### Basin Environmental Service Technologies, LLC

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### PRELIMINARY SITE INVESTIGATION REPORT and REMEDIATION/CLOSURE PLAN (REVISED)

### PLAINS MARKETING, L.P. (231735) Abandoned Vacuum 10-Inch Sour Lea County, New Mexico Plains EMS # 2004-00208 UNIT L (NW/SW), Section 8, Township 20 South, Range 37 East Latitude 32°, 35', 02.7" North, Longitude 103°, 16', 46.6" West

Prepared For:

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



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

30 September 2006

Ken Dutton

IRP-1105

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Basin Environmental Service Technologies, LLC PACOG31346456 PACOG31346576= PPACOG31347469

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### INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), responded to a pipeline release for Plains Marketing, L.P. (Plains), located on the inactive Abandoned Vacuum 10" Sour Pipeline on 07 October 2004. The inactive Abandoned Vacuum 10" Sour Pipeline was cold cut and capped and the impacted soil was excavated and stockpiled on a 6-ml poly-liner adjacent to the excavation. The inactive Abandoned Vacuum 10" Pipeline right-of-way is located on land owned by U. S. Department of the Interior, Bureau of Land Management (BLM).

This site is located in Unit L (NW/SW), Section 8, Township 20 South, Range 37 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site latitude is 32°, 35′, 02.7′ North and the site longitude is 103°, 16′, 46.6′ West. The site is characterized by a right-of-way for the pipeline in an undulating sand dune pasture utilized for cattle grazing. The visible surface stained area includes the release point and flow path area covering an area approximately 262 feet long by 17 feet wide. Approximately 8 barrels of crude oil were released from the inactive Abandoned Vacuum 10″ Pipeline and 3 barrels were recovered.

An emergency one-call was initiated 07 October 2004 and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Mr. James Amos, BLM, Carlsbad, New Mexico Office, was verbally notified 08 October 2004. Mr. Larry Johnson, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District I was verbally notified of the release on 12 October 2004. A BLM Report of Undesirable Event was prepared and delivered to Mr. Jim Amos in October 2004. A BLM Form 299, Application to Install Monitor Wells, was prepared and delivered to Carlsbad BLM Office on 15 July 2005. A NMOCD C-141 was prepared and delivered to Mr. Larry Johnson on 21 October 2004.

### NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database indicates the average depth to water for that section is 35 to 38 feet bgs. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of >19, which sets the remediation levels at:

Benzene: 10 ppm

BTEX: 50 ppm

TPH: 100 ppm

### SUMMARY OF FIELD ACTIVITIES

On 07 October 2004, Basin mobilized to the inactive Abandoned Vacuum 10" Pipeline release site to repair and contain the crude oil pipeline release under the direction of Plains operations personnel. The previous operators of the Vacuum 10" Pipeline, Texas-New Mexico Pipeline, had de-oiled the pipeline utilizing fresh water. After allowing the fresh water and minimal crude oil to drain, which was collected by a vacuum transport truck, Basin cold cut and capped the abandoned pipeline to the north and south of the crude oil release point. Excavation of the impacted soil was initiated and accomplished (see Figure 2, Excavation Site Map). The release point and visually stained area was excavated to approximately 262 feet long by 17 feet wide and ranged in depth from 4 inches to 1 foot below ground surface (bgs). Approximately 100 cubic yards of excavated soils were placed on a 6-ml poly liner adjacent to the excavation for future remedial action.

On 08 October 2004, Basin excavated the release point and visually stained area to the east to depths of approximately 3 feet bgs and 1-foot bgs, respectively (see Excavation Site Map, Figure 2). Photoionization Detector (PID) field screening of collected soil samples indicated elevated concentrations of Volatile Organic Compounds (VOC) remain at the release point and were less than NMOCD regulatory guidelines in the east flow path area.

On 11 October 2004, Basin excavated the release point to a depth of approximately 14 feet bgs in an attempt to evaluate the vertical extent of hydrocarbon contaminants. PID field readings indicated elevated concentrations of VOC's remain at the release point. Two delineation trenches were excavated to the north of the release point to evaluate the horizontal and vertical extent of contaminants (see Excavation Site Map, Figure 2). Both delineation trenches were excavated to a depth of approximately 3 feet bgs and soil samples were field screened with a PID, which indicated results were well below NMOCD regulatory guidelines.

On 23 October 2004, Basin installed one soil boring, utilizing Straub Corporation, Stanton, Texas, collecting soil samples every 5 feet at the release point in order to evaluate the vertical extent of crude oil impacted soil (see Soil Boring & Monitoring Well Locations, Figure 3). The soil boring was terminated at 36 feet bgs (soil boring log is attached as Appendix E). Each sample was screened with a PID, calibrated 23 October 2004. The selected soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO). Laboratory results indicated that constituent concentrations of BTEX were below NMOCD regulatory standards. Laboratory results indicated that constituent concentrations of TPH-GRO/DRO exceeded NMOCD regulatory standards at the 25, 30 and 35 feet bgs soil samples.

On 15 March 2006, Basin installed three (3) monitoring wells, one (1) up gradient and two (2) down gradient of the release point to evaluate the groundwater (see Figure

3). Soil samples were collected at 5 feet intervals; field screened with a PID and selected soil samples were analyzed for BTEX and TPH-GRO/DRO. Three (3) soil samples were collected for analysis from each of the three (3) groundwater monitoring well installations ranging in depth from approximately 5 to 25 feet bgs, resulting in a total of nine (9) soil samples. Laboratory results of the nine (9) soil samples indicated that BTEX and TPH-GRO/DRO constituent concentrations were not detected above laboratory method detection limits.

On 21 March 2006, 08 June 2006 and 13 September 2006, quarterly groundwater sampling was conducted at the Abandoned Vacuum 10" site. The groundwater samples were analyzed for constituent concentrations of BTEX. Laboratory results of the groundwater samples collected from the three (3) quarterly sampling events indicate that constituent concentrations BTEX were not detected above laboratory method detection limits.

### ARCHEOLOGICAL SURVEY RESULTS

Boone Archeological Services, LLC, Carlsbad, New Mexico, conducted an archeological survey of the site, in accordance with BLM directives. Results of the archeological survey did not find evidence of cultural resources present, and therefore, recommended archeological clearance. A copy of the archeological survey is included in Appendix D.

### DISTRIBUTION OF HYDROCARBONS IN THE USATURATED ZONE

The release point area was excavated to a depth of approximately 14 feet below ground surface (bgs) and evidence of crude oil impact still existed on the floor of the excavation. A drill rig was utilized to delineate the vertical extent of crude oil impacted soil. A soil boring was installed at the release point (see Figure 3). Soil samples were collected in the subsurface from the soil boring at 5 feet intervals. No visual observations of free phase hydrocarbons were encountered during the installation of the soil boring (as depicted on Appendix E) or excavation of the site. PID field screenings were utilized to determine which soil samples were to be submitted to the laboratory for analysis. Soil samples were analyzed for constituent concentrations of BTEX and TPH. Laboratory data sheets and chain-of-custody forms are attached (Appendix C).

