

1R - 0455

REPORTS

DATE:

DEC 2006



IR-0455
Report
Dec. 2006

Nm

4800 Sugar Grove Blvd.
Suite 420
Stafford, TX 77477

Phone 281.240.5200
Fax 281.240.5201
www.premiercorp-usa.com

January 17, 2007

IR-455

Mr. Daniel Bryant
Plains Marketing, L.P.
3705 E. Highway 158
Midland, TX 79706

RE: Soil Closure Report
Vacuum to Jal 14" Mainline #3
Plains SRS No. 2003-001117
Premier Project No. 205068.00

Report Entered

Dear Daniel,

Please find enclosed 4 copies of the Soil Closure Report for the Vacuum to Jal 14" Mainline #3. Two of the copies are for your files, one is for Ben Stone of the New Mexico Oil Conservation Division Environmental Bureau (NMOCD) in Santa Fe, NM and one is for Larry Johnson of the NMOCD in Hobbs, NM. If you have any question please call me at 281-240-5200 ext. 203.

Sincerely,

Chan Patel
Senior Project Manager

e Jeff Dann (Plains)

NM

SOIL CLOSURE REPORT

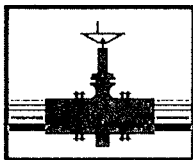
VACUUM TO JAL 14" MAINLINE #3
PLAINS SRS NO. 2003-00117

UL-A, SECTION 35, T21S, R37E

Lea County, New Mexico

IR-0455

PREPARED FOR



PLAINS
MARKETING, L.P.

Report Entered

333 CLAY STREET, SUITE 1600

HOUSTON, TEXAS 77002

PREPARED BY


PREMIER

ENVIRONMENTAL SERVICES, INC.

4800 Sugar Grove Blvd., Suite 420

Stafford, Texas 77477

281.240.5200

Project No. 205068.00

December 2006

Chan Patel
Senior Project Manager

TABLE OF CONTENTS

Distribution	iii
EXECUTIVE SUMMARY	iv
1.0 INTRODUCTION AND SITE HISTORY	1
2.0 ENVIRONMENTAL CHARACTERIZATION	3
2.1 Geological Description	3
2.2 Land Use	3
2.3 Ground Water	3
2.4 Surface Water	3
3.0 REGULATORY FRAMEWORK	4
3.1 NMOCD Site Ranking Guidance – Initial Evaluation	4
4.0 SOIL REMEDIATION	5
4.1 Soil Excavation and Isolation of COCs	5
4.2 On-going Remedial Activities	6
5.0 SOIL CLOSURE	7

Appendices:

Appendix A Figures

Figure 1 – Site Location Map

Figure 2 – Site Detail and Monitor Well Location Map

Appendix B Tables

Table 1 – EPI Soil Sample Analytical Results

Table 2 – Premier Soil Sample Analytical Results

Appendix C NMOCD Approval Letter of Soil Remediation Plan

Appendix D Site Photographs

Appendix E Analytical Laboratory Reports

Stockpile Sample SP-1

Excavated soil stockpile Sample SP1 5pt Comp

DISCLAIMER

Premier has examined and relied upon the file information provided by Plains and Environmental Plus, Inc. (EPI). Premier has not conducted an independent examination of the information contained in the Plains files; furthermore, we assume the genuineness of the documents reviewed and that the information provided in these documents to be true and accurate. Premier has prepared this report using the level of care and professionalism in the industry for similar projects under similar conditions. Premier will not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this report was prepared. Premier believes the conclusions stated herein are factual, but no guarantee is made or implied.

Distribution

Ben Stone
New Mexico Oil Conservation Division Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505
bstone@state.nm.us

Larry Johnson, Environmental Engineer
New Mexico Oil Conservation Division Environmental Bureau
1625 North French Drive
Hobbs, New Mexico 88240
505-393-6161 ext 111
lwjohnson@state.nm.us

Jeffrey Dann, PG
Senior Environmental Specialist
Plains Marketing, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002
713-646-4100
jpdann@paalp.com

Daniel Bryant (2 copies)
Plains Marketing, L.P.
3705 E. Highway 158
Midland, TX 79706
dmbryant@paalp.com

Shane Diller
Premier Environmental Services, Inc.
30 West Industrial Loop, Suite I
Midland, Texas 79701
sdiller@premiercorp-usa.com

EXECUTIVE SUMMARY

On May 8, 2003, a release of approximately 3 barrels of crude oil occurred from a 14" steel pipeline at the EOTT Energy LLC (EOTT) Vacuum to Jal 14" Mainline # 3 Site (Site), SRS No. 2003-00117 (Vac to Jal #3). Plains Marketing, L.P. (Plains) currently owns the pipeline. The Site is located in unit letter A, NE $\frac{1}{4}$ of the NE $\frac{1}{4}$, Section 35, Township 21S, Range 37E, or more specifically at latitude 32° 26' 32.75" N and longitude 103° 07' 37.81" W in Lea County, New Mexico (Figure 1, Appendix A). The release was apparently caused by internal corrosion and the pipeline was repaired.

As part of the initial remediation activities impacted soil was excavated and stockpiled onsite in June 2003. A total of 676 cubic yards of stockpiled soil was transported to the Lea Station Land Farm for treatment, as reported on the C-138 in April 2004 by Environmental Plus, Inc. (EPI).

In April 2004, a soil boring was installed to 30 feet bgs proximal to the leak origin. These analytical results show benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH) concentrations above NMOCD guidelines to a depth of 17 and 30 feet bgs, respectively. Therefore, in September 2005 and December 2005, additional soil and groundwater investigations were completed by Premier which included advancing 10 soil borings and installing 10 monitor and/or recovery wells. The results of these soil and groundwater investigations demonstrate that the lateral and vertical extent of hydrocarbons in soil and groundwater have been delineated at the Site.

In May 2006, a soil remediation plan was submitted to the NMOCD to address soil contamination at the site. Objectives of this risk-based soil remediation plan were to isolate and control contaminants of concern (COCs) in the soil and to prevent further impact to groundwater. The soil remediation plan was approved by NMOCD in a correspondence dated June 1, 2006. This report details the excavation, impermeable liner installation and other activities completed to meet the objectives identified in the soil remediation plan and the specific conditions identified in the NMOCD approval letter.

