

SOIL CLOSURE REPORT VACUUM TO JAL 14" MAINLINE #4

PLAINS SRS NO. 2003-00126

NE I/4, OF NW I/4, SECTION 28, T20S, R37E

Lea County, New Mexico NMOCD No. 1RP-374

PREPARED FOR



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April 2007

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application-pPACO603053169

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DISCLAIMER

Premier has examined and relied upon the file information provided by Plains. 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.

EXECUTIVE SUMMARY

Premier Environmental Services, Inc. (Premier) prepared this **Soil Closure Report** (Report) on behalf of Plains Marketing, L.P. (Plains) for the Vacuum to Jal 14", Mainline #4 line (Site), located in T20S, R37E, Section 28 of Lea County, New Mexico, approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A). Hydrocarbon impact at the Site was the result of a 15 barrel crude oil release that occurred on May 15, 2003. Documentation of the initial soil sampling, excavation, and emergency response activities associated with the release is presented in the **Supplemental Investigation Report and Remediation Proposal**, prepared in November 2005 by Premier. The pipeline was owned by EOTT Energy, LLC (EOTT) at the time of the release, and is currently owned by Plains.

In February 2007, Premier oversaw excavation and conducted confirmation sampling activities to remove soils affected by the May 2003 crude oil release. The excavation was completed based on a soil investigation conducted by Premier in 2005. Figure 2 (in Appendix B) illustrates the trenches and sample locations from the 2005 investigation. The February 2007 excavation activities resulted in a rectangular-shaped trench that paralleled the pipeline. The excavation measured approximately 165 feet long by 27 feet wide with an average depth of 13 feet below ground surface (bgs). Figure 3, in Appendix A, shows the size and shape of the February 2007 excavation.

Remediation included the excavation of affected soil, collection of confirmation samples from the sidewalls and bottom of the excavation, transportation of excavated/stockpiled soils off-site for disposal/treatment and backfilling of the open excavation with clean fill material. Analytical results for the eight sidewall and three excavation bottom samples confirmed that the February 2007 excavation activities were complete as no constituents were identified with concentrations above New Mexico Oil Conservation Division (NMOCD) remediation standards of 10 mg/kg benzene, 50 mg/kg total BTEX (benzene, toluene, ethylbenzene and total xylenes) and 100 mg/kg total petroleum hydrocarbons (TPH).

Analytical data from the sidewall and bottom samples collected in February 2007 demonstrate hydrocarbon impacted soils have been vertically and horizontally defined and removed based on NMOCD remediation standards. As NMOCD closure criteria have been met, Premier is requesting NMOCD closure for the Plains Vac to Jal #4 Site.

1.0 INTRODUCTION AND SITE HISTORY

In 2005, Premier was retained by Plains to complete delineation and remediation of hydrocarbon affected soil at the Vac to Jal 14" Mainline, #4 (SRS No. 2003-00126). The land is owned by the Millard Deck Estate and is located in T20S, R37E, Section 28 in Lea County, New Mexico. The Site is approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A). A crude oil release occurred on May 15, 2003 at the Site and happened while the line was being de-oiled. The release was reported (on EOTT's behalf), by Mr. Pat McCasland, of Environmental Plus, Inc. (EPI) to Ms. Sylvia Dickie of NMOCD (Appendix F, C-141 Release Notification Form).

Data on the NMOCD C-141 Release Notification Form indicates that approximately 15 barrels of crude oil were released. According to information in the historical files, EPI performed initial emergency response activities after the release occurred. Emergency response activities included the excavation of approximately 200 yd³ of crude oil affected soil. Impacted soil was placed on plastic sheeting, and was subsequently transported off-site for disposal at the South Monument SWDF facility in Monument, New Mexico. A copy of the NMOCD C-138 form associated with the removal of this soil is included in Appendix D.

Following the emergency response excavation, EPI installed four soil borings on June 11, 2003 to a maximum depth of 15 feet bgs, to further delineate hydrocarbon impacted soil. Analytical results indicated that all constituents were below NMOCD's remediation cleanup standards.

After reviewing site information found in the EPI files, it was determined that additional investigation was necessary to complete delineation of impacted soil. Based on these findings, a supplemental investigation was overtaken by Premier in August and September 2005. The supplemental investigation included the excavation of three test trenches (north, west and south trenches) to a maximum depth of 12 feet bgs and the installation of one soil boring (SB-1) to a total depth of 20 feet bgs (Figure 2, Appendix A).

Using the intersection of the Plains and the Doyle Hatman (Plantation) pipelines as the benchmark, the north trench extended from approximately 8 feet to 30 feet north of the pipeline intersection. The west trench extended from approximately 8 feet to 18 feet west of the pipeline intersection. The south trench began from a point approximately 14 feet east of the pipeline intersection and extended approximately 10 feet to the south (see Figure 2).

Soils generated during the trench excavations were examined for the presence of hydrocarbons based on visible stains, odors and photoionization (PID) readings. Soil samples were collected from the trenches to identify the vertical and lateral limits of hydrocarbon affected soil and were analyzed for TPH by EPA Method 8015 (diesel DRO and gasoline range organics (GRO)). Analytical results for the samples collected during

the trenching activities indicated one sample with a TPH concentration above the NMOCD cleanup standard of 100 mg/kg. The sample collected from the north trench, approximately 6 feet east of the release point, at 12 feet bgs, contained a TPH concentration of 300 mg/kg (DRO). Analytical results for the six remaining trench samples indicated that no other locations were identified with TPH concentrations above the 100 mg/kg remediation standard.

Based on the analyses of the trench samples, Premier oversaw the installation of one soil boring (SB-1) on September 16, 2005. SB-1 was installed very near the north trench sample that contained 300 mg/kg TPH. To confirm delineation of hydrocarbon affected soils vertically, samples from 15 and 20 feet bgs were collected for BTEX and TPH analysis at the SB-1 location. Analytical results for the two soil samples collected from SB-1 confirmed that the vertical extent was defined as both samples indicated non-detect results for all BTEX and TPH constituents. Table 1 (Appendix B) presents a summary of the BTEX and TPH analytical results for the August and September 2005 trench and boring samples.

Details can be found in Premier's November 2005 **Supplemental Investigation Report and Remediation Proposal**. This report details the activities completed to attain closure at the Site, based on NMOCD closure criteria.

2.0 ENVIRONMENTAL CHARACTERIZATION

2.1 Geological Description

In Lea County, bedrock frequently outcrops at the ground surface or is thinly interbedded with alluvium and eolian dune sands. The bedrock outcrops range from Triassic Age lithofied strata 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 the High Plains and is exposed on several ridges in Lea County.

The uppermost sediments at the Site are largely unstable sands. Wind generated sand dunes, somewhat stabilized with vegetation including mesquite and shinnery oak are found in the general area. One to four feet of aeolian sands overlie silty to sandy caliche with minor clay lenses present near the groundwater interface. The relatively flat topographic surface slopes very gently to the southeast and Monument Draw bisects the area east of the Site.

2.2 Land Use

Land use in the area is primarily livestock rangeland and oil and gas production. 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.

2.3 Groundwater

The New Mexico Office of the State Engineer database lists one agricultural usage water well approximately 660 feet to the northwest of the Site. According to the New Mexico Office of the State Engineer, and based on professional experience in the vicinity, groundwater generally occurs around 40 feet bgs in this area.

2.4 Surface Water

The Site is located in an arid environment and there are no perennial streams or persistent water bodies proximal to the Site. The Site is located on the southwesterly slope of Monument Draw. Surface water, in the form of storm water, runs overland, draining southwest to Monument Draw (Figure 1, Appendix A).

3.0 REGULATORY FRAMEWORK

In New Mexico, the NMOCD oversees and regulates oil, gas and geothermal activities, including enforcement and 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. Primary contaminants, 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 following three parameters to protect groundwater and surface water resources:

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

Chemical parameters of the soil were evaluated consistent with the objectives set out by these NMOCD documents.