The two delineation trenches excavated to the north of the release point indicated contaminants were limited to the release point area. The first delineation trench was excavated to a depth of approximately 3 feet bgs and approximately 6 feet long by 3 feet wide. The second delineation trench was excavated to a depth of approximately 3 feet bgs and approximately 18 feet long and 3 feet wide. Soil samples were collected from the floor and walls of each delineation trench; field screened with a PID, which indicated contaminant levels were well below NMOCD regulatory guidelines (100 ppm).

The visually impacted flow path area to the east of the release point was excavated to a depth of approximately 1-foot bgs. Numerous soil samples were collected along the excavated flow path area; field screened with a PID, which indicated contaminate levels well below NMOCD regulatory guidelines (100 ppm).

Soil Boring 1, as depicted on the Soil Boring & Monitoring Well Locations (Figure 3), was installed at the release point. Samples collected at the 25, 30 and 35 feet bgs were analyzed. The soil boring was terminated at 36 feet bgs. Laboratory results indicated that constituent concentrations of BTEX were below NMOCD regulatory standards at 25, 30 and 35 feet bgs. Laboratory results indicated that constituent concentrations of BTEX were below NMOCD regulatory standards at 25, 30 and 35 feet bgs. Laboratory results indicated that constituent concentrations of TPH-GRO/DRO exceeded NMOCD regulatory standards at 25, 30 and 35 feet bgs at 1430 mg/kg, 1780 mg/kg and 404 mg/kg, respectively.

Groundwater Monitoring Well 1 (MW-1) was installed at an up gradient position to the release point. Subsurface soil samples were collected at 5, 15 and 25 feet bgs sample depths, field screened with a PID and submitted for analysis. Laboratory results of the three (3) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

Groundwater Monitoring Well 2 (MW-2) was installed at a down gradient position to the release point. Subsurface soil samples were collected at 5, 15 and 25 feet bgs sample depths, field screened with a PID and submitted for analysis. Laboratory results of the three (3) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

Groundwater Monitoring Well 3 (MW-3) was installed at a down gradient position to the release point. Subsurface soil samples were collected at 5, 15 and 25 feet bgs sample depths, field screened with a PID and submitted for analysis. Laboratory results of the three (3) selected soil samples indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits.

### DISTRIBUTION OF HYDROCARBONS IN THE SATURATED ZONE

Groundwater was encountered at depths varying from 28 to 29 feet bgs in the soil boring and groundwater monitoring wells during drilling activities. No evidence of phase-separated hydrocarbons (PSH) was detected during drilling or groundwater sampling activities. Top-of-casing elevations for the on-site groundwater monitoring wells were not available at the time of this preliminary report; therefore, site-specific groundwater gradient information is not included.

On 20 and 21 March 2006, the three (3) groundwater monitoring wells were developed, purged and sampled. Quarterly groundwater sampling was conducted on 08 June 2006 and 13 September 2006. The groundwater samples collected from the

quarterly groundwater sampling events were analyzed for constituent concentrations of BTEX. Laboratory results of the three (3) groundwater monitoring wells groundwater samples indicated constituent concentrations of BTEX were not detected above laboratory method detection limits for each of the three (3) quarterly groundwater sampling events (see Groundwater Chemistry, Table 2).

### **RECOMMENDATIONS FOR REMEDIATION/CLOSURE**

Approximately 100 cubic yards of impacted soil has been excavated and stockpiled on-site resulting from the emergency response and excavation of the release point and flow path. Based on the analytical results and PID results of the soil boring, two (2) delineation trenches and three (3) groundwater monitoring wells, which indicates the crude oil impact is contained in a limited vertical subsurface area immediately around the release point, Plains proposes to excavate the release point area to approximately fifteen (15) feet bgs which will include an area approximately 30 feet long and 30 feet wide. The approximately 100 cubic yards of impacted soil and excavated clean overburden (approximately 500 cubic yards) resulting from further excavation will be blended and utilized as backfill material. The blended soil will be divided into equal grids of approximately 300 cubic yards; confirmation soil samples will be collected from the blended material to ensure TPH-GRO/DRO constituent concentrations of less than 1000 mg/kg and backfill the excavation with the blended soils.

Due to the remote area of this location and lack of receptors, Plains recommends that an impermeable barrier consisting of a 20-mil poly liner be permanently installed at the base of the excavation to inhibit vertical migration of contaminants in soil left in place below the cap (see Figure 4, Installation Diagram of 20-mil Poly Liner). The barrier will extend to a minimum of three (3) feet beyond the edges of soil impacted above NMOCD remedial thresholds. A 6-inch layer of fine sand will be installed beneath and above the 20-mil poly liner to prevent degrading the integrity of the poly liner. Installation of the 20-mil poly liner at a depth of approximately 15 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural biodegrading of contaminates in the soil.

Once installation of the 20-mil poly liner completed, backfilling of the excavation will be initiated with the blended material (<1000 mg/kg TPH-GRO/DRO) on-site. The backfilled excavation will be contoured to the original rangeland grade surrounding the site and reseeded with BLM approved grass seed.

A request for closure will be submitted to the Hobbs District I office, upon completion of backfilling activities. Based on the results of the remediation activities conducted, Plains requests approval from the NMOCD and BLM to implement these proposed final remediation and site closure activities.

### QA/QC PROCEDURES

### Soil Sampling

Soil samples were delivered to Environmental Lab of Texas, Inc. in Odessa, Texas for BTEX, TPH analyses using the methods described below. Soil samples were analyzed for BTEX, TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

### Groundwater Sampling

The groundwater monitoring wells were developed utilizing the Environmental Protection Agency (EPA) protocol of approximately nine (9) well volumes of groundwater or until the monitoring wells were dry using an electrical Grunfos Pump. Within forty-eight hours of development, the monitoring wells were measured and purged of approximately three (3) well volumes utilizing an electrical Grunfos Pump. Groundwater samples were collected using a disposable Teflon sampler and the groundwater samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and was disposed of at a licensed New Mexico disposal facility.

Groundwater samples were delivered to Environmental Laboratory of Texas, Odessa, Texas, for analysis of BTEX concentrations using the method described below. All samples were analyzed within approved holding times following the collection date.

• BTEX concentrations in accordance with EPA Method 8021B/5030

### **Decontamination Of Equipment**

Cleaning of the sampling equipment will be the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment will be cleaned with Liqui-Nox<sup>®</sup> detergent and rinsed with distilled water.

### Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures will be either transmitted with the laboratory reports or are on file at the laboratory.