1.0 INTRODUCTION AND SITE HISTORY

Premier Environmental Services, Inc. (Premier) has been retained by Plains Marketing, L.P. (Plains) to complete delineation and remediation at the Vacuum to Jal 14" Mainline #3 Crude oil release Site (Site) (Plains SRS Nos. 2003-00117).

The release was apparently caused by internal corrosion and occurred on May 8, 2003 while the pipeline was owned and operated by EOTT Energy (EOTT). The pipeline is now owned by Plains Marketing, L.P. (Plains). The Site is located in unit letter A, NE¼ of the NE¼, Section 35 Township 21S, Range 37E, or more specifically at latitude 32° 26' 32.67" N and longitude 103° 07' 36.885" W in Lea County, New Mexico (Figure 1, Appendix A). The release was below the reportable quantity and was not initially reported to the New Mexico Oil Conservation Division (NMOCD). However, subsequent investigations activities documented impact to the groundwater and therefore the release was reported to the NMOCD.

The initial investigation of the release took place in June 2003 through the installation of four borings and collection of soil samples at selected intervals by Environmental Plus, Inc. (EPI). According to Mr. Pat McCasland (with EPI), remedial excavation was conducted in June 2003 until Volatile Organic Concentration (VOC) headspace analysis showed concentrations less than 100 parts per million (ppm), and excavated soil was stockpiled onsite. A total of 676 cubic yards of stockpiled soil was transported to the Lea Station Land Farm for treatment, as reported on the C-138 in April 2004.

In June 2003, soil samples were collected from four boreholes on the excavation perimeter, completed up to 15 feet below ground surface (bgs). Analytical results indicated that Total Petroleum Hydrocarbons (TPH) and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) concentrations are below regulatory standards and generally below the detection limit of 5 mg/Kg for TPH and 0.020 mg/Kg for BTEX and benzene. To complete delineation of hydrocarbon impact at the Site, a boring was installed in 2004 in the middle of the excavated area to 30 feet below ground surface (bgs) by EPI. Samples collected and analyzed from 7 feet bgs to 30 feet bgs showed BTEX above regulatory standards to 17 feet bgs and TPH above regulatory standards to 30 feet bgs.

In September 2005 and December 2005, additional soil and groundwater investigation was completed by Premier which included advancing 10 soil borings and installing 10 monitor and/or recovery wells (Figure 2, Appendix A). Groundwater in monitor well MW-1 and recovery wells RW-1, RW-2 and RW-3 reported the presence of phase separated hydrocarbons (PSH). Groundwater samples collected from monitor wells MW-2 and MW-3 showed concentrations of benzene above NMOCD guidance cleanup concentration for the site. Groundwater samples collected from monitor wells MW-4, MW-5, MW-6 and MW-7 showed no concentrations of TPH or BTEX above the laboratory method detection limits.

The results of these soil and groundwater investigations demonstrated that hydrocarbons in soil and groundwater have been delineated at the Site. These

results were detailed in a report titled "Site Investigation and Annual Report" dated March 2006, and submitted to NMOCD. The analytical data collected by EPI (Table 1) showed the soil samples BH1 – BH4 collected on June 11, 2003 were below the NMOCD cleanup criteria and only the floor sample BH1 collected on April 12, 2004 was above the NMOCD cleanup criteria. This was confirmed by soil samples collected by Premier in the September and December 2005 investigations (Table 2). The analytical results are depicted in Figure 3, Appendix A. Some soil samples collected at the soil-water interface showed hydrocarbon concentrations. This was attributable to hydrocarbons migrating in groundwater.

In May 2006, a risk-based Soil Remediation Plan was submitted to the NMOCD to address soil contamination at the site, which was approved by NMOCD in a correspondence dated June 1, 2006. A copy of the NMOCD approval letter is provided in Appendix C. The risk based Soil Remediation Plan required additional excavation of the soil, placement of an impermeable liner and backfilling with treated/blended soil which has met the NMOCD risk-based standards set for the site. Based on the investigations completed and data presented to the NMOCD a site specific risk-based cleanup goal for excavated soil was established at 1,000 mg/kg TPH to use as a backfill.

2.0 ENVIRONMENTAL CHARACTERIZATION

2.1 Geological Description

In Lea County, bedrock frequently crop out or are thinly veneered with alluvium and eolian dune sands. The bedrock outcrops range from Triassic age strata rocks to Pleistocene age sediments. The Recent Age Mescalero sands cover 80% of Lea County, and are described as fine to medium-grained and reddish brown in color. Lea County lies in the Pecos Valley Section of the Great Plains Province, very near the Southern High Plains to the east. The Tertiary Age Ogallala Formation underlies all of the High Plains and mantles several ridges in Lea County.

The Site seems to be characteristic of the High Plains, with a uniform, topographically relatively flat surface that slopes very gently to the southeast.

2.2 Land Use

Land use in the area is primarily livestock rangeland and oil field activities. Several gas compressor stations are located in the vicinity of the Site and several major oil and gas transmission lines bisect the region. The area in the immediate vicinity of the Site is sparsely populated. There is a railroad track spur in the immediate area to the north of the current open excavation.

2.3 Ground Water

The New Mexico Office of the State Engineer database lists three water wells in Section 35, T21S R37E. Total depth of two of these private use water wells appears to be 85 feet bgs and 100 feet bgs, respectively. The average depth to groundwater in these wells is not known. There are no municipal water wells within 1,000 feet of the Site. Depth to water in the ten monitor/recovery wells installed at the site as part of the investigation, ranges from 41 to 48 feet bgs.

2.4 Surface Water

There are no surface water bodies within 1,000 feet of the Site.

3.0 REGULATORY FRAMEWORK

In New Mexico, the NMOCD oversees and regulates oil, gas and geothermal activities, including compliance with environmental regulations. Guidance for cleanup of crude oil releases is provided in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993) document. Constituents of concern, or COCs, associated with crude oil releases include TPH, and BTEX. Guidelines for these COCs in soil are evaluated based on a Site ranking system. The ranking system estimates the likelihood of exposures to the COCs and is based on the three following parameters to protect groundwater and surface water resources:

- Depth to groundwater
- Wellhead protection area
- Distance to surface water body

3.1 NMOCD Site Ranking Guidance – Initial Evaluation

The Site was initially evaluated based on the information presented in the previous sections. Based on the proximity of the Site to area water wells, surface water bodies, and depth to groundwater, the Site has an NMOCD ranking score of **20 points**, with the soil remedial goals highlighted below in the Site Ranking Matrix.

