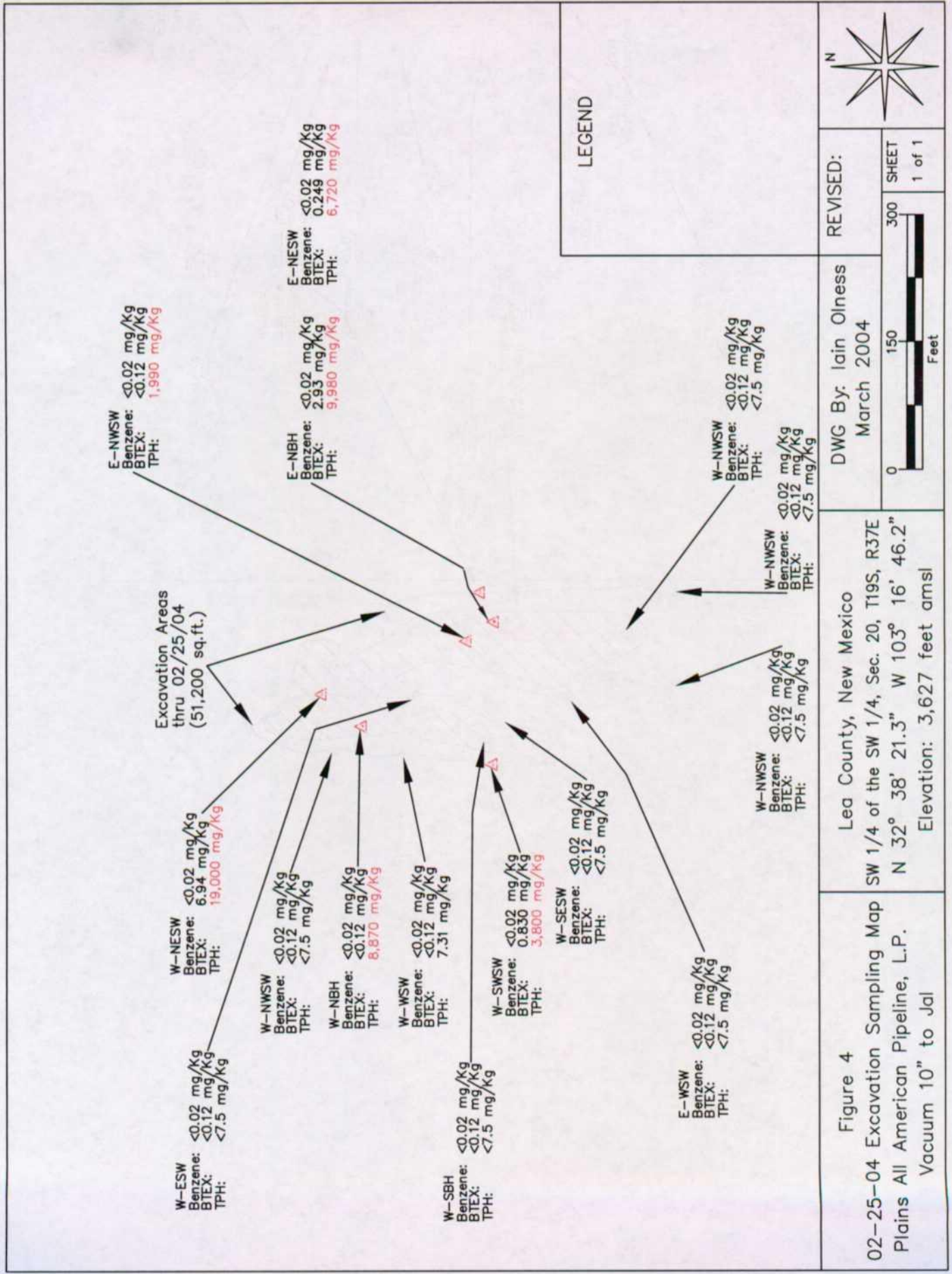
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 1 of 1