3.1 NMOCD Site Ranking

Based on the proximity of the Site to area water wells, surface water bodies, and depth to groundwater, the Site has a NMOCD ranking score of **20 points**, with the soil remedial goals specified below in the Site Ranking Matrix.

Site Ranking Matrix

1. Groundy	vater	2. Wellhead Protection Area	3. Distance to Surface Water Body		
If Depth to GW <50 20 points	0 feet:	If <1000' from water source, or, <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points		
If Depth to GW 50 10 points	to 99 feet:		200-100 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		
Groundwater Score:20		Wellhead Protection Area Score: 0	Surface Water Score: 0		
Site Rank (1+2+3)) =20+0+0=	20			
Total Site Ran	king Sco	re and Initial Guidance Cleanup Conc	entrations		
Parameter 20 or >		10			
Benzene	10 ppm	10 ppm	10 ppm		
BTEX	50 ppm	50 ppm	50 ppm		
TPH	100 ppm	1000 ppm	5000 ppm		

Based on typical NMOCD remediation standards, the analytical goals of the February 2007 excavation for sidewall and excavation bottom confirmation samples were: TPH target concentration of 100 mg/kg, benzene target concentration of 10 mg/kg and total BTEX target concentration of 50 mg/kg.

4.0 REMEDIATION ACTIVITIES

Due to the presence of soils with TPH concentrations in excess of NMOCD's 100 mg/kg remediation standard and the location of the Site within Monument Draw, Premier recommended that impacted soils be removed and treated or disposed of at an off-site facility and the excavation be filled with acceptable backfill (November 2005 Supplemental Investigation Report and Remediation Proposal). Soil remediation was completed in January and February 2007, and included excavation of hydrocarbon impacted soils identified in previous Site investigations. Remediation included the collection of confirmation samples from the bottom and sidewalls of the excavation to verify that impacted soils were removed to NMOCD standards.

4.1 Excavation and Off-site Disposal

Premier personnel oversaw excavation at the Site during January and February 2007 remediation activities. B&H Maintenance and Construction (B&H), of Eunice, New Mexico provided the track-hoe and personnel required to complete excavation activities. Excavation began on January 25, 2007, near the intersection of the Plains and Doyle Hartman (Plantation) pipelines (Figure 3, Appendix A; Photograph #1, Appendix C). The

excavation extended in north-south directions along the Plains pipeline until visual observations and field TPH analysis indicated minimal to no impact in soil.

To prevent the pipeline from sagging and potentially being damaged as the excavation continued B&H braced the pipeline by placing support materials under the pipeline. These support braces were placed approximately 30 feet apart along the line (Photographs 2 and 3, Appendix C). The excavation extended approximately 40 feet south of the intersection between the two pipelines and approximately 125 feet north of the pipeline intersection (Photograph 4, Appendix C). During excavation, the sidewalls were sloped at a ratio of approximately 1 to 1.5 to prevent caving.

The average width at the base of the excavation was approximately 27 feet, while the depth ranged between 11 and 16 feet bgs (Figure 3, Appendix A). The soil is primarily silty sand with some caliche and one area of clay. A greenish gray clay layer was encountered approximately 50 feet north of the pipeline intersection. The clay layer was present beneath the location of the original release at approximately 15 feet bgs (Photograph 5, Appendix C). Excavated soil was temporarily stockpiled on both sides of the pipeline.

In lieu of treating the excavated soil and returning it to the excavation, Plains transported all soil off-site for treatment. In February 2007, approximately 3,264 yards (272 truckloads with approximately 12 cubic yards per load) of excavated soil was transported to the Plains Lea Station Landfarm facility in Lea County, New Mexico. A copy of the NMOCD C-138 Form verifying land farming activities is included in Appendix D.

4.2 Confirmation Sampling

Using visual observations and field TPH analysis to determine remediation completeness, confirmation samples were collected for laboratory verifications. Confirmation samples were collected from the base and sidewalls of the excavation using the following protocol:

- Sidewall samples one sample approximately every 50 linear feet.
- Bottom samples one sample approximately every 50 linear feet.
- Confirmation samples were analyzed for TPH C₆-C₁₂, TPH C₁₂-C₂₈ and TPH C₂₈-C₃₅ by EPA method SW 846 8015M and BTEX by EPA method SW 846 8021B.
- Confirmation sidewall and excavation bottom sample analytical results were compared to NMOCD remediation cleanup standards.

Prior to collecting confirmation samples for laboratory analysis, Premier personnel used a field TPH analyzer to assist in verifying that sufficient soils had been excavated. Results from the field TPH analyzer indicated that all results were below NMOCD's 100 mg/kg target concentration for TPH. Table 3, Appendix B, describes locations of confirmation samples, as well as TPH field analysis results. Soil removal was deemed complete upon

meeting remediation standards for the floor and sidewalls at less than 100 mg/kg TPH, less than 10 mg/kg benzene, and less than 50 mg/kg total BTEX concentrations.

On February 14, 2007, three excavation bottom samples (BH-1, BH-2 and BH-3) and eight sidewall samples (SW-1 through SW-8) were collected from the open excavation and sent to Accutest Laboratory in Houston, Texas for analysis. All samples were collected in laboratory provided containers and placed in a cooler with ice prior to overnight shipment to the lab. Analytical results for all confirmation sidewall and excavation bottom samples are summarized in Table 3, Appendix B. Laboratory reports are found in Appendix E.

4.2.1 Confirmation Sidewall Sampling

On February 14, 2007, eight sidewall confirmation samples (SW-1 through SW-8) were collected from the open excavation. SW-1 was collected from the southern end of the excavation, SW-2 was collected from the southwest corner of the excavation, while the locations of the remaining sidewall samples (SW-3 through SW-8) proceeded in a clockwise direction from SW-2, back around toward the location of SW-1. The samples were approximately 50 feet apart (Figure 4, Appendix A; Table 2, Appendix B).

Analytical results for the eight sidewall samples indicated that TPH and BTEX concentrations were below the method detection limits and below the NMOCD cleanup limits for this Site. These results demonstrated that affected soils were removed and no additional sidewall excavation was needed (Figure 4, Appendix A). Analytical results for confirmation samples are summarized on Table 3, Appendix B.

4.2.2 Confirmation Excavation Bottom Sampling

Three confirmation soil samples were collected from the base or bottom of the excavation. These samples, BH-1, BH-2 and BH-3, were also collected on February 14, 2007 and were collected from approximately 16 feet bgs, 11 feet bgs and 15 feet bgs respectively. Sample BH-1 was collected from the southeastern end of the excavation, approximately 5 feet east of the Plains pipeline. Analytical results for BH-1 indicated concentrations of 14.5 mg/kg TPH C₆-C₁₂ and 59.7 mg/kg TPH C₁₂-C₂₈, while TPH C₂₈-C₃₅ was not detected (< 10 mg/kg). The combined TPH concentration for sample BH-1 was 74.2 mg/kg, while all the BTEX constituents were below the laboratory's reporting limit (Figure 4, Appendix A; Table 3, Appendix B).

Sample BH-2 was collected from approximately 25 to 30 feet north of the pipelines intersection and approximately 8 feet east of the Plains pipeline (see Figure 4). Analytical results for BH-2 indicated concentrations of 0.00285 mg/kg benzene and 0.0217 mg/kg toluene, while ethylbenzene, total xylenes and TPH concentrations were below laboratory detection limits. BH-3 was collected from the area below the point of the original release (approximately 90 feet north of the intersection between the two pipelines). Analytical results for sample BH-3 indicated that all BTEX and TPH constituents were below laboratory detection limits. Laboratory results are summarized on Table 3 in Appendix B,

while a copy of the laboratory report is included in Appendix E. Laboratory results indicated that no additional remediation was required along the base of the excavation.