Site Ranking Matrix

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 If >1000' from water source, or, >200' from private domestic water source: 0 points	<200 horizontal feet: 20 points	
If Depth to GW 50 to 99 feet: 10 points		200-100 horizontal feet: 10 points	
If Depth to GW >100 feet: 0 points		>1000 horizontal feet: 0 points	
Groundwater Score:20	Wellhead Protection Area Score: 0	Surface Water Score: 0	
Site Rank (1+2+3) =20+0+0=20			
Total Site Ranking Score and Initial Guidance Cleanup Concentrations for Soil			
Parameter	20 or >	10	0
Benzene	10 ppm	10 ppm	10 ppm
BTEX	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

Based on the investigations completed and data presented to the NMOCD, a site specific risk-based cleanup goal for excavated soil was established at 1,000 mg/kg TPH to use as a backfill.

4.0 SOIL REMEDIATION

4.1 Soil Excavation and Isolation of COCs

The soil excavation was conducted in accordance with the Soil Remediation Plan submitted to NMOCD in May 2006, which was approved by NMOCD in June 2006. The objectives of the soil remediation (as described in the approved soil remediation plan) were to isolate and control COCs in the soil and to prevent further impact to groundwater. To accomplish the soil remediation goals and meet regulatory requirements, the excavation under the exposed pipelines was conducted on October 3 and 4, 2006 in the following manner:

- In accordance with the approved work plan, the central portion of the base of the excavation was over excavated to an approximate depth of 5 feet below the bottom of the pipeline (Photograph 1, Appendix D).
- The base of the excavation was inspected for debris that may have the potential to damage the liner. Such debris was removed and the base of the excavation was graded with a high central area, thus creating an outward slope from the center of the excavation base.
- A 20-mil high-density polyurethane impermeable liner was placed at the base of the excavation and excess liner trimmed (Photographs 2 and 3, Appendix D).
- The impermeable liner was covered with a 6-inch thick layer of clean imported sand (Photograph 4, Appendix D). The outward slope from the center of the excavation will allow precipitation that infiltrates from the surface to flow off the impermeable liner and away from the residual hydrocarbon.
- Special care was taken when placing the impermeable liner around the monitor well MW-1 located within the confines of the excavation. The area around the monitor was sealed by placing bentonite chips both below and above the liner and hydrating the bentonite (Photograph 5, Appendix D).
- One composite soil sample was collected from the onsite clean fill stockpiled soil to verify that COC concentrations in the stockpiled soil meet remediation goals to be used as a backfill material as specified in Section 5.2 of the Soil Remediation Plan. The analytical results of the stockpile sample (SP-1) showed a TPH concentration detected at 163 mg/kg (Appendix E).
- One 5 part composite soil sample was also collected from the stockpiled excavated soil resulting from deepening the excavation to 5 feet below the pipeline. The results of the stockpile excavated soil sample (SP1 5 pt Comp) showed that concentrations of benzene and BTEX were well below the NMOCD cleanup level of 10 ppm and 50 ppm, respectively. TPH concentration was detected at 671 mg/kg. COC concentrations detected for

stockpiled soil used for backfill material are all below the backfill performance standard of 1,000 mg/kg as described in Section 5.3 of the Soil Remediation Plan and NMOCD approval letter dated June 1, 2006. Therefore, the stockpiled soil was blended with the clean imported soil and used to back fill the excavation and the site was returned to grade to allow for stormwater runoff.

- The surface vegetation will be restored by reseeding, if required, in the late spring or early summer of 2007.

4.2 On-going Remedial Activities

As proposed in the Soil Remediation Plan and approved by NMOCD, Plains will continue quarterly groundwater monitoring and routine PSH recovery at the site. The results of these activities will be summarized and presented in the 2006 Annual Groundwater Monitoring Report as requested by NMOCD.