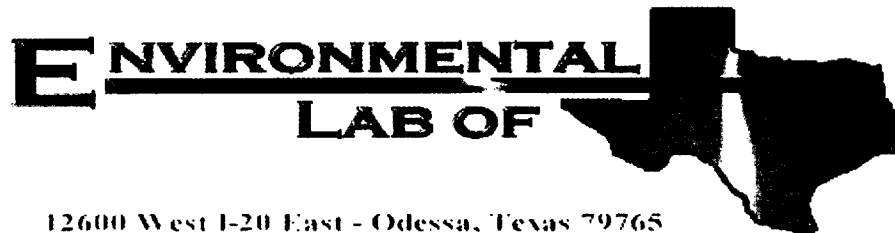


Lea County, New Mexico
 SW 1/4 of the SW 1/4, Sec. 20, T19S, R37E
 N 32° 38' 21.3" W 103° 16' 46.2"
 Elevation: 3,627 feet amsl

Figure 3
 Site Map
 Plains All American Pipeline, L.P.
 Vacuum 10" to Jal







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: Vacuum 10" to Jal

Project Number: 2002-10248

Location: None Given

Lab Order Number: 5I20006

Report Date: 09/28/05

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:
09/28/05 13:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-9 (5')	5I20006-01	Soil	09/16/05 11:30	09/20/05 12:17
MW-9 (10')	5I20006-02	Soil	09/16/05 11:43	09/20/05 12:17
MW-9 (15')	5I20006-03	Soil	09/16/05 11:52	09/20/05 12:17
MW-9 (18')	5I20006-04	Soil	09/16/05 12:04	09/20/05 12:17
MW-9 (20')	5I20006-05	Soil	09/16/05 12:13	09/20/05 12:17

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914
Reported:
09/28/05 13:54

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (5') (5120006-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI52303	09/23/05	09/24/05	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		84.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI52106	09/21/05	09/22/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		85.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		90.6 %	70-130		"	"	"	"	
MW-9 (10') (5120006-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI52303	09/23/05	09/24/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	0.0370	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		115 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI52106	09/21/05	09/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		77.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.0 %	70-130		"	"	"	"	
MW-9 (15') (5120006-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI52303	09/23/05	09/24/05	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		87.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI52106	09/21/05	09/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:
09/28/05 13:54

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (15') (5I20006-03) Soil									
Surrogate: 1-Chlorooctane		74.4 %	70-130		EI52106	09/21/05	09/21/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		98.4 %	70-130		"	"	"	"	
MW-9 (18') (5I20006-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI52303	09/23/05	09/24/05	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		80.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.2 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI52106	09/21/05	09/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		76.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.6 %	70-130		"	"	"	"	
MW-9 (20') (5I20006-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI52303	09/23/05	09/24/05	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		97.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.0 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI52106	09/21/05	09/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		79.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		93.8 %	70-130		"	"	"	"	

Environmental Lab of Texas

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914
Reported:
09/28/05 13:54

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (5') (5I20006-01) Soil									
% Moisture	10.0	0.1	%	1	EI52101	09/21/05	09/21/05	% calculation	
MW-9 (10') (5I20006-02) Soil									
% Moisture	8.7	0.1	%	1	EI52101	09/21/05	09/21/05	% calculation	
MW-9 (15') (5I20006-03) Soil									
% Moisture	8.4	0.1	%	1	EI52101	09/21/05	09/21/05	% calculation	
MW-9 (18') (5I20006-04) Soil									
% Moisture	18.3	0.1	%	1	EI52101	09/21/05	09/21/05	% calculation	
MW-9 (20') (5I20006-05) Soil									
% Moisture	20.4	0.1	%	1	EI52101	09/21/05	09/21/05	% calculation	

Environmental Lab of Texas

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:
09/28/05 13:54

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 EI52106 - Solvent Extraction (GC)

Blank (EI52106-BLK1)