4.3 Backfill and Grade Excavation

Upon determination that excavation was complete based on sidewall and bottom sample analytical results, the excavation was backfilled with clean surface soil from an on-site, nearby sand dune, as requested by the property owner. The filled trench was compacted using the track hoe and returned to the natural grade. Photograph 6 (Appendix C) shows the area after the backfilling and grading activities were completed. The surface vegetation will be restored by reseeding or as negotiated with the landowner.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The soil excavation undertaken at the Vacuum to Jal 14" Mainline #4 site was conducted in accordance standard industry practices to remove hydrocarbon impacted soil that resulted from a crude oil release that occurred at the Site on May 15, 2003. The excavation activities completed between January 25 and February 26, 2007 accomplished the following:

- The excavation was a rectangular-shaped trench that paralleled the 14-inch Plains pipeline. The base of the excavation was approximately 165 feet long, 27 feet wide, with depths ranging from 11 to 16 feet bgs.
- Confirmation soil samples were collected from the sidewalls and the bottom of the excavation. Analytical results were compared to NMOCD remediation cleanup standards to verify complete remediation.
- NMOCD remediation criteria were attained, demonstrated by analytical results of sidewall and bottom hole confirmation samples.
- Excavated soils were transported off-site to the Plains Lea Station Landfarm facility in Lea County, New Mexico for treatment.
- The open excavation was filled with clean soil from an on-site, nearby sand dune (as requested by the property owner). Using the backhoe, the excavation was filled in, compacted, leveled and graded and the Site was brought back to it's natural grade as part of completing the project.

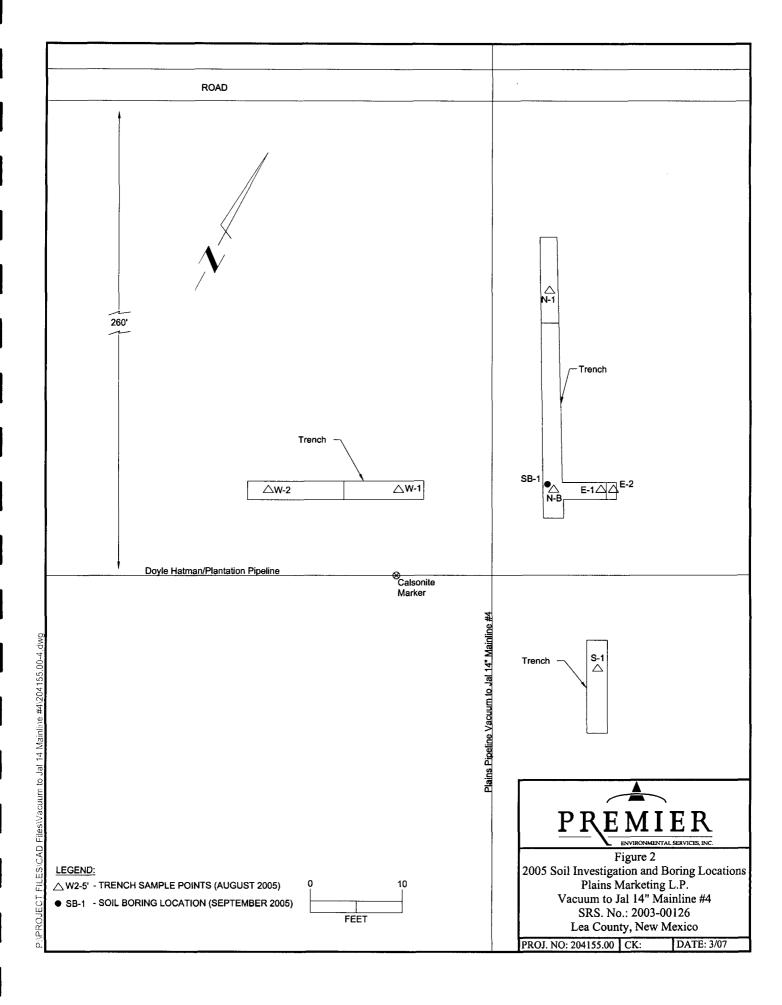
The surface vegetation will be restored by reseeding in late spring or early summer of 2007.

The remedial activities completed at the Site to date, including excavation, confirmation sampling and analytical results, backfilling and site grading that are described in this report, demonstrate that NMOCD remediation standards have been met. Premier recommends that Plains submit this report to NMOCD for final regulatory approval and closure at this Site, and request a "No Further Action required for remediation" letter from NMOCD.

Appendix A -

Figures

Figure 1 Site Location Map
Figure 2 2005 Investigation - Boring Locations
Figure 3 2007 Site Map with Approximate Excavation Boundaries
Figure 4 2007 BTEX and TPH Soil Confirmation Analytical Results



Appendix B Tables

Table 1	2005 Soil Analytical Results – Supplemental Investigation
Table 2	2007 Soil Sample Locations and Field TPH Results
Table 3	2007 Soil Confirmation Samples – Analytical Results

Table 1
2005 Soil Analytical Results - Supplemental Investigation Plains Marketing L.P.
SRS #2003-00126
Vacuum to Jal #4
Lea County, New Mexico

N-B-12'	11-Aug-05	VΑ	NA	NA	NA	NA	050'0 >	300	300
E-1-4'	11-Aug-05	ΝA	NA	AN	ΝA	NA	0.16	09	60.16
E-2-8'	11-Aug-05	NA	NA	NA	AN	NA	050'0 >	< 50	QN
N-1-8'	11-Aug-05	NA	NA	NA	NA	NA	< 0.050	< 50	QN
W-1-5'	11-Aug-05	VΝ	NA	NA	NA	NA	< 0.050	< 50	QN
W-2-5'	11-Aug-05	NA	NA	NA	NA	NA	< 0.050	< 50	ΩN
S-1-8,	11-Aug-05	ΝA	NA	NA	NA	NA	050'0 >	> 20	QN
SB1-15'	16-Sep-05	< 0.0058	< 0.0058	< 0.0058	< 0.018	QN	2 '9 >	< 9.8	QN
SB1-20'	16-Sep-05	> 0.0056	< 0.0056	< 0.0056	< 0.017	QN	< 6.1	< 9.4	QN
NMOCD Rem	NMOCD Remediation Standards	10				50			100

Notes: ND = Not detected above laboratory reporting limit.

Bold = Represents concentration above NMOCD Remediation Cleanup Standard.

2007 Soil Sample Locations - Field TPH Results Lea County, New Mexico Plains Marketing, L.P. SRS No. 2003-00126 Vacuum to Jal #4 Table 2

62	16	3	4	2	33	4	2	42	33	QN
East end bottom hole	Center of bottom hole excavation	West end of bottom of the excavation	[East wall	East end of the south wall	Central south wall	West end of south wall	West wall	West end of north wall	Central north wall	east end of north wall
15	12	15	13	13	9	4	2	8	2	13
9	-8	0	5	8-	-18	-16	-2	16.5	145	21
-34	25	61	09-	-41	19	64	104	22	-13	-33
2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"	7 Intersection of Plantation gas line and Vac To Jal 14"	7 Intersection of Plantation gas line and Vac To Jal 14"	2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"	2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"	2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"	7 Intersection of Plantation gas line and Vac To Jal 14"	7 Intersection of Plantation gas line and Vac To Jal 14"	7 Intersection of Plantation gas line and Vac To Jal 14"	2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"	2/14/2007 Intersection of Plantation gas line and Vac To Jal 14"
2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007	2/14/2007
BH-1	BH-2	BH-3	SW-1	SW-2	SW-3	SW-4	SW-5	9-MS	SW-7	SW-8

Reference Point * = Pipeline intersection - North and East positive distances, South and West negative distances measurements Field Readings = TPH field analyzer

Field Readings = TPH field analyzer

BH = Bottom Hole or Base of Excavation Samples

SW = Sidewall

ND = Not Detected Notes:

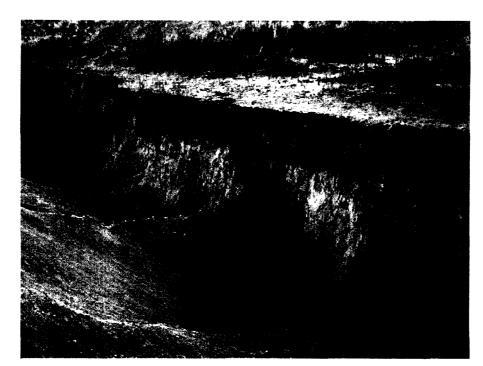
Table 3
2007 Soil Confirmation Samples - Analytical Results
Plains Marketing L.P.
SRS #2003-00126
Vacuum to Jal #4
Lea County, New Mexico

Notes: 1. BH-1 - Bottom hole or excavation bottom soil samples.