### LIMITATIONS

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

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

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

### DISTRIBUTION

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- Copy 3: Mr. James Amos U.S. Department of the Interior Bureau of Land Management 620 E. Greene St. P. O. Box 1778 Carlsbad, New Mexico, 88220 James Amos@nm.blm.gov
- Copy 4: Mr. Larry Johnson New Mexico Oil Conservation Division 1625 N. French Dr. Hobbs, New Mexico 88240 Larry.johnson@state.nm.us
- Copy 5: Basin Environmental Service Technologies LLC P. O. Box 301 Lovington, New Mexico 88260 kdutton@basinenv.com

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# SOIL CHEMISTRY, SOIL BORING/MONITOR WELL INSTALLATION

**TABLE 1** 

## PLAINS MARKETING L.P. ABANDONED 10" VACUUM LEA COUNTY, NEW MEXICO EMS: 2004-00208

SAMPLE	SAMPLE	SAMPLE		METHOD: E	PA SW 8464	3021B, 5030		METHOI	): 8015M	TOTAL
LOCATION	DEPTH	DATE	BENZENE	TOLUENE	ETHYL-	M,P-	<b>O-XYLENE</b>	GRO	DRO	ТРН
					BENZENE	XYLENES				
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SB-1	25'	10/23/04	0.059	0.237	0.599	1.33	0.721	285	1140	1430
SB-1	30'	10/23/04	<0.025	<0.025	0.038	0.078	0.045	187	1590	1780
SB-1	35'	10/23/04	<0.025	<0.025	<0.025	0.052	0.026	72.8	331	404
			1. 1. 1.							
MW-1 5'	5' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-1 15'	15' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-1 25'	25' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-2 5'	5' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-2 15'	15' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-2 25'	25' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
								A State of the second se		
MW-3 5'	5' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-3 15'	15' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
MW-3 25'	25' bgs	03/15/06	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0
<b>NMOCD CRITER</b>	١A		10		TOTAL	<b>3TEX 50</b>				100

# **TABLE 2**

# **GROUNDWATER CHEMISTRY**

# PLAINS MARKETING, L.P. ABANDONED VACUUM 10" LEA COUNTY, NEW MEXICO PLAINS EMS NO. 2004-00208

ΠE	BENZENE	TOLUENE	ЕТНУС-	М,Р-	<b>O-XYLENES</b>	160.1
			BENZENE	XYLENES		TDS
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1/06	<0.001	<0.001	<0.001	<0.001	<0.001	
8/06	<0.001	<0.001	<0.001	<0.001	<0.001	
3/06	<0.001	<0.001	<0.001	<0.001	<0.001	
1/06	<0.001	<0.001	<0.001	<0.001	<0.001	
8/06	<0.001	<0.001	<0.001	<0.001	<0.001	
3/06	<0.001	<0.001	<0.001	<0.001	<0.001	
1/06	<0.001	<0.001	<0.001	<0.001	<0.001	
8/06	<0.001	<0.001	<0.001	<0.001	<0.001	
3/06	<0.001	<0.001	<0.001	<0.001	<0.001	
	<u>8000000000000000000000000000000000000</u>	/06 <0.001   /06 <0.001	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	000 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <td></td>	









Plains Marketing, L. P. Abandoned Vacuum 10" Sour NW/SW S8, T20S, R37E Lea County, NM Plains EMS: 2004-00208













	Township: 20S	Range: 37E	Sections: 8			
	NAD27 X:	Y:	Zone:	Search	Radius:	
County:		Basin:		Number:	Suffix:	
Owner Nan	ne: (First)	(Las	ot)	○ Non-D	omestic ODomes	tic 🛈 All
	Well / Sur	face Data Repo	t C	Avg Depth to Wa	ater Report	
		Clear Form	WATERS	Menu Help		

								(Depth	Water in	Feet)
Bsn	Tws	Rng	Sec	Zone	x	Y	Wells	Min	Max	Avg
А	20S	37E	08				1	38	38	38
L	205	37E	08				9	30	38	35

Record Count: 10

Form NM 3162-1 (August 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR Burcau of Land Management New Mexico State Office
REPORT OF UNDESIRABLE EVENT
DATE OF OCCURRENCE/DISCOVERY: $10764$ time of occurrence: $10.304m$
DATE REPORTED TO BLM: 10/8/04 TIME REPORTED: 8:00 AM
BLM OFFICE REPORTED TO: (FIELD/DISTRICT/OTHER) Jim Amos - Carlsback
LOCATION: (1/4 1/4) M SECTION 31 T. 205 R. 37E MERIDIAN MM Prime Meridian
COUNTY: Lea STATE: nm well NAME Abundoned Vacuum 10"5
OPERATOR: COMPANY NAME PLAINS All AMericantione NO. 505-444-0965 CONTACT PERSON'S NAME CAMILE REYNOLDS
SURFACE OWNER:MINERAL OWNER:
LEASE NO.: RIGHT-OF-WAY NO.: <u>LC 05 73</u> 55
UNIT NAME / COMMUNITIZATION AGREEMENT NO.:
TYPE OF EVENT, CIRCLE APPROPRIATE ITEM (S):
BLOWOUT, FIRE, FATALITY, INJURY, PROPERTY DAMAGE, OIL SPILL, SALTWATER SPILL, OIL AND SALTWATER SPILL, TOXIC FLUID SPILL, HAZARDOUS MATERIAL SPILL, UNCONTROLLED FLOW OF WELLBORE FLUIDS, OTHER (SPECIFY):
cause of event: Break in wild were 4" pipiline
HazMat Notified: (for spills)
Law Enforcement Notified: (for thefts)
CAUSE AND EXTENT OF PERSONAL INJURIES/CAUSE OF DEATH(S):
Safety Officer Notified:
EFFECTS OF EVENT: Crucle OIL Impacted Soil
ACTION TAKEN TO CONTROL EVENT: Line WAS Cut and Capped
LENGTH OF TIME TO CONTROL BLOWOUT OR FIRE:
VOLUMES DISCHARGED: OIL & DATELS WATER GAS
OTHER AGENCIES NOTIFIED:

FINAL	INVESTIGATION: TEAM NAME(S)
	FIELD INSPECTION DATE
	SUMMARY OF RESULTS OF INSPECTION
RESOL	IRCE LOSS WAS (CIRCLE ITEM): AVOIDABLE UNAVOIDABLE
DATE	OF MEMO NOTIFYING MINEALS MANAGEMENT SSERVICE THAT LOSS WAS AVOIDABLE:
DATE/	TIME/PERSON NOTIFIED: DISTRICT OFFICE
	STATE OFFICE
	WASHINGTON OFFICE
SUMM	ARY OF RESULTS OF RECLAMATION/CORRECTIVE ACTION:
REMAI	UKS:
<u>,                                     </u>	

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Issuing Office Carlsbad Field Office

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

### SERIAL NUMBER: NM-113356

- 1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).
- 2. Nature of Interest:
  - a. By this instrument, the holder:

Plains Pipeline, LP <del>Right of way Dept.</del> EH+S Dept- Attn. Camile Reynolds PO Box 4648 Houston, TX 77210

receives a right to construct, operate, maintain, and terminate (2) groundwater monitoring wells on public lands described as follows:

### T. 20 S., R. 37 E., NMPM Sec. 08: SW1/4SW1/4.

b. The right-of-way for the monitoring wells granted herein is (2) sites that are 50 feet wide and 50 feet long and contains 0.114 total acres, more or less.

c. This instrument shall terminate on <u>December 31<sup>st</sup>, 2034</u>, 30 years from the effective date of this grant unless prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800.

b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.

c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

d. The stipulations, plans, maps, or designs set forth in Exhibits A and B dated July 19, 2005, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Authorized Officer)

Tony J. Herrell, Field Manager itle)

#### EXHIBIT A July 19, 2005 NM-113356 Plains Pipeline, L.P. monitoring wells

### STIPULATIONS FOR FLPMA SITES

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this right-of-way.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to an toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, *etc.*) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of a toxic substances shall be furnished to the Authorized Officer concurrent with the filing of 1 reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) the right-of-way (unless the release or threatened release is wholly unrelated to the right of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the site any pollutant should be discharged from site facilities, or from containers, or vehicles impacting public lands, the control and total removal, disposal, and cleanup of such pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. U<sub>I</sub> failure of the holder to control, dispose of, or clean up such discharge on or affecting public lands, or to repair all damages to public lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wild habitats, at the full expense of the holder. Such action by the Authorized Officer shall nol relieve the holder of any liability or responsibility.