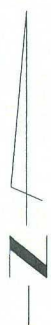
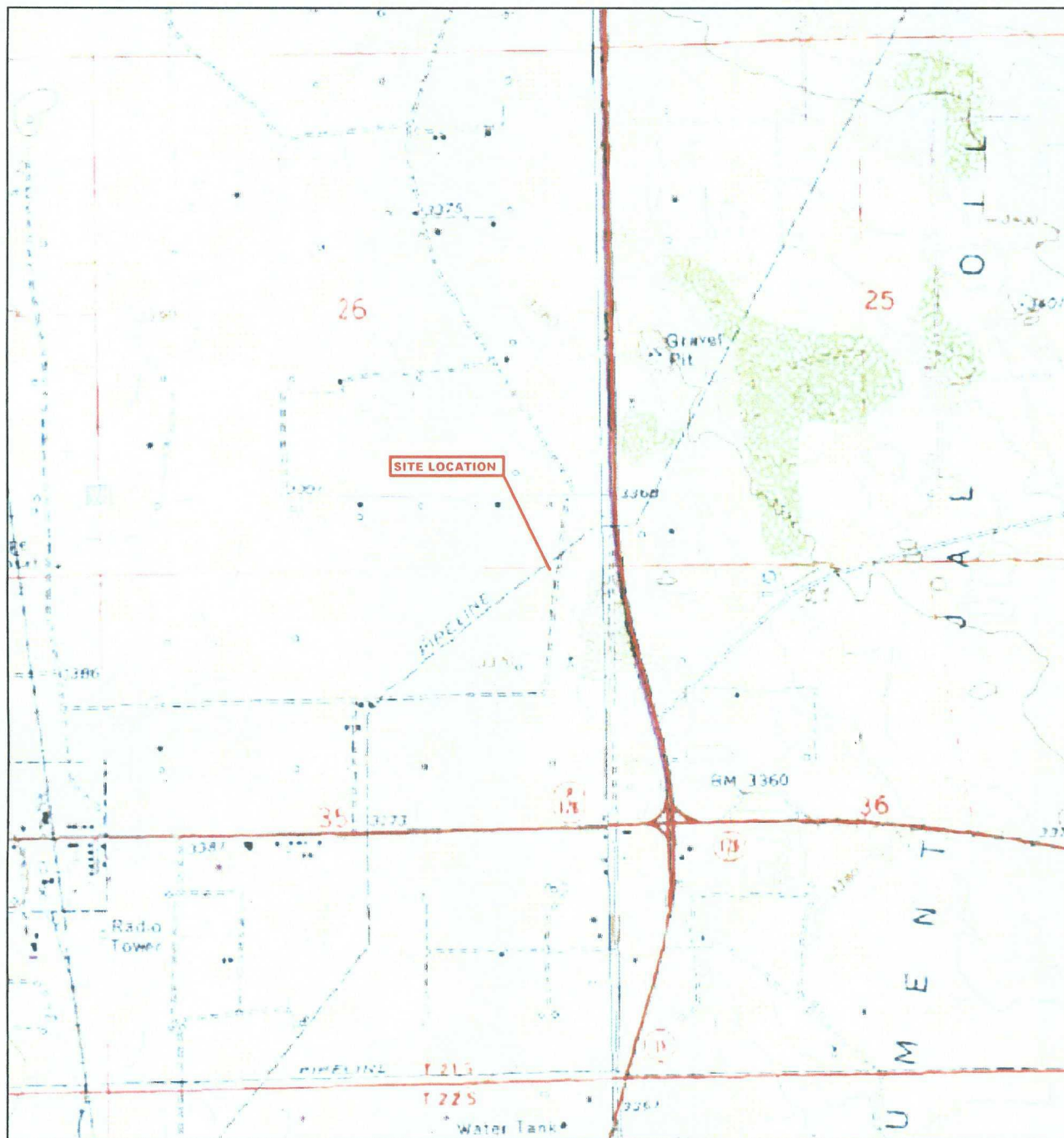
5.0 SOIL CLOSURE

The results of the remedial activities completed to date including the recent excavation, placement of impermeable liner, and backfill activities described in this report, illustrate that these activities meet the requirements of the May 2006 Soil Remediation Plan and specific conditions identified in the NMOCD approval letter. This report illustrates the activities completed at the Vacuum to Jal 14" Mainline # 3 Site has met the risk based NMOCD cleanup criteria for soil established for this site. As such, Premier recommends that Plains submit this report to the NMOCD for final regulatory approval for closure of soil issues at this Site, and request a "No Further Action required for soil remediation" letter from the NMOCD.

Appendix A

Figures

T:\PROJECT FILES\CAD Files\Vacuum to Jal 14 Mainline #3\205068.00.dwg



Eunice Quadrangle
32°26'32.75"N Latitude & 103°07'37.81"W Longitude

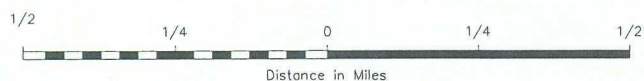
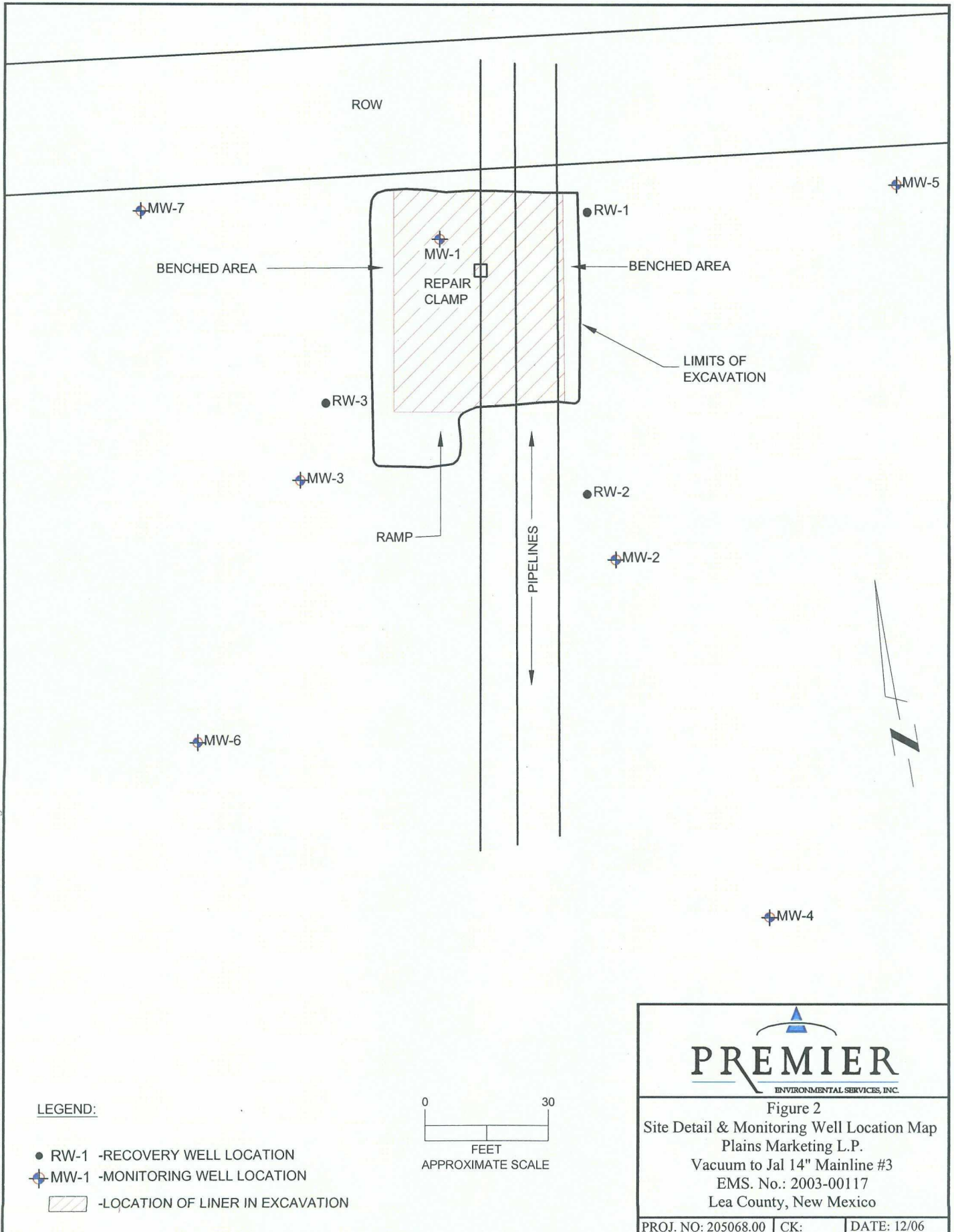