- 2. SW-1 Confirmation sidewall soil samples.
- 3. See Figure 3 for sample locations.

Appendix C

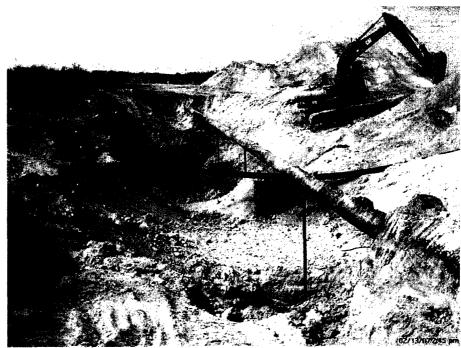
Site Photographs



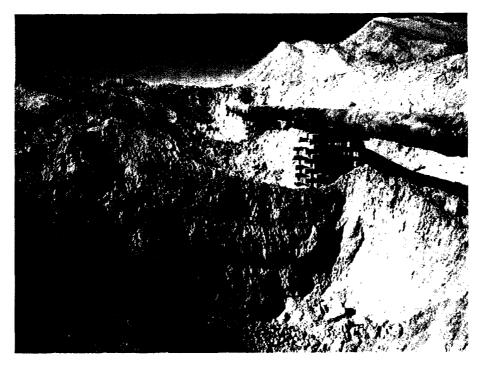
Photograph 1: Photograph shows the intersection between the Plains pipeline (upper line) and the Doyle Hatman pipeline (lower line).



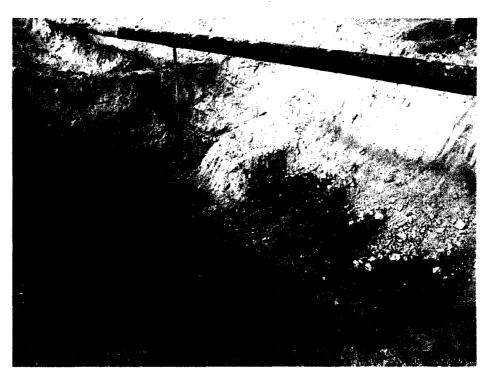
Photograph 2: Wooden supports placed under the pipeline to Prevent sagging during excavation activities.



Photograph 3: Photograph shows how support stands were used to support the pipeline during excavation activities. Photo taken viewing north.



Photograph 4: Photograph shows a portion of the northern portion of excavation.



Photograph 5: Photograph illustrates the greenish gray clay unit encountered at approximately 15 feet bgs, north of the pipeline intersection.



Photograph 6: Photograph of the excavated area after backfilling and grading activities were completed. Photo taken on February 26, 2007, viewing south.

Appendix D

NMOCD C-138 Soil Disposal Forms (2005 & 2007)

ENVIRONMENTAL PLUS, INC.

Land Farm
PERMIT # NM-01-0013

CERTIFICATE OF WASTE STATUS

"NON - EXEMPT WASTE"

EOTT ENERGY LLC

TOWNSHIP: T20S RANGE:R37E	
SOURCE DESCRIPTION (PIPELINE, LEASE, BATTERY, FLOWLINE, ETC.)	
14"-16" STEEL PIPELINE VACUUM TO JAL 14" MAINLINE #4 20	03-00126
AS A CONDITION OF ACCEPTANCE FOR DISPOSA. I HEREBY CERTIFY THAT THIS WASTE IS A NON-EXEMP AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY (REGULATORY DETERMINATION AND TO MY KNOWLEDGE, TH CHARACTERIZED AS "NON-HAZARDOUS" PURSUANT TO THE PROVIS PART 261 SUBPART C AND HAS NOT BEEN COMINGLED WITH AN EIGHT SUBPART D "LISTED WASTE." LIKEWISE, THIS WASTE DOES NOT COCCURRING RADIOACTIVE MATERIAL (NORM) PURUSANT TO 20 1403 AND CONTAINS NO FREE LIQUID PURSUANT TO THE "PAINT METHOD 9095A.	T WASTE EPA) JULY 1988 IS WASTE BEEN IONS OF EPA 40 CFR PA 40 CFR PART 261 ONTAIN NATURALLY NMAC 3.1 SUBPART
NORM EXPOSURE RATE: 10-13 μR/HR	
I, FRANK HERNANDEZ, THE UNDERSIGNED AGE: FOR, EOTT ENERGY LLC, HEREBY CERTIFY THA BASED ON PERSONAL KNOWLEDGE, THE ABOVE STATEMENT IS TRUE.	Υ,
NAME FRANK HERNANDEZ	
TITLE DISTRICT ENVIRONMEN	
ADDRESS 5805 EAST HIGHWAY 80	
MIDLAND, TEXAS 79702	
SIGNATURE Dumin	Jan 👣
DATE 2003-05-16 00:00:00	

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 Department Oil Conservation Division

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-138 Revised March 17, 1999

> Submit Original Plus 1 Copy to Appropriate District Office

REQUEST FOR APPROVAL TO	ACCEPT SOLID WASTE
1. RCRA Exempt: ☐ Non-Exempt; ☑	4. Generator EOTT Energy LLC 5. Originating Site
Verbal Approval Received: Yes No No	Vacuum to Jal 14" Mainline #4 2003-00126
2. Management Facility Destination:	6. Transporter
South Monument SWDF #NM	Environmental Plus, Inc.
3. Address of Facility Operator: Environmental Plus, Inc.	8. State New Mexico
7. Location of Material (Street Address or ULSTR) UL I, NE	% of the SE% of Section 28 T20S R37E
9. Circle One:	
A. All requests for approval to accept oilfield exempt wastes we the Generator; one certificate per job. All requests for approval to accept non-exempt wastes must PROVE the material is not-hazardous and the Generator's certificating or testing will be approved. All transporters must certify the	be accompanied by necessary chemical analysis to
BRIEF DESCRIPTION OF MATERIAL:	
Crude Oil Contaminated Soil Estimated Volume	by the operator at the end of the haul)cy
SIGNATURE TITLE: Waste Management Facility Authorized Agent	DATE:
TYPE OR PRINT NAME:	TELEPHONE NO
(This space for State Use)	
APPROVED BY: TITLE:	DATE:
APPROVED BY: TITLE:	•
101LE	DATE:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenne, 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 Department Oil Conservation Division