Prepared & Analyzed: 09/21/05

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	45.4		mg/kg	50.0		90.8	70-130			
Surrogate: 1-Chlorooctadecane	45.9		"	50.0		91.8	70-130			

LCS (EI52106-BS1)

Prepared & Analyzed: 09/21/05

Gasoline Range Organics C6-C12	443	10.0	mg/kg wet	500		88.6	75-125			
Diesel Range Organics >C12-C35	564	10.0	"	500		113	75-125			
Total Hydrocarbon C6-C35	1010	10.0	"	1000		101	75-125			
Surrogate: 1-Chlorooctane	56.1		mg/kg	50.0		112	70-130			
Surrogate: 1-Chlorooctadecane	48.6		"	50.0		97.2	70-130			

Calibration Check (EI52106-CCV1)

Prepared: 09/21/05 Analyzed: 09/22/05

Gasoline Range Organics C6-C12	409		mg/kg	500		81.8	80-120			
Diesel Range Organics >C12-C35	499		"	500		99.8	80-120			
Total Hydrocarbon C6-C35	908		"	1000		90.8	80-120			
Surrogate: 1-Chlorooctane	47.0		"	50.0		94.0	0-200			
Surrogate: 1-Chlorooctadecane	49.1		"	50.0		98.2	0-200			

Matrix Spike (EI52106-MS1)

Source: 5I20006-01

Prepared & Analyzed: 09/21/05

Gasoline Range Organics C6-C12	458	10.0	mg/kg dry	556	ND	82.4	75-125			
Diesel Range Organics >C12-C35	603	10.0	"	556	ND	108	75-125			
Total Hydrocarbon C6-C35	1060	10.0	"	1110	ND	95.5	75-125			
Surrogate: 1-Chlorooctane	58.7		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	49.4		"	50.0		98.8	70-130			

Matrix Spike Dup (EI52106-MSD1)

Source: 5I20006-01

Prepared & Analyzed: 09/21/05

Gasoline Range Organics C6-C12	455	10.0	mg/kg dry	556	ND	81.8	75-125	0.657	20	
Diesel Range Organics >C12-C35	603	10.0	"	556	ND	108	75-125	0.00	20	
Total Hydrocarbon C6-C35	1060	10.0	"	1110	ND	95.5	75-125	0.00	20	
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	47.1		"	50.0		94.2	70-130			

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914
Reported:
09/28/05 13:54

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 EI52303 - EPA 5030C (GC)

Blank (EI52303-BLK1)

Prepared: 09/23/05 Analyzed: 09/24/05

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	32.3		ug/kg	40.0		80.8	80-120			
Surrogate: 4-Bromofluorobenzene	32.4		"	40.0		81.0	80-120			

LCS (EI52303-BS1)

Prepared & Analyzed: 09/23/05

Benzene	43.2		ug/kg	50.0		86.4	80-120			
Toluene	42.0		"	50.0		84.0	80-120			
Ethylbenzene	45.1		"	50.0		90.2	80-120			
Xylene (p/m)	82.6		"	100		82.6	80-120			
Xylene (o)	47.1		"	50.0		94.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.6		"	40.0		89.0	80-120			
Surrogate: 4-Bromofluorobenzene	41.4		"	40.0		104	80-120			

Calibration Check (EI52303-CCV1)

Prepared: 09/23/05 Analyzed: 09/25/05

Benzene	41.4		ug/kg	50.0		82.8	80-120			
Toluene	40.0		"	50.0		80.0	80-120			
Ethylbenzene	42.8		"	50.0		85.6	80-120			
Xylene (p/m)	81.9		"	100		81.9	80-120			
Xylene (o)	45.3		"	50.0		90.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.3		"	40.0		90.8	0-200			
Surrogate: 4-Bromofluorobenzene	37.1		"	40.0		92.8	0-200			

Matrix Spike (EI52303-MS1)