Figure 1
Site Location Map
Plains Marketing L.P.
Vacuum to Jal 14" Mainline #3
EMS. No.: 2003-00117
Lea County, New Mexico

PROJ. NO: 205068.00 CK: DATE: 12/06

P:\PROJECT\FILES\CAD Files\Vacuum to Jal 14 Mainline #3\205068.00-8.dwg



Appendix B

Tables

Table 1
EPI Soil Sample Analytical Results
June 2003 and April 2004

Vacuum to Jal 14' Mainline #3
Lea County, New Mexico
Plains Marketing, L.P.
SRS No. 2003-00117

Borehole	Sampling Interval	Sample Name	Date Taken	DRO mg/Kg	GRO mg/Kg	TPH 8015 m mg/Kg	BTEX 8021b mg/Kg	Benzene mg/Kg	Ethylbenzene mg/Kg	m,p-Xylenes mg/Kg	o-Xylene mg/Kg	Toluene mg/Kg
	'bgs											
BH1	2	SE14M461103BH1-2'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH1	5	SE14M461103BH1-5'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH1	10	SE14M461103BH1-10'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH1	15	SE14M461103BH1-15'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH2	2	SE14M461103BH2-2'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH2	5	SE14M461103BH2-5'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH2	10	SE14M461103BH2-10'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH2	15	SE14M461103BH2-15'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH3	2	SE14M461103BH3-2'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH3	5	SE14M461103BH3-5'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH3	10	SE14M461103BH3-10'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH3	15	SE14M461103BH3-15'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH4	2	SE14M461103BH4-2'	6/11/2003	45.00	<5	45.00	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH4	5	SE14M461103BH4-5'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH4	10	SE14M461103BH4-10'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH4	15	SE14M461103BH4-15'	6/11/2003	<5	<5	<5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
BH1	7	SL14M3041204BH1-7'	4/12/2004	14600.00	4890.00	19490.00	166.07	3.47	38.2	64.6	22.9	36.9
BH1	12	SL14M3041204BH1-12'	4/12/2004	7610.00	4080.00	11690.00	166.07	3.47	38.2	64.6	22.9	36.9
BH1	17	SL14M3041204BH1-17'	4/12/2004	8590.00	3820.00	12410.00	220.60	12.7	46.5	74.3	25.2	61.9
BH1	22	SL14M3041204BH1-22'	4/12/2004	8730.00	929.00	9659.00	10.78	0.182	2.55	5.1	1.76	1.19
BH1	27	SL14M3041204BH1-27'	4/12/2004	9750.00	1660.00	11410.00	33.93	0.657	7.66	14.5	5.53	5.58
BH1	30	SL14M3041204BH1-30'	4/12/2004	5520.00	1190.00	6710.00	29.44	0.445	6.98	12.2	4.42	5.39

BGS - Below Ground Surface

DRO - Diesel Range Organics

GRO - Gasoline Range Organics

Table 2
Premier Soil Sample Analytical Results
September and December 2005
SRS No. 2003-00117
Plains Marketing, L.P.
Vacuum to Jal 14' Mainline #3
Lea County, New Mexico

Borehole	Sample Interval Feet	Sample Name	Laboratory Sample ID	Date Taken	DRO		GRO		TPH	BTEX	Benzene	Toluene	Ethylbenzene	Total Xylenes
					mg/Kg		mg/Kg							
MW-1	10	SB1-10'	T11459-1	9/12/2005	57		81		138	1.7328	0.0438	0.399	1.29	<0.027
MW-1	35	SB1-35'	T11459-2	9/12/2005	477		96.8		573.8	8.733	0.183	1.81	4.14	2.6
MW-1	45	SB1-45'	T11459-3	9/12/2005	376		13.6		711.8	3.543	0.187	0.757	1.83	0.769
MW-2	15	SB2-15'	T11459-4	9/13/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-2	25	SB2-25'	T11459-5	9/13/2005	<5		<5		<5	0.008	<0.020	0.0019	0.0057	<0.020
MW-2	45	SB2-45'	T11459-6	9/13/2005	<5		<5		<5	0.0311	0.0153	0.0016	0.0063	0.0079
MW-3	10	SB3-10'	T11459-7	9/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-3	35	SB3-35'	T11459-8	9/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-3	45	SB3-45'	T11459-9	9/14/2005	<5		<5		<5	0.021	<0.020	<0.020	0.018	0.0025
RW-1	20	SB5-20'	T12153-1	12/12/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
RW-1	40	SB5-40'	T12153-2	12/12/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
RW-1	45	SB5-45'	T12153-3	12/12/2005	1600		1230		2830	44.05	1.11	10.0	9.84	23.1
RW-2	25	SB6-25'	T12153-4	12/13/2005	5.12		<5		5.12	<0.020	<0.020	<0.020	<0.020	<0.020
RW-2	40	SB6-40'	T12153-5	12/13/2005	18.30		<5		18.30	0.029	<0.020	0.0026	0.0055	0.0207
RW-2	45	SB6-45'	T12153-6	12/13/2005	408		233		641	7.206	<0.020	0.726	1.75	4.73
RW-3	25	SB7-25'	T12153-18	12/16/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
RW-3	40	SB7-40'	T12153-19	12/16/2005	<5		<5		<5	0.142	0.007	0.0886	0.0161	0.0303
RW-3	45	SB7-45'	T12153-20	12/16/2005	1010		461		1471	19.44	0.11	2.77	4.76	11.8
MW-4	30	MW4-30'	T12153-7	12/14/2005	6.21		<5		6.21	0.0035	0.0035	<0.020	<0.020	<0.020
MW-4	40	MW4-40'	T12153-8	12/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-4	45	MW4-45'	T12153-9	12/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-5	10	MW5-10'	T12153-13	12/15/2005	5.52		<5		5.52	<0.020	<0.020	<0.020	<0.020	<0.020
MW-5	35	MW5-35'	T12153-14	12/15/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-6	10	MW6-10'	T12153-10	12/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-6	40	MW6-40'	T12153-11	12/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-6	45	MW6-45'	T12153-12	12/14/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-7	30	MW7-25'	T12153-15	12/15/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-7	40	MW7-40'	T12153-16	12/15/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020
MW-7	45	MW7-45'	T12153-17	12/15/2005	<5		<5		<5	<0.020	<0.020	<0.020	<0.020	<0.020