5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste material both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means discarded matter including, but not limited to, human waste, trash, garbage, and equipment.

6. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is <u>Shale Green</u>, Munsell Soil Color Chart Number <u>5Y 4/2</u>.

1 1 Jac 14

NM-113356 July 19, 2005 Page 2 of 2

7. The holder shall post a sign designating the BLM serial number assigned to this right-ofway grant in a permanent, conspicuous location on the site where the sign will be visible from the entry to the site. This sign will be maintained in a legible condition for the term of the right-of-way.

8. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

9. Should the holder require a base of mineral material, a sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM <u>prior to commencing construction</u>. There are several options available for purchasing mineral material: contact the BLM office.

10. The area will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle, and saltcedar.

Special Stipulations:

1. The Authorized Officer for the BLM, Carlsbad Field Office, will be contacted at (505-234-5972) for full restoration of the monitoring well prior to abandonment.

2. The project is identified as habitat for the lesser prairie chicken; therefore, all construction activities will be restricted between the hours of 3:00 am through 9:00 am for the period of March 15 through June 15.

LEA COUNTY.

### NEW MEXICO.





### Analytical Report

### **Prepared for:**

Ken Dutton Basin Environmental Services P.O. Box 301 Lovington, TX 88260

Project: Abandoned 10 inch Vacuum Project Number: EMS: 2004-00208 Location: Lea County, NM

Lab Order Number: 4J26002

Report Date: 11/01/04

Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 25'	4J26002-01	Soil	10/23/04 09:11	10/25/04 17:25
SB-1 30'	4J26002-02	Soil	10/23/04 09:17	10/25/04 17:25
SB-1 35'	4J26002-03	Soil	10/23/04 09:25	10/25/04 17:25

Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

### Organics by GC

**Environmental Lab of Texas** 

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 25' (4J26002-01) Soil	·····								
Benzene	0.0599	0.0250	mg/kg dry	25	EK40101	10/28/04	10/29/04	EPA 8021B	
Toluene	0.237	0.0250	n	H	"	"	n	**	
Ethylbenzene	0.599	0.0250	. 11	"	"	"	11	**	
Xylene (p/m)	1.33	0.0250	n	"	"	n	**	n	
Xylene (0)	0.721	0.0250	n	п	"	n	n	**	
Surrogate: a,a,a-Trifluorotoluene		135 %	80-1	20	"	"	"	H	S-04
Surrogate: 4-Bromofluorobenzene		102 %	80-1	20	"	"	"	"	
Gasoline Range Organics C6-C12	285	10.0	mg/kg dry	1	EJ42604	10/26/04	10/27/04	EPA 8015M	
Diesel Range Organics >C12-C35	1140	10.0	**	"	*	*	•	11	
Total Hydrocarbon C6-C35	1430	10.0	"	"	n	11	H	"	
Surrogate: 1-Chlorooctane		103 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		114 %	70-1	30	"	"	n	n	
SB-1 30' (4J26002-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK40101	10/28/04	10/29/04	EPA 8021B	
Toluene	J [0.0194]	0.0250	"	"	"	"	*	14	J
Ethylbenzene	0.0381	0.0250	**	*	"	n	11	59	
Xylene (p/m)	0.0787	0.0250	"	n	**	n	n		
Xylene (o)	0.0450	0.0250	"	*		"	Ħ	**	
Surrogate: a,a,a-Trifluorotoluene		86.9 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.7 %	80-1	20	"	"	"	n	
Gasoline Range Organics C6-C12	187	10.0	mg/kg dry	1	EJ42604	10/26/04	10/27/04	EPA 8015M	
Diesel Range Organics >C12-C35	1590	10.0	"	**	n	п	н		
Total Hydrocarbon C6-C35	1780	10.0	п	•		n	n	51	
Surrogate: 1-Chlorooctane		97.4 %	70-1	30	n	"	"	"	
Surrogate: 1-Chlorooctadecane		124 %	70-1	30	"	"	"	"	
SB-1 35' (4J26002-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK40101	10/28/04	10/29/04	EPA 8021B	
Toluene	J [0.00920]	0.0250	н	"	**	11	"		J
Ethylbenzene	J [0.0167]	0.0250	"	н	"	"	*	н	J
Xylene (p/m)	0.0526	0.0250	n	н	"	"	•	н	
Xylene (o)	0.0265	0.0250	"	н	17	"	*	n	
Surrogate: a,a,a-Trifluorotoluene		81.4 %	80-1	20	#	"	"	~	
Surrogate: 4-Bromofluorobenzene		90.6 %	80-1	20	"	"	#	"	
Gasoline Range Organics C6-C12	72.8	10.0	mg/kg dry	1	EJ42604	10/26/04	10/27/04	EPA 8015M	
Diesel Range Organics >C12-C35	331	10.0	11		**	11	n	*	
Total Hydrocarbon C6-C35	404	10.0	"					**	

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.

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Basin Environmental Services	Project: Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number: EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager: Ken Dutton	11/01/04 16:45

### Organics by GC

**Environmental Lab of Texas** 

Analyte SB-1 35' (4J26002-03) Soil	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane		96.2 % 111 %	70-1. 70-1.	30 30	EJ42604 "	10/26/04 "	10/27/04 "	EPA 8015M "	

Environmental Lab of Texas

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Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

### General Chemistry Parameters by EPA / Standard Methods

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 25' (4J26002-01) Soil									
% Moisture	11.0		%	1	EJ42701	10/26/04	10/27/04	% calculation	
SB-1 30' (4J26002-02) Soil									
% Moisture	6.0		%	1	EJ42701	10/26/04	10/27/04	% calculation	
SB-1 35' (4J26002-03) Soil									
% Moisture	12.0		%	1	EJ42701	10/26/04	10/27/04	% calculation	

Environmental Lab of Texas

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Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