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-138 Revised Merch 17, 1999

> Submit Original Plus 1 Copy to Appropriate District Office

REQUEST FOR	APPROVAL	TO ACCEPT	SOLID	WASTE
-------------	----------	-----------	-------	-------

REQUEST FOR AFTROVAL TO	ACCEL I SOLID WASTE
RCRA Exempt: □ Non-Exempt: ☒	4. Generator Pinius Pipeline
Verbal Approval Received: Yes ⊠ No □	5. Originating Site Vacuum to Jal 14" #4 Steel Pipeline ref#2003-
2. Management Facility Destination:	00126 6. Transporter
Plains All American Lea Station Land Farm #GW-351	
3. Address of Facility Operator: Environmental Plus, Inc.	8. State New Mexico
7. Location of Material (Street Address or ULSTR) UL-C, N	E% of the NW% of Section 28 T20S R37E
9. Circle One:	
A. All requests for approval to accept oilfield exempt wastes we the Generator; one certificate per job.	rill be accompanied by a certification of waste from
B. All requests for approval to accept non-exempt wastes must	be accompanied by necessary chemical analysis to
PROVE the material is not-hazardous and the Generator's certi	
listing or testing will be approved.	•
	vastes delivered are only those consigned for transport.
BRIEF DESCRIPTION OF MATERIAL:	
Crude Oil Contaminated Soil	
Estimated Volume 300 cy Known Volume (to be entered by	y the operator at the end of the haul) 3264 cy
	1 1
SIGNATURE GYVILLE EMONDO TITLE: ER	vironmental Coordinator DATE: 1116 2007
TYPE OR PRINT NAME: Camille Reynolds TELEPHO	NE NO505-441-0965
^	
(This space for State Use)/)	
Yell are to	Mind 1/11/lon
APPROVED BY: (ILL) (ILL) TITLE: (ILL)	Pliance Succeedate: 1/16/07
APPROVED BY: TITLE:	DATE:

Appendix E

Analytical Laboratory Reports -

7B15010 February 2007 – Soil Sidewall and Excavation Base Analytical Reports



A Xenco Laboratories Company

Analytical Report

Prepared for:

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

Project: Vac to Jal #4
Project Number: 2003-00126
Location: Lea Co., NM

Lab Order Number: 7B15010

Report Date: 02/22/07

Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-I	7B15010-01	Soil	02/14/07 13:00	02-15-2007 14:30
ВН-2	7B15010-02	Soil	02/14/07 13:20	02-15-2007 14:30
BH-3	7B15010-03	Soil	02/14/07 14:00	02-15-2007 14:30
SW-1	7B15010-04	Soil	02/14/07 13:05	02-15-2007 14:30
SW-2	7B15010-05	Soil	02/14/07 13:10	02-15-2007 14:30
SW-3	7B15010-06	Soil	02/14/07 13:15	02-15-2007 14:30
SW-4	7B15010-07	Soil	02/14/07 14:10	02-15-2007 14:30
SW-5	7B15010-08	Soil	02/14/07 14:20	02-15-2007 14:30
SW-6	7B15010-09	Soil	02/14/07 14:40	02-15-2007 14:30
SW-7	7B15010-10	Soil	02/14/07 14:55	02-15-2007 14:30
SW-8	7B15010-11	Soil	02/14/07 15:05	02-15-2007 14:30

Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC Environmental Lab of Texas

Analysis	D l .	Reporting	Unico	D.1.				A # . # . *	3. 1 ·
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-1 (7B15010-01) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	•	н	*		**	•	
Ethylbenzene	ND	0.00200	*		•	•	н	**	
Xylene (p/m)	ND	0.00200		*	*	*	*	•	
Xylene (o)	ND	0.00200	• 		<u>"</u>		н		
Surrogate: a,a,a-Trifluorotoluene		82.2 %	75-1.	25	*	,,	*	"	
Surrogate: 4-Bromofluorobenzene		83.2 %	75-1.	25	*	*	n	"	
Carbon Ranges C6-C12	14.5	10.0	mg/kg dry	1	EB71510	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	59.7	10.0	•	•	*		**	*	
Carbon Ranges C28-C35	ND	10.0	•		*	*	*	#	
Total Hydrocarbons	74.2	10.0		*	*	*	n		
Surrogate: 1-Chlorooctane		107 %	70-1	30	"	,,	"	,,	
Surrogate: 1-Chlorooctadecane		107 %	70-1	30	и	"	"	"	
BH-2 (7B15010-02) Soil									
Benzene	0.00285	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	0.0127	0.00200		•	"		*	•	
Ethylbenzene	ND	0.00200		*	11	**		,,	
Xylene (p/m)	ND	0.00200	"	**	•	**	•	*	
Xylene (o)	ND	0.00200	"	н	*			"	
Surrogate: a,a,a-Trifluorotoluene		192 %	75-1	25	"	"	"	"	S-0
Surrogate: 4-Bromofluorobenzene		140 %	75-1	25	"	*	,,	"	8-
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71510	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	**			•	*	**	
Carbon Ranges C28-C35	ND	10.0	н	•	•		"	19	
Total Hydrocarbons	ND	10.0		н	"	*	#		
Surrogate: 1-Chlorooctane		98.2 %	70-1	30	"	"		"	•
Surrogate: 1-Chlorooctudecane		98.6 %	70-1	30	"	"	n	,,	
BH-3 (7B15010-03) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	н	*	**	•		**	
Ethylbenzene	ND	0.00200	**	•		*			
Xylene (p/m)	ND	0.00200	*	n	n	*	**	*	
Xylene (o)	ND	0.00200	n	**	*	19			
Surrogate: a,a,a-Trifluorotoluene		84.2 %	75-1	125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.8 %	75-1	125	"	п	"	"	
Carbon Ranges C6-C12	ND		mg/kg dry	1	EB71510	02/16/07	02/18/07	EPA 8015M	

Environmental Lab of Texas

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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.

Project: Vac to Jal #4
Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC Environmental Lab of Texas

		Reporting	17.						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BH-3 (7B15010-03) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	l	EB71510	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	•	**			ir.	*	
Total Hydrocarbons	ND	10.0			*		•	*	
Surrogate: 1-Chlorooctane		103 %	70-130		*	*	,	"	
Surrogate: 1-Chlorooctadecane		107 %	70-130		n	n	"	n	
SW-1 (7B15010-04) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	н	-		#	**	n	
Ethylbenzene	ND	0.00200	•	н	•	*	H	**	
Xylene (p/m)	ND	0.00200	**			"			
Xylene (o)	ND	0.00200	•	*	•	*	•	*	
Surrogate: a.a.a-Trifluorotoluene		82.0 %	75-	125	"	"	,,	,,	
Surrogate: 4-Bromofluorobenzene		82.8 %	75-	125	"	"	,,	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	ı	EB71510	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	u	,	*	*	•	*	
Carbon Ranges C28-C35	ND	10.0	*	•	**		*		
Total Hydrocarbons	ND	10.0	•	•			"	•	
Surrogate: 1-Chlorooctane		105 %	70-	130	*	17	"	*	
Surrogate: 1-Chlorooctadecane		106 %	70-	130	"	"	"	"	
SW-2 (7B15010-05) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/21/07	EPA 8021B	
Toluene	ND	0.00200	*	•		•		•	
Ethylbenzene	ND	0.00200	M		,	#		*	
Xylene (p/m)	ND	0.00200	*	**	,,	•	*		
Xylene (o)	ND	0.00200	H	•		•	•	•	
Surrogate: a,a,a-Trifluorotoluene		91.0%	75-	125	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		103 %	75-	125	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71510	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"		•		*	**	
Carbon Ranges C28-C35	ND	10.0	н		**	•		*	
Total Hydrocarbons	ND	10.0	•	w	•		•	•	
Surrogate: 1-Chlorooctane		96.0 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		97.6 %	70-	130		**	**	16	

Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	DOL:	n., 1	D	A==1: . J	Made	X 1
 	Result	Limit		Dilution	Batch	Prepared	Analyzed	Method	Not
SW-3 (7B15010-06) Soil									
Benzene	ND		mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	*		•	*	•	*	
Ethylbenzene	ND	0.00200	•	*		*	*	"	
Xylene (p/m)	ND	0.00200	•		*	*	•	*	
Xylene (o)	ND	0.00200	"			*	**		
Surrogate: a.a.a-Trifluorotoluene		82.0 %	75-125		•	"	*	n	
Surrogate: 4-Bromofluorobenzene		78.2 %	75-1.	25	*	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0		•	•	*	*	n	
Carbon Ranges C28-C35	ND	10.0	•	"		•	*	*	
Total Hydrocarbons	ND	10.0				•			
Surrogate: 1-Chlorooctane		101 %	70-1	30	,,	"	,,	"	
Surrogate: 1-Chlorooctadecane		105 %	70-1	30	"	**	"	n	
SW-4 (7B15010-07) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	•	"	*	н	*	•	
Ethylbenzene	ND	0.00200	•	**	**		•	н	
Xylene (p/m)	ND	0.00200	n	н	*			н	
Xylene (o)	ND	0.00200	*			*	**	•	
Surrogate: a,a,a-Trifluorotoluene		83.8 %	75-1	25	#	"	tt	"	
Surrogate: 4-Bromofluorobenzene		84.0 %	75-1	25	*	"	,,	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	*		•	•		•	
Carbon Ranges C28-C35	ND	10.0	*		*	*	•	•	
Total Hydrocarbons	ND	10.0	**	•	•	•	**		
Surrogate: I-Chlorooctane		94.4%	70-1	30	н		"	"	
Surrogate: I-Chlorooctadecane		100 %	70-1	30	"	"	"	"	
SW-5 (7B15010-08) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/21/07	EPA 8021B	
Toluene	ND	0.00200	**	"	*		•	•	
Ethylbenzene	ND	0.00200		,	#				
Xylene (p/m)	ND	0.00200	•			*	*	н	
Xylene (o)	ND	0.00200		*	*		•		
Surrogate: a,a,a-Trifluorotoluene		80.6 %	75-1	25	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	75-1	25	"	"	"	"	
Carbon Ranges C6-C12	ND	0.01	mg/kg dry	ı	EB71606	02/16/07	02/18/07	EPA 8015M	

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Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC Environmental Lab of Texas

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
SW-5 (7B15010-08) Soil	· 								
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	*	*	*	*	*	•	
Total Hydrocarbons	ND	10.0		**			*	*	
Surrogate: 1-Chlorooctane		99.0 %	70-130		"	"	,	,,	
Surrogate: 1-Chlorooctadecane		105 %	70-13	80	"	"	"	"	
SW-6 (7B15010-09) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/21/07	EPA 8021B	
Toluene	ND	0.00200	*			*		n	
Ethylbenzene	ND	0.00200	*	•	•	#	*	•	
Xylene (p/m)	ND	0.00200				*	*	ø	
Xylene (o)	ND	0.00200		•		-	**	**	
Surrogate: a,a,a-Trifluorotoluene		84.0 %	75-1.	25	,,	"	,,	r	
Surrogate: 4-Bromofluorabenzene		92.6 %	75-1.	25	**	#	#	11	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	**				•	•	
Carbon Ranges C28-C35	ND	10.0	**	•				"	
Total Hydrocarbons	ND	10.0	*			•		н	
Surrogate: I-Chlorooctane		98.6 %	70-1.	30	"	"	"	м	
Surrogate: 1-Chlorooctadecane		107 %	70-1	30	"	,,	"	n	
SW-7 (7B15010-10) Soil									
Benzene	ND	0.00200	mg/kg dry	2	EB72006	02/20/07	02/20/07	EPA 8021B	
Toluene	ND	0.00200	*				*		
Ethylbenzene	ND	0.00200	"		**		н	n	
Xylene (p/m)	ND	0.00200	н		"		*	•	
Xylene (o)	ND	0.00200	*		*	*	•	"	
Surrogate: a,a,a-Trifluorotoluene		83.8 %	75-1	25	и	"	"	4	
Surrogate: 4-Bromofluorobenzene		76.2 %	75-1	25	*	*	,,	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	0.01	**		н	и	•	•	
Carbon Ranges C28-C35	ND	10.0	41			•	•	н	
Total Hydrocarbons	ND	10.0	"	*		•	•	n	
Surrogate: 1-Chlorooctane		105 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-1	30	"	*	*	"	

Environmental Lab of Texas

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Project Number: 2003-00126
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
SW-8 (7B15010-11) Soil									
Benzene	ND	0.00200	mg∕kg dry	2	EB72006	02/20/07	02/21/07	EPA 8021B	
Toluene	ND	0.00200			*	•	•	*	
Ethylbenzene	ND	0.00200	•		**	11	H	*	
Xylene (p/m)	ND	0.00200	•		*	*	*	*	
Xylene (o)	ND	0.00200	•	*		*	•	*	
Surrogate: a,a,a-Trifluorotoluene		89.2 %	75-1	25	,,	"	"	,	
Surrogate: 4-Bromofluorobenzene		103 %	75-1	25	"	n	"	,,	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB71606	02/16/07	02/18/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	•	H		•		*	
Carbon Ranges C28-C35	ND	10.0	•	4	*	*		H-	
Total Hydrocarbons	ND	10.0	,	*	*		•	•	
Surrogate: 1-Chlorooctane		97.6 %	70-1	30		,,	"	"	
Surrogate: 1-Chlorooctadecane		102 %	70-1	30	•	"	"	"	

Project: Vac to Jal #4
Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (7B15010-01) Soil									
% Moisture	13.6	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
BH-2 (7B15010-02) Soil									
% Moisture	9.7	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
BH-3 (7B15010-03) Soil									
% Moisture	16.5	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-1 (7B15010-04) Soil									
% Moisture	13.9	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-2 (7B15010-05) Soil									
% Moisture	14.3	1.0	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-3 (7B15010-06) Soil									
% Moisture	14.4	0.1	%	l	EB71603	02/16/07	02/16/07	% calculation	
SW-4 (7B15010-07) Soil									
% Moisture	2.9	0.1	%	ι	EB71603	02/16/07	02/16/07	% calculation	
SW-5 (7B15010-08) Soil									
% Moisture	9.5	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-6 (7B15010-09) Soil									
% Moisture	21.3	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-7 (7B15010-10) Soil									
% Moisture	9.1	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	
SW-8 (7B15010-11) Soil									
% Moisture	12.0	0.1	%	1	EB71603	02/16/07	02/16/07	% calculation	

Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB71510 - Solvent Extraction (GC)										
Blank (EB71510-BLK1)				Prepared: 0	2/15/07 A	nalyzed: 02	/18/07			
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	51,7	,	mg kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	52.7		"	50.0		105	70-130			
LCS (EB71510-BS1)				Prepared: ()2/15/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	558	10.0	mg/kg wet	500		112	75-125			
Carbon Ranges C12-C28	537	10.0	n	500		107	75-125			
Carbon Ranges C28-C35	ND	10.0	•	0.00			75-125			
Total Hydrocarbons	1090	10.0	*	1000		109	75-125			
Surrogate: 1-Chlorooctane	54.6		mg kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	53.1		**	50.0		106	70-130			
Calibration Check (EB71510-CCV1)				Prepared: (02/15/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	231		mg/kg	250		92.4	80-120			
Carbon Ranges C12-C28	284			250		114	80-120			
Total Hydrocarbons	515			500		103	80-120			
Surrogate: 1-Chlorooctane	58,7		'n	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	51.3		"	50.0		103	70-130			
Matrix Spike (EB71510-MS1)	Soi	urce: 7B15005	5-05	Prepared:	02/15/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	728	10.0	mg/kg dry	592	ND	123	75-125			
Carbon Ranges C12-C28	668	10.0	n	592	37.0	107	75-125			
Carbon Ranges C28-C35	ND	10.0	•	0.00	ND		75-125			
Total Hydrocarbons	1400	10.0	**	1180	37.0	116	75-125			
Surrogate: 1-Chlorooctane	55.7		mg kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	52.4		•	50.0		105	70-130			