BGS - Below Ground Surface

DRO - Diesel Range Organics GRO - Gasoline Range Organics

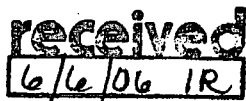
Appendix C

NMOCD Approval Letter of Soil Remediation Plan



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary



Mark E. Fesmire, P.E.
Director
Oil Conservation Division

June 1, 2006

Mr. Daniel Bryant
Plains Marketing, L.P.
P.O. Box 3371
Midland, TX 79702

RE: Soil Remediation Plan for the Plains Vacuum to Jal 14: Mainline #3
Plains EMS Number 2003-00117
Unit Letter A, Section 35, Township 21 South, Range 37 East
NMOCD File Number 1R-0455

Dear Mr. Bryant:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above plan submitted, on behalf of Plains Marketing, L.P. (Plains), by Premier Environmental Services, Inc. This plan is hereby approved with the following understandings and conditions:

1. Plains will effect excavation of soils around the exposed portion of the pipeline. Such excavation will follow the horizontal limits as shown in Figure 2 of the plan, and be not less than five (5) feet deep, instead of the three (3) feet proposed in Section 5.2 of the plan.
2. The base of the resulting excavation will be properly prepared as described in Section 5.1 of the plan.
3. Plains will install a 20-mil HDPE liner in the bottom of the resulting excavation.
4. Plains will backfill with stockpiled soil that contain less than 1,000 mg/Kg TPH. Confirmation samples will be taken from the stockpiled soil as described in Sections 5.2 and 5.3 of the plan.
5. Plains will continue groundwater monitoring and product recovery at the site.
6. Plains will prepare a 2006 Annual Groundwater Monitoring Report detailing the activities at the site and reporting groundwater sampling results and cumulative product recovery amounts, by quarter. This report will be submitted to the NMOCD Santa Fe office by April 1, 2007.

Plains Vacuum to Jal 14" Mainline #3
Soil Remediation Plan Approval
IR-0455
June 1, 2006
Page 2 of 2

NMOCD approval does not relieve Plains of responsibility should its operations at this site 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 governmental agency.

If you have any questions, contact me at (505) 576-3470, or (505) 690-2365, or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION



Edwin E. Martin
Environmental Bureau

Copy: Chan Patel, Premier
NMOCD, Hobbs

Appendix D
Site Photographs



Photograph 1: View of the soil excavation underneath the exposed pipeline.



Photograph 2: Placement of 20-mil high-density polyurethane impermeable liner at the base of the excavation.



Photograph 3: Close-up view of the liner underneath the exposed pipeline.



Photograph 4: View of a layer of clean imported sand above the liner.



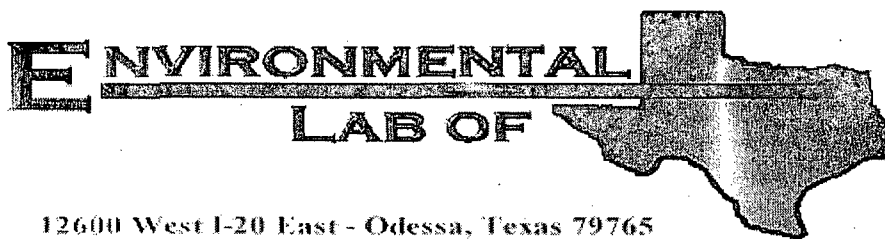
Photograph 5: View of the bentonite seal around the monitoring well MW-1.

Appendix E

Analytical Laboratory Reports

Stockpile Sample SP-1

Excavated soil stockpile Sample SP1 5pt Comp



Analytical Report

Prepared for:

Chan Patel

Premier Environmental

4800 Sugar Grove

Stafford, TX 77477

Project: Vac to Jal #3

Project Number: 205068

Location: Eunice, NM

Lab Order Number: 6H11013

Report Date: 08/14/06

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1	6H11013-01	Soil	08/09/06 11:43	08-11-2006 10:24

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1 (6H11013-01) Soil									
Carbon Ranges C6-C12	J [5.73]	10.0	mg/kg dry	1	EH61110	08/11/06	08/11/06	EPA 8015M	J
Carbon Ranges C12-C28	124	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	39.0	10.0	"	"	"	"	"	"	
Total Hydrocarbons	163	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		86.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		81.2 %	70-130		"	"	"	"	

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1 (6H11013-01) Soil									
% Moisture	9.1	0.1	%	1	EH61415	08/11/06	08/14/06	% calculation	

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

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 EH61110 - EPA 5030C (GC)

Blank (EH61110-BLK1)

Prepared & Analyzed: 08/11/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	63.7		mg/kg	50.0		127	70-130			
Surrogate: 1-Chlorooctadecane	61.3		"	50.0		123	70-130			

LCS (EH61110-BS1)

Prepared & Analyzed: 08/11/06

Carbon Ranges C6-C12	491	10.0	mg/kg wet	500		98.2	75-125			
Carbon Ranges C12-C28	439	10.0	"	500		87.8	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	930	10.0	"	1000		93.0	75-125			
Surrogate: 1-Chlorooctane	63.7		mg/kg	50.0		127	70-130			
Surrogate: 1-Chlorooctadecane	59.0		"	50.0		118	70-130			

Calibration Check (EH61110-CCV1)