		Reporting		Spike	Source		%REC		RPD	
Anaiyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EJ42604 - Solvent Extraction (GC)										
Blank (EJ42604-BLK1)				Prepared &	k Analyzed:	10/26/04				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	Ħ							
Total Hydrocarbon C6-C35	ND	10.0	n							
Surrogate: 1-Chlorooctane	39.6		mg/kg	50.0		79.2	70-130		···· ····	
Surrogate: 1-Chlorooctadecane	41.0		"	50.0		82.0	70-130			
Blank (EJ42604-BLK2)				Prepared:	10/26/04 A	nalyzed: 10	)/27/04			
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet			· · ·				
Diesel Range Organics >C12-C35	ND	10.0	н							
Total Hydrocarbon C6-C35	ND	10.0	н							
Surrogate: 1-Chlorooctane	39.7		mg/kg	50.0		79.4	70-130			
Surrogate: 1-Chlorooctadecane	40.3		"	50.0		80.6	70-130			
LCS (EJ42604-BS1)				Prepared &	k Analyzed:	10/26/04				
Gasoline Range Organics C6-C12	455	10.0	mg/kg wet	500		91.0	75-125			
Diesel Range Organics >C12-C35	486	10.0	n	500		97.2	75-125			
Total Hydrocarbon C6-C35	941	10.0	"	1000		94.1	75-125			
Surrogate: 1-Chlorooctane	45.7		mg/kg	50.0		91.4	70-130			
Surrogate: 1-Chlorooctadecane	40.1		"	50.0		80.2	70-130			
LCS (EJ42604-BS2)				Prepared:	10/26/04 A	nalyzed: 10	/27/04			
Gasoline Range Organics C6-C12	434	10.0	mg/kg wet	500		86.8	75-125			
Diesel Range Organics >C12-C35	488	10.0	**	500		97.6	75-125			
Total Hydrocarbon C6-C35	922	10.0	"	1000		92.2	75-125			
Surrogate: 1-Chlorooctane	45.8		mg/kg	50.0		91.6	70-130			
Surrogate: 1-Chlorooctadecane	41.7		"	50.0		83.4	70-130			
Calibration Check (EJ42604-CCV1)				Prepared 8	2 Analyzed:	10/26/04				
Gasoline Range Organics C6-C12	488		mg/kg	500		97.6	80-120			
Diesel Range Organics >C12-C35	519		"	500		104	80-120			
Total Hydrocarbon C6-C35	1010		14	1000		101	80-120			
Surrogate: 1-Chlorooctane	48.3		n	50.0	· · · · · · · · · · · · · · · · · · ·	96.6	70-130			
Surrogate: 1-Chlorooctadecane	45.0		"	50.0		90.0	70-130			

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Basin Environmental Services		Fax: (505) 396-1429										
P.O. Box 301		Project N	umber: EN	1S: 2004-00	208				Reported:			
Lovington TX, 88260		Project Ma	anager: Ke	n Dutton					11/01/0	4 16:45		
	O	rganics by	y GC - Q	uality Co	ontrol							
		Environ	mental L	ab of Te	xas							
		Reporting		Spike	Source		%REC		RPD			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Batch EJ42604 - Solvent Extraction (GC)												
Calibration Check (EJ42604-CCV2)				Prepared &	k Analyzed:	10/26/04						
Gasoline Range Organics C6-C12	489		mg/kg	500		97.8	80-120					
Diesel Range Organics >C12-C35	488			500		97.6	80-120					
Total Hydrocarbon C6-C35	977		"	1000		97.7	80-120					
Surrogate: 1-Chlorooctane	41.7		"	50.0		83.4	70-130					
Surrogate: 1-Chlorooctadecane	39.9		"	50.0		<i>79.8</i>	70-130					
Matrix Spike (EJ42604-MS1)	Source: 4J26001-17 Prepared & Analyzed: 10/26/04											
Gasoline Range Organics C6-C12	573	10.0	mg/kg dry	562	ND	102	75-125					
Diesel Range Organics >C12-C35	584	10.0	"	562	ND	104	75-125					
Total Hydrocarbon C6-C35	1160	10.0	"	1120	ND	104	75-125					
Surrogate: 1-Chlorooctane	55.0		mg/kg	50.0		110	70-130					
Surrogate: 1-Chlorooctadecane	50.3		"	50.0		101	70-130					
Matrix Spike (EJ42604-MS2)	Sou	rce: 4J26001	-21	Prepared:	10/26/04 A	nalyzed: 10	0/27/04					
Gasoline Range Organics C6-C12	536	10.0	mg/kg dry	568	ND	94.4	75-125					
Diesel Range Organics >C12-C35	611	10.0	"	568	ND	108	75-125					
Total Hydrocarbon C6-C35	1150	10.0	"	1140	ND	101	75-125					
Surrogate: 1-Chlorooctane	46.4		mg/kg	50.0		92.8	70-130					
Surrogate: 1-Chlorooctadecane	44.5		"	50.0		89.0	7 <b>0-13</b> 0					
Matrix Spike Dup (EJ42604-MSD1)	Sou	rce: 4J26001	-17	Prepared &	t Analyzed:	10/26/04						
Gasoline Range Organics C6-C12	567	10.0	mg/kg dry	562	ND	101	75-125	1.05	20			
Diesel Range Organics >C12-C35	584	10.0	n	562	ND	104	75-125	0.00	20			
Total Hydrocarbon C6-C35	1150	10.0	н	1120	ND	103	75-125	0.866	20			
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	70-130					
Surrogate: 1-Chlorooctadecane	51.8		"	50.0		104	70-130					
Matrix Spike Dup (EJ42604-MSD2)	Sou	rce: 4J26001	-21	Prepared:	10/26/04 A	nalyzed: 10	/27/04					
Gasoline Range Organics C6-C12	550	10.0	mg/kg dry	568	ND	96.8	75-125	2.58	20			
Diesel Range Organics >C12-C35	589	10.0	u	568	ND	104	75-125	3.67	20			
Total Hydrocarbon C6-C35	1140	10.0	H	1140	ND	100	75-125	0.873	20			
Surrogate: 1-Chlorooctane	46.7		mg/kg	50.0	•	93.4	70-130		···· · · · · · · · · · · · · · · · · ·			
Surrogate: 1-Chlorooctadecane	44.8		"	50.0		89.6	70-130					

Environmental Lab of Texas

### Project: Abandoned 10 inch Vacuum Project Number: EMS: 2004-00208 Project Manager: Ken Dutton

### **Reported:** 11/01/04 16:45

### **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
D-4-L EK40101 ED-4 2000 (CO)										
Batch EK40101 - EPA 5030C (GC)										
Blank (EK40101-BLK1)				Prepared &	2 Analyzed:	10/28/04				
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	u							
Xylene (p/m)	ND	0.0250	u							
Xylene (o)	ND	0.0250	u							
Surrogate: a,a,a-Trifluorotoluene	83.7		ug/kg	100		83.7	80-120			
Surrogate: 4-Bromofluorobenzene	<b>9</b> 8.7		"	100		98.7	80-120			
LCS (EK40101-BS1)				Prepared &	ک Analyzed:	10/28/04				
Benzene	84.3		ug/kg	100		84.3	80-120			
Toluene	87.5		11	100		87.5	80-120			
Ethylbenzene	96.2		*	100		96.2	80-120			
Xylene (p/m)	216		**	200		108	80-120			
Xylene (o)	104		*	100		104	80-120			
Surrogate: a,a,a-Trifluorotoluene	97.4		"	100		97.4	80-120			
Surrogate: 4-Bromofluorobenzene	116		"	100		116	80-120			
Calibration Check (EK40101-CCV1)				Prepared: 1	10/28/04 A	nalyzed: 10	/29/04			
Benzene	94.5		ug/kg	100		94.5	80-120			
Toluene	94.2		*	100		<del>9</del> 4.2	80-120			
Ethylbenzene	93.3		n	100		93.3	80-120			
Xylene (p/m)	206		**	200		103	80-120			
Xylene (o)	98.7		н	100		98.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	107		n	100		107	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			
Matrix Spike (EK40101-MS1)	Sou	rce: 4J26001	-31	Prepared: 1	10/28/04 A	nalyzed: 10	/29/04			
Benzene	90.7		ug/kg	100	ND	90.7	80-120			-
Toluene	93.4		"	100	ND	93.4	80-120			
Ethylbenzene	101		"	100	ND	101	80-120			
Xylene (p/m)	229			200	ND	114	80-120			
Xylene (o)	111		"	100	ND	111	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	113		"	100		113	80-120			