Source: 5I20008-14

Prepared: 09/23/05 Analyzed: 09/25/05

Benzene	1100		ug/kg	1250	ND	88.0	80-120			
Toluene	1060		"	1250	ND	84.8	80-120			
Ethylbenzene	1140		"	1250	ND	91.2	80-120			
Xylene (p/m)	2090		"	2500	ND	83.6	80-120			
Xylene (o)	1140		"	1250	ND	91.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	37.3		"	40.0		93.2	80-120			
Surrogate: 4-Bromofluorobenzene	38.3		"	40.0		95.8	80-120			

Environmental Lab of Texas

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

Page 6 of 9

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:
09/28/05 13:54

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 EI52303 - EPA 5030C (GC)

Matrix Spike Dup (EI52303-MSD1)

Source: 5120008-14

Prepared: 09/23/05 Analyzed: 09/25/05

Benzene	1040		ug/kg	1250	ND	83.2	80-120	5.61	20	
Toluene	1030		"	1250	ND	82.4	80-120	2.87	20	
Ethylbenzene	1100		"	1250	ND	88.0	80-120	3.57	20	
Xylene (p/m)	2030		"	2500	ND	81.2	80-120	2.91	20	
Xylene (o)	1110		"	1250	ND	88.8	80-120	2.67	20	
Surrogate: a,a,a-Trifluorotoluene	36.7		"	40.0		91.8	80-120			
Surrogate: 4-Bromofluorobenzene	37.4		"	40.0		93.5	80-120			

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914
Reported:
09/28/05 13:54

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 EI52101 - General Preparation (Prep)										
Blank (EI52101-BLK1)				Prepared & Analyzed: 09/21/05						
% Solids	100		%							
Duplicate (EI52101-DUP1)		Source: 5119030-01		Prepared & Analyzed: 09/21/05						
% Solids	84.7		%		84.6			0.118	20	
Duplicate (EI52101-DUP2)		Source: 5119032-04		Prepared & Analyzed: 09/21/05						
% Solids	95.8		%		94.1			1.79	20	
Duplicate (EI52101-DUP3)		Source: 5120008-07		Prepared & Analyzed: 09/21/05						
% Solids	92.6		%		92.9			0.323	20	

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

Project: Vacuum 10" to Jal
Project Number: 2002-10248
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Reported:
09/28/05 13:54

Notes and Definitions

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:

9/28/2005

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

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

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

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

Environmental Labs of Texas

12600 West I-20 East, Odessa, TX 79763
(915) 563-1800 FAX: (915) 563-1713

Chain of Custody Form

Company Name Environmental Plus, Inc.		Bill To ANALYSIS RESULTS	
EPI Project Manager Iain Olness	Attn: ENV Accounts Payable		
Mailing Address P.O. BOX 1558	PO Box 4648,		
City, State, Zip Eunice New Mexico 88231	Houston, TX 77210-4648		
EPI Phone#/Fax# 505-394-3481 / 505-394-2601			
Client Company Plains All American			
Facility Name Vacuum 10" to Jal			
Project Reference 2002-10248			
EPI Sampler Name Iain Olness			

LAB I.D.	SAMPLE I.D.	MATRIX						PRESERV.		SAMPLING		ANALYSIS RESULTS									
		GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO ₄)	PH	TCLP	OTHER >>	PAH	
01	MW-9 (5')			X					X		16-Sep-05	11:30	X	X							
02	MW-9 (10')			X					X		16-Sep-05	11:43	X	X							
03	MW-9 (15')			X					X		16-Sep-05	11:52	X	X							
04	MW-9 (18')			X					X		16-Sep-05	12:04	X	X							
05	MW-9 (20')			X					X		16-Sep-05	12:13	X	X							
6																					
7																					
8																					
9																					
10																					

Sampler-Relinquished By: Iain Olness	Received By: Aron Boone
Relinquished On: 8-20-05	Received By: (lab staff) Carmel Kelly
Delivered by:	Sample Cool & Intact Yes No
	Checked By:

E-mail results to: iolness@eolness.com & cjohnolds@paalp.com
REMARKS: 3.5°C 402 labels/seal

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: EPL/Plains

Date/Time: 9/20/05 12:15

Order #: SI20006

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	3.5	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:



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.