Prepared: 08/11/06 Analyzed: 08/12/06

Carbon Ranges C6-C12	204		mg/kg	250		81.6	80-120			
Carbon Ranges C12-C28	239		"	250		95.6	80-120			
Total Hydrocarbons	443		"	500		88.6	80-120			
Surrogate: 1-Chlorooctane	44.7		"	50.0		89.4	70-130			
Surrogate: 1-Chlorooctadecane	37.8		"	50.0		75.6	70-130			

Matrix Spike (EH61110-MS1)

Source: 6H11015-03

Prepared: 08/11/06 Analyzed: 08/12/06

Carbon Ranges C6-C12	637	10.0	mg/kg dry	602	ND	106	75-125			
Carbon Ranges C12-C28	572	10.0	"	602	ND	95.0	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1210	10.0	"	1200	ND	101	75-125			
Surrogate: 1-Chlorooctane	62.8		mg/kg	50.0		126	70-130			
Surrogate: 1-Chlorooctadecane	47.3		"	50.0		94.6	70-130			

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

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 EH61110 - EPA 5030C (GC)

Matrix Spike Dup (EH61110-MSD1)		Source: 6H11015-03		Prepared: 08/11/06 Analyzed: 08/12/06						
Carbon Ranges C6-C12	655	10.0	mg/kg dry	602	ND	109	75-125	2.79	20	
Carbon Ranges C12-C28	575	10.0	"	602	ND	95.5	75-125	0.523	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1230	10.0	"	1200	ND	102	75-125	1.64	20	
Surrogate: 1-Chlorooctane	63.9		mg/kg	50.0		128	70-130			
Surrogate: 1-Chlorooctadecane	48.7		"	50.0		97.4	70-130			

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

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 EH61415 - General Preparation (Prep)										
Blank (EH61415-BLK1)				Prepared: 08/11/06 Analyzed: 08/14/06						
% Solids	100		%							
Duplicate (EH61415-DUP1)				Source: 6H11018-01 Prepared: 08/11/06 Analyzed: 08/14/06						
% Solids	89.6		%		89.7			0.112	20	

Premier Environmental
4800 Sugar Grove
Stafford TX, 77477

Project: Vac to Jal #3
Project Number: 205068
Project Manager: Chan Patel

Fax: (281) 240-5201

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

8/14/2006

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

Client: Premier Env.
 Date/ Time: 8/11/06 10:24
 Lab ID #: 6H110
 Initials: CR

Sample Receipt Checklist

Client Initials

#1 Temperature of container/ cooler?	Yes	No	3.5 ° C	
#2 Shipping container in good condition?	Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5 Chain of Custody present?	Yes	No		
#6 Sample instructions complete of Chain of Custody?	Yes	No		
#7 Chain of Custody signed when relinquished/ received?	Yes	No		
#8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11 Containers supplied by ELOT?	Yes	No		
#12 Samples in proper container/ bottle?	Yes	No	See Below	
#13 Samples properly preserved?	Yes	No	See Below	
#14 Sample bottles intact?	Yes	No		
#15 Preservations documented on Chain of Custody?	Yes	No		
#16 Containers documented on Chain of Custody?	Yes	No		
#17 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18 All samples received within sufficient hold time?	Yes	No	See Below	
#19 VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

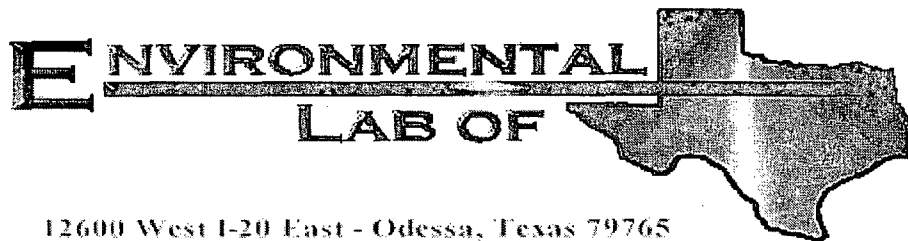
Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
☐ Client understands and would like to proceed with analysis
☐ Cooling process had begun shortly after sampling event



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 to Jal 14" #3

Project Number: 2003-00117

Location: Lea Co., NM

Lab Order Number: 6J05002

Report Date: 10/06/06

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP1 Spt Comp.	6J05002-01	Soil	10/04/06 16:00	10-05-2006 08:40

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP1 5pt Comp. (6J05002-01) Soil									
Benzene	0.120	0.0250	mg/kg dry	25	EJ60511	10/05/06	10/05/06	EPA 8021B	
Toluene	0.443	0.0250	"	"	"	"	"	"	
Ethylbenzene	0.443	0.0250	"	"	"	"	"	"	
Xylene (p/m)	1.45	0.0250	"	"	"	"	"	"	
Xylene (o)	0.485	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		91.0 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	125	10.0	mg/kg dry	1	EJ60510	10/05/06	10/05/06	EPA 8015M	
Carbon Ranges C12-C28	472	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	75.1	10.0	"	"	"	"	"	"	
Total Hydrocarbons	671	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		99.8 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		92.0 %	70-130		"	"	"	"	

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP1 5pt Comp. (6J05002-01) Soil									
% Moisture	8.8	0.1	%	1	EJ60601	10/05/06	10/06/06	% calculation	

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EJ60510 - Solvent Extraction (GC)

Blank (EJ60510-BLK1)

Prepared & Analyzed: 10/05/06

Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	42.1		mg/kg	50.0		84.2	70-130			
Surrogate: 1-Chlorooctadecane	40.5		"	50.0		81.0	70-130			

LCS (EJ60510-BS1)

Prepared & Analyzed: 10/05/06

Carbon Ranges C6-C12	445	10.0	mg/kg wet	500		89.0	75-125			
Carbon Ranges C12-C28	417	10.0	"	500		83.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	862	10.0	"	1000		86.2	75-125			
Surrogate: 1-Chlorooctane	54.6		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	42.2		"	50.0		84.4	70-130			

Calibration Check (EJ60510-CCV1)

Prepared & Analyzed: 10/05/06

Carbon Ranges C6-C12	207		mg/kg	250		82.8	80-120			
Carbon Ranges C12-C28	246		"	250		98.4	80-120			
Total Hydrocarbons	453		"	500		90.6	80-120			
Surrogate: 1-Chlorooctane	52.3		"	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	49.2		"	50.0		98.4	70-130			