Project: Vac to Jal #4
Project Number: 2003-00126

Project Number: 2003-00120

Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB71510 - Solvent Extraction (GC)										
Matrix Spike Dup (EB71510-MSD1)	Sou	rce: 7B15005	-05	Prepared:	02/15/07 A	nalyzed: 02	/18/07			
Carbon Ranges C6-C12	757	10,0	mg/kg dry	592	ND	128	75-125	3.98	20	М
Carbon Ranges C12-C28	690	10.0		592	37.0	110	75-125	2.76	20	
Carbon Ranges C28-C35	ND	10.0	•	0.00	ND		75-125		20	
Total Hydrocarbons	1450	0.01	•	1180	37.0	120	75-125	3.39	20	
Surrogate: 1-Chlorooctane	56.6		mg kg	50.0		113	70-130			
Surrogate: 1-Chlorooctadecane	53.3		**	50.0		107	70-130			
Batch EB71606 - Solvent Extraction (GC)										
Blank (EB71606-BLK1)			<u> </u>	Prepared:	02/16/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	Ħ							
Carbon Ranges C28-C35	ND	10.0								
Total Hydrocarbons	ND	10.0	•							
Surrogate: 1-Chlorooctane	49.1		mg kg	50.0		98.2	70-130			
Surrogate: 1-Chlorooctadecane	52.0		*	50.0		104	70-130			
LCS (EB71606-BS1)				Prepared:	02/16/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	522	10.0	mg/kg wet	500		104	75-125			
Carbon Ranges C12-C28	480	10.0	e	500		96.0	75-125			
Carbon Ranges C28-C35	ND	10.0	*	0.00			75-125			
Total Hydrocarbons	1000	10.0		1000		100	75-125			
Surrogate: 1-Chlorooctane	48.3		nıg kg	50.0		96.6	70-130			
Surrogate: 1-Chlorooctadecane	48.9		n	50.0		97.8	70-130			
Calibration Check (EB71606-CCV1)				Prepared:	02/16/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	219		mg/kg	250		87.6	80-120			
Carbon Ranges C12-C28	269		11	250		108	80-120			
Total Hydrocarbons	488		"	500		97.6	80-120			
Surrogate: 1-Chlorooctane	54.1			50.0		108	70-130			

48.6

Surrogate: 1-Chlorooctadecane

97.2

70-130

50.0

Project: Vac to Jal #4
Project Number: 2003-00126
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB71606 - Solvent Extraction (GC)										
Matrix Spike (EB71606-MS1)	Sour	ce: 7B15010	-07	Prepared: (02/16/07 A	nalyzed: 02	/18/07			
Carbon Ranges C6-C12	535	10.0	mg/kg dry	515	ND	104	75-125			
Carbon Ranges C12-C28	496	10.0	*	515	ND	96.3	75-125			
Carbon Ranges C28-C35	ND	10.0	•	0.00	ND		75-125			
Total Hydrocarbons	1030	10.0	•	1030	ND	100	75-125			
Surrogate: 1-Chloroociane	50.5		mg kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	49.2		*	50.0		98.4	70-130			
Matrix Spike Dup (EB71606-MSD1)	Sour	rce: 7B15010	-07	Prepared:	02/16/07 A	nalyzed: 02	2/18/07			
Carbon Ranges C6-C12	533	10.0	mg/kg dry	515	ND	103	75-125	0.966	20	
Carbon Ranges C12-C28	500	10.0	**	515	ND	97.1	75-125	0.827	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1030	10.0	*	1030	ND	100	75-125	0.00	20	
Surrogate: 1-Chlorooctane	48.4		mg kg	50.0		96.8	70-130			
Surrogate: 1-Chlorooctadecane	47.5		"	50.0		95.0	70-130			
Batch EB72006 - EPA 5030C (GC)										
Blank (EB72006-BLK1)				Prepared &	& Analyzed	02/20/07	· · · · · · · · · · · · · · · · · · ·			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100	*							
Xylene (p/m)	ND	0.00100	n							
Xylene (o)	ND	0.00100								
Surrogate: a,a,a-Trifluorotoluene	53.0		ug kg	50.0		106	75-125			
Surrogate: 4-Bromofluorobenzene	46.3		"	50.0		92.6	75-125			
LCS (EB72006-BS1)				Prepared a	& Analyzed	: 02/20/07				
Benzene	0.0596	0.00100	mg/kg wet	0.0500		119	80-120			
Toluene	0.0578	0.00100	n	0.0500		116	80-120			
Ethylbenzene	0.0559	0.00100	•	0.0500		112	80-120			
Xylene (p/m)	0.113	0.00100	•	0.100		113	80-120			
Xylene (o)	0.0473	0.00100	*	0.0500		94.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	54.9		ug kg	50.0		110	75-125			
Surrogate: 4-Bromofluorobenzene	54.2		"	50.0		108	75-125			

Project Number: 2003-00126
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 EB72006 - EPA 5030C (GC)										
Calibration Check (EB72006-CCVI)				Prepared &	Analyzed:	02/20/07				
Benzene	54.7		ug/kg	50.0		109	80-120			
Toluene	50.7		•	50.0		101	80-120			
Ethylbenzene	48.0		н	50.0		96.0	80-120			
Xylene (p/m)	96.7		•	100		96.7	80-120			
Xylene (o)	41.0			50.0		82.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	49.8		"	50.0		99.6	75-125			
Surrogate: 4-Bromofluorobenzene	43.2		"	50.0		86.4	75-125			
Matrix Spike (EB72006-MS1)	Sou	rce: 7B15010)-01	Prepared &	k Analyzed:	02/20/07				
Benzene	0.106	0.00200	mg/kg dry	0.116	ND	91.4	80-120		············	
Toluene	0.0964	0.00200	"	0.116	ND	83.1	80-120			
Ethylbenzene	0.0935	0.00200	*	0.116	ND	80.6	80-120			
Xylene (p/m)	0.201	0.00200		0.231	ND	87.0	80-120			
Xylene (o)	0.0895	0.00200	•	0.116	ND	77.2	80-120			М
Surrogate: a,a,a-Trifluorotoluene	42.7		ug kg	50.0		85.4	75-125			
Surrogate: 4-Bromofluorobenzene	43.9		"	50.0		87.8	75-125			
Matrix Spike Dup (EB72006-MSDI)	Sou	rce: 7B15010	10-0	Prepared &	& Analyzed	: 02/20/07				
Benzene	0.114	0.00200	mg/kg dry	0.116	ND	98.3	80-120	7.27	20	····
Toluene	0.104	0.00200	н	0.116	ND	89.7	80-120	7.64	20	
Ethylbenzene	0.102	0.00200	н	0.116	ND	87.9	80-120	8.66	20	
Xylene (p/m)	0.216	0.00200	**	0.231	ND	93.5	80-120	7.20	20	
Xylene (o)	0.0946	0.00200	*	0.116	ND	81.6	80-120	5.54	20	
Surrogate: a,a,a-Trifluorotoluene	41.4		ug kg	50.0		82.8	75-125			
Surrogate: 4-Bromofluorobenzene	41.9		"	50.0		83.8	75-125			

Project: Vac to Jal #4

Project Number: 2003-00126

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 EB71603 - General Preparation (Prep)										
Biank (EB71603-BLK1)				Prepared &	Analyzed	02/16/07				
% Solids	100		%							
Duplicate (EB71603-DUP1)	Sour	rce: 7B15002-	01	Prepared &	Analyzed	02/16/07				
% Solids	91.6		%		90.8			0.877	20	
Duplicate (EB71603-DUP2)	Sou	rce: 7B15009-	01	Prepared &	Analyzed	02/16/07				
% Solids	89.3		%		88.8			0.561	20	

Plains All American EH & S
Project: Vac to Jal #4

1301 S. County Road 1150
Project Number: 2003-00126

Midland TX. 79706-4476
Project Manager: Camille Reynolds

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
М1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
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

	 1 *	- 2 X		
Report Approved By:			Date:	2/22/2007

Brent Barron, Laboratory Director/Corp. Technical Director Celey D. Keene, Org. Tech Director Raland K. Tuttle, Laboratory Consultant James Mathis, QA/QC Officer Jeanne Mc Murrey, Inorg. Tech Director

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

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

Environmental Lab of Texas

The results in 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.