Environmental Lab of Texas

### Project: Abandoned 10 inch Vacuum Project Number: EMS: 2004-00208 Project Manager: Ken Dutton

#### **Reported:** 11/01/04 16:45

### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

r				·····						*******
		Reporting		Spike	Source		%REC		RPD	:
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch EK40101 - EPA 5030C (GC)

Matrix Spike Dup (EK40101-MSD1)	Source: 4	Prepared: 1	10/28/04 A	)/29/04				
Benzene	92.0	ug/kg	100	ND	92.0	80-120	1.42	20
Toluene	93.8	"	100	ND	<b>93.8</b>	80-120	0.427	20
Ethylbenzene	101	"	100	ND	101	80-120	0.00	20
Xylene (p/m)	228	"	200	ND	114	80-120	0.00	20
Xylene (o)	110	**	100	ND	110	80-120	0.905	20
Surrogate: a,a,a-Trifluorotoluene	99.9	"	100		99.9	80-120		
Surrogate: 4-Bromofluorobenzene	118	"	100		118	80-120		

Environmental Lab of Texas

Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

# 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 EJ42701 - General Preparation (Prep)										÷
Blank (EJ42701-BLK1)				Prepared: 1	0/26/04 A	nalyzed: 10	/27/04			
% Moisture	0.0		%							
Duplicate (EJ42701-DUP1)	Sou	rce: 4J26001-0	)1	Prepared: 1	0/26/04 A	nalyzed: 10	/27/04			
% Moisture	6.0		%		6.0			0.00	20	

Environmental Lab of Texas

Basin Environmental Services	Project:	Abandoned 10 inch Vacuum	Fax: (505) 396-1429
P.O. Box 301	Project Number:	EMS: 2004-00208	Reported:
Lovington TX, 88260	Project Manager:	Ken Dutton	11/01/04 16:45

### **Notes and Definitions**

S-04 T	he surrogate recovery	for this sample	e is outside of established	control limits due to a sam	ple matrix effect.
--------	-----------------------	-----------------	-----------------------------	-----------------------------	--------------------

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

Raland K houts

11/1/04

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

Date:

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

Environmental Lab of Texas

Report Approved By:

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Environn 12600 West 1-20 Em Odessa, Texas 7971	Project M	Company	Company A	CityISt	Tekeptx	Sampler Slg			LOOMESH	Muo sen gal 2 gy	20-	(a-					Special Instructions:	( The second second	References of the Second	the en

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

Client:	Basin	Environ	mental
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Date/Time: 10-26-04 0 0 830

Initials: JMM

# Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	0.0 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Tes	Ng	
Sample Instructions complete on Chain of Custody?	185	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	A DONE	No	
Container labels legible and intact?		No	
Sample Matrix and properties same as on chain of custody?	res	No	
Samples in proper container/bottle?	YES	No	
Samples properly preserved?	Tes	No	
Sample bottles intact?	Tas	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	Na	
Sufficient sample amount for indicated test?	(Tes)	No	
All samples received within sufficient hold time?	CED	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

### Variance Documentation:

.

Contact Person:	·	Date/Time:	Contacted by:	
Regarding:				

Corrective Action Taken:

4.



# Analytical Report

# **Prepared for:**

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

Project: Abandoned Vacuum 10" Project Number: EMS: 2004-00208 Location: Lea County, NM

Lab Order Number: 6C16005

Report Date: 03/23/06

Plains All American EH & S	Project: Abar	ndoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS	5: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager: Cam	ille Reynolds	03/23/06 17:05

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 5'	6C16005-01	Soil	03/15/06 09:12	03/16/06 10:00
MW-1 15'	6C16005-02	Soil	03/15/06 09:17	03/16/06 10:00
MW-1 25'	6C16005-03	Soil	03/15/06 09:25	03/16/06 10:00
MW-2 5'	6C16005-04	Soil	03/15/06 11:07	03/16/06 10:00
MW-2 15'	6C16005-05	Soil	03/15/06 11:13	03/16/06 10:00
MW-2 25'	6C16005-06	Soil	03/15/06 11:17	03/16/06 10:00
MW-3 5'	6C16005-07	Soil	03/15/06 12:56	03/16/06 10:00
MW-3 15'	6C16005-08	Soil	03/15/06 12:59	03/16/06 10:00
MW-3 25'	6C16005-09	Soil	03/15/06 13:06	03/16/06 10:00

Plains All American EH & S	Project:	Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/23/06 17:05

# Organics by GC

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 5' (6C16005-01) Soil	· · · · · · · · · · · · · · · · · · ·			2 20001					1.0003
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	
Toluene	ND	0.0250	**	"		*	u	n	
Ethylbenzene	ND	0.0250	"	"	*		H	"	
Xylene (p/m)	ND	0.0250		"	•	"	"	"	
Xylene (o)	ND	0.0250		"	н	*	"	11	
Surrogate: a,a,a-Trifluorotoluene		92.8 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		<b>96</b> .0 %	80-1	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	79	"	н	*	n	N	
Carbon Ranges C28-C35	ND	10.0	**	Ħ	"	"	"	н	
Total Hydrocarbon C6-C35	ND	10.0	"	н	**	**	"	n	
Surrogate: 1-Chlorooctane		124 %	70-1	30	"	"	"	n	
Surrogate: 1-Chlorooctadecane		124 %	70-1	30	"	"	"	"	
MW-1 15' (6C16005-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	•
Toluene	ND	0.0250	**	n	n	н	"	H	
Ethylbenzene	ND	0.0250	*	н	н	"	n	"	
Xylene (p/m)	ND	0.0250	*	н			11	u	
Xylene (o)	ND	0.0250	u	"	"		н	"	
Surrogate: a,a,a-Trifluorotoluene		88.0 %	80-1	20	"	"	n	n	
Surrogate: 4-Bromofluorobenzene		93.2 %	80-1.	20	"	"	"	n	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0		17		"	"	*	
Carbon Ranges C28-C35	ND	10.0	н		*	*	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	11	"	"	n	u	
Surrogate: 1-Chlorooctane		116 %	70-1	30	"	"	17	#	···· · · · · · · · · · · · · · · · · ·
Surrogate: 1-Chlorooctadecane		117 %	70-1.	30	"	"	"	"	
MW-1 25' (6C16005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	
Toluene	ND	0.0250	"	n	"	"	н	"	
Ethylbenzene	ND	0.0250	*	n	"	"	n	n	
Xylene (p/m)	ND	0.0250	u	*	11	Ħ	n	"	
Xylene (o)	ND	0.0250	н	"	n	н	19	*1	
Surrogate: a,a,a-Trifluorotoluene		96.0 %	80-12	20	n	n	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	80-12	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M	
Environmental Lab of Tayor	·····							·	······