Attn: Iain Olness

Address: 2100 Ave. O

Euinee,

NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 171061 **Report Date:** 09/26/05

Project ID: 2002-10248

Sample Name: MW-9

Sample Matrix: water

Date Received: 09/20/2005 **Time:** 15:30

Date Sampled: 09/20/2005 **Time:** 14:45

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
Volatile organics-8260b/BTEX	---		---		09/21/05	8260b(5030/5035)	---	---	---	---	---
Benzene	2.8	µg/L	1	<1	09/21/05	8260b	---	1.2	98.1	98.5	99.8
Ethylbenzene	3.35	µg/L	1	<1	09/21/05	8260b	---	1.5	104	108.9	109.2
m,p-Xylenes	5.5	µg/L	2	<2	09/21/05	8260b	---	2.2	103.8	108.7	109.2
o-Xylene	2.23	µg/L	1	<1	09/21/05	8260b	---	1.2	95.5	100.1	113.9
Toluene	8.54	µg/L	1	<1	09/21/05	8260b	---	1.1	104.5	104.5	105.9

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Dale Wagner

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than (" $<$ ") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2002-10248
Sample Name: MW-9

Report#/Lab ID#: 171061
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	97.9	70-130	---
Toluene-d8	8260b	103	80-127	---


Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.




AnalySys Inc.

4221 Freidrich Lane, Suite 190, Austin, TX 78744
512-444-5896 FAX: 512-447-4766

2209 N. Padre Island Dr., Corpus Christi, TX 78408

Chain of Custody Form

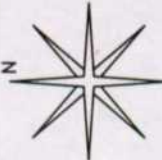
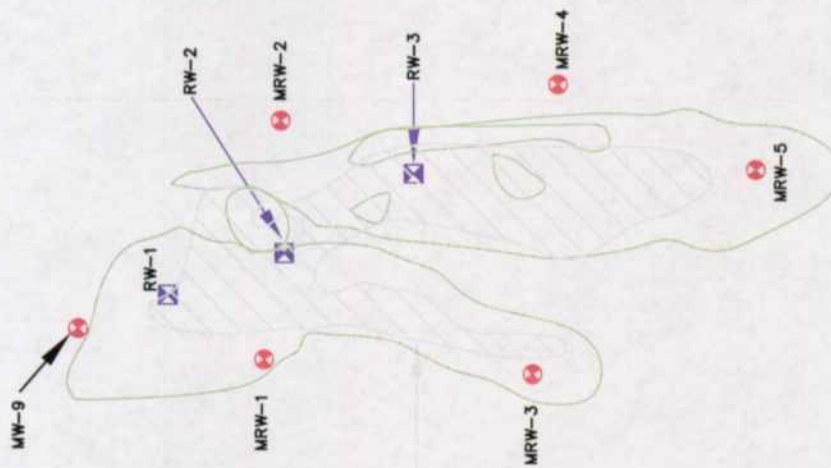
Company Name Environmental Plus, Inc. EPI Project Manager Iain Olness Mailing Address P.O. BOX 1558 City, State, Zip Eunice New Mexico 88231 EPI Phone#/Fax# 505-394-3481 / 505-394-2601 Client Company Plains All American Facility Name Vacuum 10" to Jal Project Reference 2002-10248 EPI Sampler Name George Blackburn		 <p>PLAINS ALL AMERICAN PIPELINE, L.P.</p> <p>Attn: Camille Reynolds 5805 East Highway 80 Midland, TX 79706</p>		ANALYSIS REQUEST TPH 8015M CHLORIDES (Cl) SULFATES (SO ₄) PH TCLP OTHER >>> PAH																	
LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO ₄)	PH	TCLP	OTHER >>>	PAH
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL										
171061	1MW-9	G	4	X										X							
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Sample Relinquished:  Relinquished by: 	Received By: Date: 9-20-05 Time: 3:30 Received By: (lab staff): Date: 9-21-05 Time: 9:35	Delivered by: 	Checked By: Sample Cool & Intact Yes No
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------	------------------------------------------------------