Environmental Lab of Texas

Odessa, Texas 79765 12600 West I-20 East

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST () Phone: 432-663-1800

☐ NPDES □ TRB Analyze For. Project Name: Vac to Jal #4 Standard Standard Project Loc: Les Co. NM Project #: 204155 PO # Report Format: e-mail: cpatel@premiercorp-usa.com Fax No: 281.520.5201 Company Address: 4800 Sugar Grove Blvd. #420 Premier Environmental Stafford, Texas 7747 Sampler Signature: Shane A.Diller 281.240.5200 Chan Patel Project Manager: Company Name Telephone No: City/State/Zip:

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Environmental Lab of Texas

12600 West I-20 East Odessa, Texas 79785

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
Phone: 432-563-1713

Fax: 432-563-1713 ☐ NPOES ☐ TR89 Project Name: Vac to Jal # 4 X Standard Project Loc: Lea Co. NM Project #: 204155 # Od Report Format: Fax No: 281.520.5201 Company Address: 4800 Sugar Grove Blvd. #420 Premier Environmental Stafford, Texas 7747 Sampler Signature: Shane A.Diller 281 240.5200 Project Manager: Chan Patel Company Name Telephone No: City/State/Zip:

e-mail: cpatel@premiercorp-usa.com

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Bill Plains Marketing EMS # 2003-00126 Please call Shane w/ Verbal 432 230 3344	<u> a</u>	ease call Shane w/	Vert	4	32.2	30.3	4						7 % E	X Por	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace	Omn	inta depa	ું ફુટ ફુ			00			18 No. 18 18 18 18 18
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Date

Relinquished by:

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In Client: 215/M 2:50 Date! Time: 7B15010 Lab ID#: Initials: Sample Receipt Checklist Client initials ° C Temperature of container/ cooler? No 0 Yes Shipping container in good condition? Pes No Custody Seals intact on shipping container/ cooler? Yes No Not Present #3 Not Present Custody Seals intact on sample bottles/ container? Yes No Chain of Custody present? Yes No #6 Sample instructions complete of Chain of Custody? Yes No Yes No #7 Chain of Custody signed when relinquished/ received? Chain of Custody agrees with sample label(s)? Yes No ID written on Cont./(Lid Yes Container label(s) legible and intact? No Not Applicable Yes #10 Sample matrix/ properties agree with Chain of Custody? No No #11 Containers supplied by ELOT? Yes #12 Samples in proper container/ bottle? Yes No See Below #13 Samples properly preserved? Yes No See Below Yes #14 Sample bottles intact? No #15 Preservations documented on Chain of Custody? No Yes #16 Containers documented on Chain of Custody? Yes No #17 Sufficient sample amount for indicated test(s)? ×e3 No See Below Yes #18 All samples received within sufficient hold time? No See Below #19 Subcontract of sample(s)? No Not Applicable Yes #20 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

4<u>riel i</u> 25 N. French Dr., Honbs, NM **8824**0 strict II 01 W. Grand Avenue, Artesia, SM 88210

te: 2003-05-16 00:00:00

* Attach Additional Sheets If Necessary

striet III 00 Rio Brazos Road, Aztec, NM 87410 strict IV

20 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

1 orm C-141 Revised March 17, 1999

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

	Releas	se Notifica	tion a	nd Cor	rective A	ction	
OPERATOR					⊠ In	itial Report	Final Report
une of Company				Contact			
OTT Energy LLC					Hernandez		
idress				Telepho			
) Box 1660 5805 East Highwa	y 80 Midla	nd, Texas 7970)2	713.25			
cility Name				Facility			
acuum to Jal 14" Mainline #4				14"-16	" Steel Pipeli	ne	
ırface Owner: Millard Deck E	state			Mine	ral Owner		Lease No.
		LOCAT	TION (OF REL	EASE		
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urce of Release				:	lour of Occurre	í	Date and Hour of Discovery
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	Yes 🗌	No 🔲 Not Rec	quired	· Sylvia Dic			
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a Watercourse was Impacted. Desc	ribe Fully *						
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scribe Cause of Problem and Rem "-16" Steel Pipeline. The cause w pressured and a line repair clamp scribe Area Affected and Cleanup 5' x 120' 2.431 sqft Site will be de Remedial Goals: TPII 8015m = 1 lenes = 50 mg/Kg.	as either int installed (Action Take lineated to d	ernal or external contaminated soil n.* letermine the ver	l was dis tical and	posed of in t horizontal (he South Moni extents of conta	ument Surface umination. Co	WM Facility. ntaminated soil will be disposed
ereby certify that the information gulations all operators are required blic health or the environment. The suld their operations have failed to alth or the environment. In additional ter federal, state, or local laws and	to report and e acceptance adequately in, NMOCD	Vor file certain re tof a C-141 report investigate and re acceptance of a C	clease not rt by the mediate	tifications an NMOCD ma contamination	d perform corrected as "Final on that pose a ti	ective actions I Report" does n breat to ground	or releases which may endanger or relieve the operator of liability water, surface water, human
mature. nted Name: I rank Hernandez.				Approv	ed by District S	Supervisor:	
le: District Environmental Superv	isor			Approv	al Date:	:	Expiration Date:
ter 2003-05-16 00:00:00	Ol	none: 713 253 70	·()(one of Approx		Attached [

| Conditions of Approval:

Phone: 713.253.7006

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

* Attack Additional Charte IChloganam.

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003 ubmit 2 Copies to appropriate

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

Release Notification and Corrective Action												
						OPERATOR Initial Report Final Report						
Name of Company Plains Pipeline Address 3112 W. US Hwy 82, Lovington, NM 88260						Contact Camille Reynolds						
				Telephone No. 505-441-0965								
Facility Nan	ne Vacuur	n to Jal 14" l		Facility Type 14"Steel Pipeline								
Surface Own	ner Millar	d Deck Estat	Lease No.									
LOCATION OF RELEASE												
Unit Letter I	Section 28	Township 20S	Range 37E	Feet from the	North/	South Line	Feet from the	East/West Line		County Lea		
		Latitud	e 32° 32	2' 36.8"	Longitude 103° 14' 56.4"							
Latitude 32° 32' 36.8" Longitude 103° 14' 56.4" RP-374 NATURE OF RELEASE												
Type of Release Crude Oil Volume of Release 15 barrels Volume Recovered 0 barrels												
Source of Rel							Pate and Hour of Discovery					
Was Immedia	te Notice (Fiven?		5/13/03 @ 10:00 5/15/03 @ 12:00 If YES, To Whom?					2000			
was minour	no routee (quired									
By Whom? P			Date and Hour 5/15/03 @ 14:00									
Was a Watero	course Read	ched?		If YES, Volume Impacting the Watercourse.								
If a Watercou	rse was Im	pacted, Descri	ibe Fully.	•						11	Receive Hobbs	ed
Describe Cause of Problem and Remedial Action Taken Release form a 14-16 inch steel pipeline was apparently caused by corrosion. The line was being deoiled at the time of the release. The line was depressurized and a line repair clamp was installed. The repair and remediation excavation extended to a depth of eight feet, beyond all visual evidence of impact.												
Describe Area Affected and Cleanup Action Taken.* Per the approved NMOCD Plains Marketing Supplemental Investigation Report and Remediation Proposal, the crude oil release site was excavated; the impacted soil was stockpiled on plastic adjacent to the excavation and confirmation soil samples were collected from the floor and sidewalls of the excavation. Once analytical documentation indicated the confirmation soil samples were below NMOCD regulatory standards the excavated/stockpiled soil was transported off-site for disposal/treatment at the Plains Lea Station Landfarm and the excavation was backfilled and contoured to original topography with clean soil. See attached Premier Environmental Services Soil Closure Report, dated April 2007, for details of remedial activities conducted.												
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:	ωm	أسالك		OIL CONSERVATION DIVISION ENVIRO ENGR								
Printed Name	: Camille R	leynolds		Approved by District Supervisor:								
Title: Remedi	ation Coor	dinator		Approval Date: 5-11.07 Expiration Date:								
E-mail Address: cjreynolds@paalp.com						Conditions of Approval:				Attached		
Date: 5/01/07			965									