Matrix Spike (EJ60510-MS1)

Source: 6J04001-14

Prepared & Analyzed: 10/05/06

Carbon Ranges C6-C12	553	10.0	mg/kg dry	613	ND	90.2	75-125			
Carbon Ranges C12-C28	531	10.0	"	613	ND	86.6	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1080	10.0	"	1230	ND	87.8	75-125			
Surrogate: 1-Chlorooctane	55.2		mg/kg	50.0		110	70-130			
Surrogate: 1-Chlorooctadecane	44.9		"	50.0		89.8	70-130			

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EJ60510 - Solvent Extraction (GC)

Matrix Spike Dup (EJ60510-MSD1)

Source: 6J04001-14

Prepared & Analyzed: 10/05/06

Carbon Ranges C6-C12	557	10.0	mg/kg dry	613	ND	90.9	75-125	0.721	20	
Carbon Ranges C12-C28	557	10.0	"	613	ND	90.9	75-125	4.78	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1110	10.0	"	1230	ND	90.2	75-125	2.74	20	
Surrogate: 1-Chlorooctane	57.5		mg/kg	50.0		115	70-130			
Surrogate: 1-Chlorooctadecane	45.6		"	50.0		91.2	70-130			

Batch EJ60511 - EPA 5030C (GC)

Blank (EJ60511-BLK1)

Prepared & Analyzed: 10/05/06

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	34.5		ug/kg	40.0		86.2	80-120			
Surrogate: 4-Bromofluorobenzene	33.3		"	40.0		83.2	80-120			

LCS (EJ60511-BS1)

Prepared & Analyzed: 10/05/06

Benzene	1.15	0.0250	mg/kg wet	1.25		92.0	80-120			
Toluene	1.04	0.0250	"	1.25		83.2	80-120			
Ethylbenzene	1.08	0.0250	"	1.25		86.4	80-120			
Xylene (p/m)	2.04	0.0250	"	2.50		81.6	80-120			
Xylene (o)	1.03	0.0250	"	1.25		82.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.1		ug/kg	40.0		85.2	80-120			
Surrogate: 4-Bromofluorobenzene	34.3		"	40.0		85.8	80-120			

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EJ60511 - EPA 5030C (GC)

Calibration Check (EJ60511-CCV1)

Prepared & Analyzed: 10/05/06

Benzene	47.2		ug/kg	50.0		94.4	80-120			
Toluene	41.8		"	50.0		83.6	80-120			
Ethylbenzene	41.7		"	50.0		83.4	80-120			
Xylene (p/m)	82.2		"	100		82.2	80-120			
Xylene (o)	40.9		"	50.0		81.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.3		"	40.0		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	38.7		"	40.0		96.8	80-120			

Matrix Spike (EJ60511-MS1)

Source: 6J04001-01

Prepared & Analyzed: 10/05/06

Benzene	1.33	0.0250	mg/kg dry	1.43	ND	93.0	80-120			
Toluene	1.20	0.0250	"	1.43	ND	83.9	80-120			
Ethylbenzene	1.40	0.0250	"	1.43	ND	97.9	80-120			
Xylene (p/m)	2.53	0.0250	"	2.86	ND	88.5	80-120			
Xylene (o)	1.17	0.0250	"	1.43	ND	81.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	32.6		ug/kg	40.0		81.5	80-120			
Surrogate: 4-Bromofluorobenzene	43.5		"	40.0		109	80-120			

Matrix Spike Dup (EJ60511-MSD1)

Source: 6J04001-01

Prepared: 10/05/06 Analyzed: 10/06/06

Benzene	1.42	0.0250	mg/kg dry	1.43	ND	99.3	80-120	6.55	20	
Toluene	1.28	0.0250	"	1.43	ND	89.5	80-120	6.46	20	
Ethylbenzene	1.50	0.0250	"	1.43	ND	105	80-120	7.00	20	
Xylene (p/m)	2.62	0.0250	"	2.86	ND	91.6	80-120	3.44	20	
Xylene (o)	1.26	0.0250	"	1.43	ND	88.1	80-120	7.42	20	
Surrogate: a,a,a-Trifluorotoluene	35.6		ug/kg	40.0		89.0	80-120			
Surrogate: 4-Bromofluorobenzene	41.9		"	40.0		105	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 8

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

Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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 EJ60601 - General Preparation (Prep)

Blank (EJ60601-BLK1)

Prepared: 10/05/06 Analyzed: 10/06/06

% Solids	100		%							
----------	-----	--	---	--	--	--	--	--	--	--

Duplicate (EJ60601-DUP1)

Source: 6J04011-01

Prepared: 10/05/06 Analyzed: 10/06/06

% Solids	96.6		%		95.8			0.832	20	
----------	------	--	---	--	------	--	--	-------	----	--

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

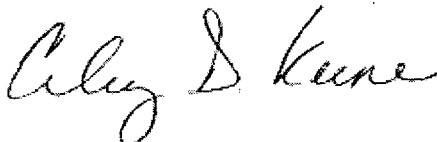
Project: Vacuum to Jal 14" #3
Project Number: 2003-00117
Project Manager: Camille Reynolds

Fax: (432) 687-4914

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: _____



Date: 10/6/2006

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

Jeanne Mc Murrey, Inorg. Tech Director
La Tasha 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.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-1800
Fax: 432-563-1713

Mainline Soc. #3

Project Name: Vac to Jal # 3

Project #: 205068

Project Loc: Lea Co. NM

2008

Fax No: 281.520.5201

Report Format:

e-mail: cpatel@premiercorp-usa.com

[illegible]

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

Client: Premier / Plains
Date/ Time: 10/5/00 8:40
Lab ID #: 6305002
Initials: CK

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	Yes	No	<u>1.0</u> °C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	<u>Not Present</u>
#4	Custody Seals intact on sample bottles/ container?	Yes	No	<u>Not Present</u>
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	Yes	No	<u>Not Applicable</u>
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
☐ Client understands and would like to proceed with analysis
☐ Cooling process had begun shortly after sampling event