Environmental Lab of Texas

1010 S. County Road 1130 Project Manager: Camille Reynolds Reparate: 03/23/06 17.05   Midland TX, 79706-4476 Project Manager: Camille Reynolds Second 10.00 Reparate: 03/23/06 17.05   Camille Reynolds Reparate: Sub Camille Reynolds   Camille Reynolds Reparate: Sub Camille Reynolds   Mark 126 (CG1606-63) Soil Mathewall Reynolds Reparate: Reparate: Sub Camille Reynolds Reparate: R	Plains All American EH & S	ains All American EH & S Project: Abandoned Vacuum 10"										
Midland TX, 79706-4476   Project Manager:   Camille Reynolds   Organics by GC     Companies by GC     Environmental Lab of Texas     Analyte   Reputing Limit   Units   Dilation   Back   Prepared Prepared   Analyted Method   Method   Method   Network     Analyte   Reputing Limit   Units   Dilation   Back   Prepared   Analyted   Method   Note     Analyte   Reputing Limit   Units   Dilation   Back   Prepared   Analyted   Method   Note     Cathon Ranges C24 CGE 5005-C03   ND   10.0   *<	1301 S. County Road 1150		Project N	lumber: EM	(S: 2004-0	0208			Repo	rted:		
Dreame by Greating Experting     Analyze   Repared Propertion   Back Propertion   Propertion   Analyze   Method   Note     Mathy   Result   Linits   Linits   Back   Pergered   Analyze   Method   Note     MUP1 25' GGE6005-03 Soil   TO   10.0   mekg dry   1   EC61618   03.0606   0.01706   BPA 8915M     Carbon Ranges C28-C35   ND   10.0   "   -	Midland TX, 79706-4476		Project M	anager: Car	nille Reyno	olds			03/23/0	6 17:05		
Individual India In			0	rganics b	y GC							
Analysis   Reporting Lank   Units   Dilution   Batch   Pepared   Analysed   Method   Note     Analysis   CdeColoB04-30 Soil			Environ	mental L	ab of Te	exas						
Calling   Lamin   Calling   Diation   Back   Pergend   Analyzed   Method   Note     MV-1   25' (6C16406-43) Soil		Develt	Reporting	¥ 1								
WW-1 27 (0C10005-03) Sail     Carbon Ranges C12-C28   ND   10.0   "   *   *   *   *     Total Hydrocarbon C6-C35   ND   10.0   "   *   *   *   *     Total Hydrocarbon C6-C35   ND   10.0   "   *<	Analyte	Kesult	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Carbon Ranges C12-C28   ND   10.0   mg/kg dry   1   ECk3 6/3   30/16/06   EPA 8015M     Carbon Ranges C28-C35   ND   10.0   "	MW-1 25' (6C16005-03) Soil								· · · · · · · · · · · · · · · · · · ·			
Carbon Ranges C28-C35   ND   10.0   * <td>Carbon Ranges C12-C28</td> <td>ND</td> <td>10.0</td> <td>mg/kg dry</td> <td>1</td> <td>EC61618</td> <td>03/16/06</td> <td>03/17/06</td> <td>EPA 8015M</td> <td></td>	Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M			
Total Hydrocarbon C6-C35   ND   10.0   "	Carbon Ranges C28-C35	ND	10.0	и	"	**	"					
Surrogate: 1-Chlorooctane   108 %   70-130   "	Total Hydrocarbon C6-C35	ND	10.0		"	8	"	*	11			
Surrogate : 1-Chlorooctadecane   1/1 %   70-130   *	Surrogate: 1-Chlorooctane		108 %	70-1	30	"	"	"	"			
MW-2. 5 (6C16005-04) Soil   ND   0.0250   mg/kg dry   25   EC62103   03/20/06   D2/A 8021B     Toluene   ND   0.0250   -	Surrogate: 1-Chlorooctadecane		111 %	70-1	30	"	"	"	n			
Benzene   ND   0.0250   mg/kg dry   25   EC62103   03/21/06   EPA 8021B     Toluene   ND   0.0250   """"""""""""""""""""""""""""""""""""	MW-2 5' (6C16005-04) Soil											
Toluene ND 0.0250 * * * * * * *   Ethylbenzene ND 0.0250 * * * * * *   Sylene (p/m) ND 0.0250 * * * * * *   Surrogate: .a,a-Triffuorolohene 91.0 % 80-120 * * * * *   Surrogate: .a,a-Triffuorolohenene 101 % 80-120 * * * * *   Carbon Ranges C6-C12 ND 10.0 mgk dry 1 EC61618 03/1606 03/1706 EPA 8015M   Carbon Ranges C28-C35 ND 10.0 * * * * *   Surrogate: 1-Chlorooctadecane 123 % 70-130 * * * * *   Surrogate: 1-Chlorooctadecane 123 % 70-130 * * * * * *   Surrogate: 1-Chlorooctadecane ND 0.0250 * * * * *	Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B			
Bitly benzene   ND   0.0250   "	Toluene	ND	0.0250	n			"	**	*			
Xylene (p/m)   ND   0.0250   "	Ethylbenzene	ND	0.0250	"	"	н	"	*	0			
Xylene (o)   ND   0.0250   "	Xylene (p/m)	ND	0.0250	N	n			**	11			
Surrogate: a. a. a. Trifluorotoluene   91.0 %   80-120   "<	Xylene (o)	ND	0.0250	"	n	"	17		n			
Norogate:   Horogifuorobenzene   101 %   80-120   "   "   "   "     Carbon Ranges C6-C12   ND   10.0   mg/kg dry   1   EC61618   03/16/06   03/17/06   EPA 8015M     Carbon Ranges C12-C28   ND   10.0   "   #	Surrogate: a.a.a-Trifluorotoluene		91.0 %	80-1	20	"	n	"	"			
Carbon Ranges C6-C12   ND   10.0   mg/kg dry   1   EC61618   03/16/06   03/17/06   EPA 8015M     Carbon Ranges C12-C28   ND   10.0   "<	Surrogate: 4-Bromofluorobenzene		101 %	80-1	20	"	"	"	"			
Carbon Ranges C12-C28   ND   10.0   " <td>Carbon Ranges C6-C12</td> <td>ND</td> <td>10.0</td> <td>mg/kg dry</td> <td>1</td> <td>EC61618</td> <td>03/16/06</td> <td>03/17/06</td> <td>EPA 8015M</td> <td></td>	Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M			
Carbon Ranges C28-C35   ND   10.0   "   "   "   "   "   "     Total Hydrocarbon C6-C33   ND   10.0   "	Carbon Ranges C12-C28	ND	10.0	n	"	11	н	"	0			
Total Hydrocarbon C6-C35   ND   10.0   "	Carbon Ranges C28-C35	ND	10.0	H		н	н	п	u			
Surrogate: 1-Chlorooctane 123 % 70-130 "	Total Hydrocarbon C6-C35	ND	10.0	"		*	"	"	n			
Surrogate: 1-Chlorooctadecane 125 % 70-130 " " " " "   MW-2 15' (6C16005-05) Soil   Benzene ND 0.0250 mg/kg dry 25 EC62103 03/20/06 03/21/06 EPA 8021B   Toluene ND 0.0250 " " " " " "   Ethylbenzene ND 0.0250 " " " " " " "   Xylene (p/m) ND 0.0250 "	Surrogate: 1-Chlorooctane		123 %	70-1	30	11	"	n	"			
MW-2 15' (6C16005-05) Soil   Benzene ND 0.0250 mg/kg dry 25 EC62103 03/20/06 EPA 8021B   Toluene ND 0.0250 " " " " "   Ethylbenzene ND 0.0250 " " " " "   Xylene (p/m) ND 0.0250 " " " " " "   Surrogate: a, a, a-Trifluorotoluene 93.2 % 80-120 " " " " "   Surrogate: A-Bromofluorobenzene 91.2 % 80-120 " " " " "   Carbon Ranges C6-C12 ND 10.0 mg/kg dry 1 EC61618 03/16/06 03/17/06 EPA 8015M   Carbon Ranges C12-C28 ND 10.0 " " " " " "   Carbon Ranges C28-C35 ND 10.0 " " " " " " "   Surrogate: 1-Chlorooctane 109 % 70-130 " " " " " " "	Surrogate: 1-Chlorooctadecane		125 %	70-1	30	"	"	n	"			
Benzene   ND   0.0250   mg/kg dry   25   EC62103   03/20/06   03/21/06   EPA 8021B     Toluene   ND   0.0250   " <td>MW-2 15' (6C16005-05) Soil</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	MW-2 15' (6C16005-05) Soil											
Toluene ND 0.0250 " <	Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B			
Ethylbenzene ND 0.0250 "	Toluene	ND	0.0250	н		11	"	"	**			
Xylene (p/m) ND 0.0250 "	Ethylbenzene	ND	0.0250	"	u.	"	"	**				
Xylene (o) ND 0.0250 """"""""""""""""""""""""""""""""""""	Xylene (p/m)	ND	0.0250		н	n			"			
Surrogate: a, a, a-Trifluorotoluene 93.2 % 80-120 " <th< td=""><td>Xylene (o)</td><td>ND</td><td>0.0250</td><td>"</td><td>n</td><td>"</td><td>*</td><td>"</td><td>"</td><td></td></th<>	Xylene (o)	ND	0.0250	"	n	"	*	"	"			
Surrogate: 4-Bromofluorobenzene 91.2 % 80-120 " </td <td>Surrogate: a,a,a-Trifluorotoluene</td> <td>****</td> <td>93.2 %</td> <td>80-1</td> <td>20</td> <td>n</td> <td></td> <td>"</td> <td>"</td> <td></td>	Surrogate: a,a,a-Trifluorotoluene	****	93.2 %	80-1	20	n		"	"			
Carbon Ranges C6-C12 ND 10.0 mg/kg dry 1 EC61618 03/16/06 03/17/06 EPA 8015M   Carbon Ranges C12-C28 ND 10.0 " <td>Surrogate: 4-Bromofluorobenzene</td> <td></td> <td>91.2 %</td> <td>80-1</td> <td>20</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	Surrogate: 4-Bromofluorobenzene		91.2 %	80-1	20	"	"	"	"			
Carbon Ranges C12-C28   ND   10.0   " <td>Carbon Ranges C6-C12</td> <td>ND</td> <td>10.0</td> <td>mg/kg dry</td> <td>1</td> <td>EC61618</td> <td>03/16/06</td> <td>03/17/06</td> <td>EPA 8015M</td> <td></td>	Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M			
Carbon Ranges C28-C35   ND   10.0   " <td>Carbon Ranges C12-C28</td> <td>ND</td> <td>10.0</td> <td>n</td> <td>n</td> <td></td> <td></td> <td>"</td> <td>n</td> <td></td>	Carbon Ranges C12-C28	ND	10.0	n	n			"	n			
ND   10.0   " <td>Carbon Ranges C28-C35</td> <td>ND</td> <td>10.0</td> <td>"</td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	Carbon Ranges C28-C35	ND	10.0	"		"	"	"	"			
Surrogate: 1-Chlorooctane   109 %   70-130   "   "   "   "     Surrogate: 1-Chlorooctadecane   111 %   70-130   "   "   "   "	Total Hydrocarbon C6-C35	ND	10.0	"	۳	"	*	"	"			
Surrogate: 1-Chlorooctadecane 111 % 70-130 " " " "	Surrogate: 1-Chlorooctane		109 %	70-1	30	n	#	"	"			
	Surrogate: 1-Chlorooctadecane		111 %	70-1	30	"	"	n	"			