E-mail results to: iolness@envplus.net and cireynolds@paalp.com

REMARKS:

Tz 2.50C



REVISED:

DWG By: Iain Olness
March 2004

0 150 300
Feet
SHEET
1 of 1

Lea County, New Mexico
SW 1/4 of the SW 1/4, Sec. 20, T19S, R37E
N 32° 38' 21.3" W 103° 16' 46.2"
Elevation: 3,627 feet amsl

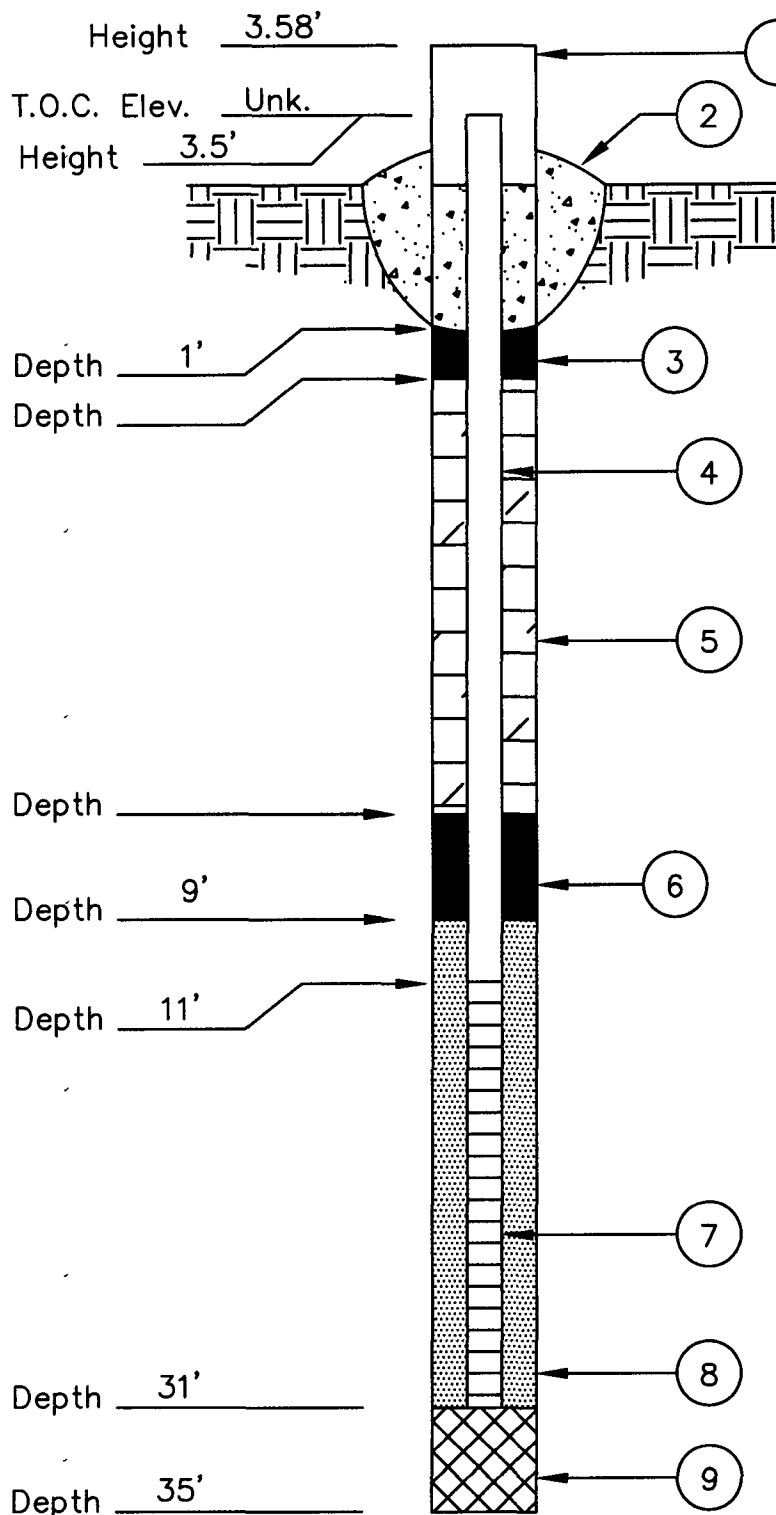
Figure 3
Site Map
Plains All American Pipeline, L.P.
Vacuum 10" to Jal



ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND
ENVIRONMENTAL SERVICES
EUNICE, NM
505-394-3481

Monitoring Well Construction Information Standard Well

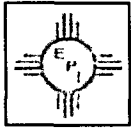
Job No.: 2002-10248 Job Name: Vacuum 10" to Jol Boring / Well No. MW-9
Date: 09/16/05 Field Representative: IAO State Unique Well No. NA



- 1) Protective Casing ☒ Yes ☐ No
Locking ☒ Yes ☐ No
Protective Posts Yes ☒ No
Concrete Pyramid Yes ☒ No
- 2) Concrete Seal ☒ Yes ☐ No
- 3) Type of Surface Seal if Installed 1 bag of Bentonite Plug
- 4) Solid Pipe Type PVC
Solid Pipe Length 14.5 ft.
Joint Type Slip/Glued or Threaded Threaded
- 5) Type of Backfill Bentonite Plug
- 6) Type of Lower Seal if Installed Bentonite Plug
- 7) Screen Type P.V.C.
Screen Length 20 ft.
Slot Size .020"
Length 20 ft.
Screen Diameter 2 in.
- 8) Type of Backfill around Screen 5.5 bags of 8/16 silica sand
- 9) Type of Backfill Native Soils
- 10) Drilling Method Air Rotary
- 11) Additives Used if any None
- 12) Borehole Diameter 5" in.

Log Of Test Borings

(NOTE - Page 1 of 2)



ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND
ENVIRONMENTAL SERVICES
EUNICE, NM
505-394-3481

Project Number: Plains Marketing, L.P. - 2002-10248

Project Name: Vacuum 10" to Jal

Location: UL - M, Section 20, T 19 S, R 37 E

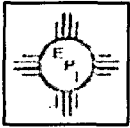
Boring Number: MW-9

Surface Elevation: -

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Start Date: 09/16/05 Time: 1120 Completion Date: 09/16/05 Time: 1234 Description
							0.67' Sandy Loam Topsoil
							CALICHE, White to Tan, Soft to Hard
1130	Core	12	Dry	21.4	SP	5	
						10	
1143	Core	12	Dry	17.1	SP		
						15	
1152	Core	8	Damp	13.6	--		
1204	Core	10	Moist	10.6	CL		
						20	Red Brown, Soft to Hard, CLAY WITH SOME TRACE SILT AND SAND
1213	Core	10	Moist	8.4	CL		
						25	
						30	
						35	

Log Of Test Borings

(NOTE - Page 2 of 2)



ENVIRONMENTAL PLUS, INC.
STATE APPROVED LAND FARM AND
ENVIRONMENTAL SERVICES
ELMICE, MN
305-394-3481

Project Number: Plains Marketing, L.P. - 2002-10248

Project Name: Vacuum 10" to Jal

Location: UL-M, Section 20, T 19 S, R 37 E

Boring Number: MW-9

Surface Elevation: -

Sample # and Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	U.S.C.S. Symbol	Depth (feet)	Start Date: 09/16/05 Time: 1120 Completion Date: 09/16/05 Time: 1234 Description
						35	Red Brown, Soft to Hard, CLAY WITH SOME TRACE SILT AND SAND
						40	
						45	
						50	
						55	
						60	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-in Depth	Water Level	Drilling Method: Air Rotary 5.0" OD
09/16/05	1445	-	-	-	27.6	Backfill Method: MW-9 Installed
						Field Representative: IAO



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mr. Jimmy Bryant
Link Energy
P.O. Box 1660
Midland, TX 79703

June 23, 2004

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Dear Mr. Bryant:

The New Mexico Oil Conservation Division has received the "Annual Monitoring Report Link Energy Vacuum 10-Inch to Jal #2002-10248" (OCD ref: 1R-0385) dated April 7, 2004.

The recommendations included in the report, shown below, are hereby approved.

1. Continue to monitor the groundwater monitoring/recovery well network on a monthly basis to recover PSH from the impacted groundwater monitoring well(s). Collect groundwater level data on a monthly basis.
2. The monitoring/recovery well network may be sampled on a semi-annual basis and the samples are to be submitted for the quantification of BTEX. If PSH are not detected in wells currently showing PSH levels, these wells will be added to the sampling protocol set forth above.
3. During the next sampling event, analyze for the presence of PAH's. If results indicate the presence of PAH's, samples should continue to be analyzed for the presence of PAH's on an annual basis.

In addition to the above, Link should further excavate the site at the following soil sampling points to remove sources of possible further groundwater contamination:

1. W-NESW, TPH levels on 2/25/04 were 19,008 ppm
2. W-SWSW, TPH levels on 2/25/04 were 3,796 ppm
3. W-NBH, TPH levels on 2/25/04 were 8,869 ppm
4. E-NWSW, TPH levels on 2/25/04 were 1,987 ppm
5. E-NBH, TPH levels on 2/25/04 were 9,977 ppm
6. E-NESW, TPH levels on 2/25/04 were 6,716

This approval does not relieve Link Energy of any future liability should its operations in this area cause as yet undiscovered contamination that endangers public health or the environment. Nor does it relieve Link Energy of its responsibility to adhere to any other local, state, or federal rules and regulations.

If you have any questions, please contact me at (505) 476-3492 or emartin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin, Environmental Bureau

cc: Larry W. Johnson, NMOCD, Hobbs
Jeff Dann, Link Energy, Houston
Iain Olness, EPI



ENVIRONMENTAL PLUS, INC.

Micro-Blaze

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STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

7 April 2004

Mr. Ed Martin
NM Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division – Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Annual Monitoring Report Link Energy Vacuum 10-Inch to Jal #2002-10248
UL-M Section 20 T19S R37E, Lea County, New Mexico
Landowner: Cooper

Dear Mr. Martin,

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, Link Energy, submits for your consideration this *Annual Monitoring Report* for the above-referenced site. Based on data collected during the past year, Link Energy recommends continued monthly monitoring of the monitoring/recovery well network for PSH recovery and collection of groundwater level data. In addition, Link Energy is recommending that the monitoring/recovery well network be sampled on a semi-annual basis due to the fact that only low levels or no contaminants have been detected.

Should you have any questions or comments please call Mr. Ben Miller or myself at EPI's offices, or at 505-390-2088 or 505-390-7306 respectively. Mr. Hernandez may be contacted through Link's Midland office at 915-638-3799 or 505-631-3095.

All official correspondence should be addressed to:

Mr. Frank Hernandez
Link Energy
P.O. Box 1660
5805 East Highway 80
Midland, Texas 79703

Sincerely,

ENVIRONMENTAL PLUS, INC.

Iain Olness, P.G.
Hydrogeologist

cc: Larry W. Johnson, NMOCD – Hobbs District Office
Frank Hernandez, Link Energy – Midland
Jeff Dann, Link Energy – Houston
Sherry Miller, EPI President
Ben Miller, EPI Vice President and General Manager

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