Environmental Lab of Texas

Plains All American EH & S	Project:	Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/23/06 17:05

# Organics by GC

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	[ ]nite	Dilutia -	Detab	Decesso	A m=1	Mathe	N7-4
MW-2 25' (6C16005-06) Soil	ivouit	Luilt		Dilution	DAICH	rrepared	Analyzed	Ivietnoa	Notes
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	
Toluene	ND	0.0250		"	"	17	"	"	
Ethylbenzene	ND	0.0250	H N	**	"	H	*	n	
Xylene (p/m)	ND	0.0250		"	"	IT	u	"	
Xyiene (o)	ND	0.0250		"	"	"		**	
Surrogate: a,a,a-Trifluorotoluene		90.2 %	80-1	20	n	"	n	n	
Surrogate: 4-Bromofluorobenzene		98.8 %	80-1	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61618	03/16/06	03/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	**	H	"	**	H	11	
Carbon Ranges C28-C35	ND	10.0	11	"	"	*	It	n	
Total Hydrocarbon C6-C35	ND	10.0		*		**	и	11	
Surrogate: 1-Chlorooctane		114 %	70-1	30	"	**	"	n	
Surrogate: 1-Chlorooctadecane		115 %	70-1	30	"	"	"	n	
MW-3 5' (6C16005-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	
Toluene	ND	0.0250	**	н	"		"	"	
Ethylbenzene	ND	0.0250	**	"	"	"	11	**	
Xylene (p/m)	ND	0.0250	u	"	"	"	н 1	"	
Xylene (o)	ND	0.0250	u	"	"	u		п	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-1.	20	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		107 %	80-1	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61706	03/17/06	03/18/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"		н <sup>.</sup>	"	n	"	
Carbon Ranges C28-C35	ND	10.0	"	11	"	*	*	n	
Total Hydrocarbon C6-C35	ND	10.0	"	n	н	u	"	н	
Surrogate: 1-Chlorooctane		130 %	70-1.	30	"	#	"	#	
Surrogate: 1-Chlorooctadecane		128 %	70-1.	30	"	"	17	"	
MW-3 15' (6C16005-08) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B	
Toluene	ND	0.0250	н	"	"	"	"	**	
Ethylbenzene	ND	0.0250	н	"	**	"	**	*	
Xylene (p/m)	ND	0.0250	'n	H	Ħ	"	"	*	
Xylene (o)	ND	0.0250	"	*	н	"	"	*	
Surrogate: a,a,a-Trifluorotoluene		86.2 %	80-12	20	n	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.5 %	80-12	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61706	03/17/06	03/18/06	EPA 8015M	
Environmental Lab of Texas			The rest	ults in this r	eport annlv to	the samples on	alvzed in accorde	ince with the sample	25

Plains All American EH & S			Project: Ab	andoned V	acuum 10"			Fax: (432) 687-4914			
1301 S. County Road 1150		Project N	lumber: EN	1S: 2004-0	0208			Report	Reported:		
Midland TX, 79706-4476		Project M	lanager: Ca	mille Reyno	olas			03/23/00	5 17:05		
		O	rganics b	y GC							
		Environ	mental L	ab of To	exas						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
MW-3 15' (6C16005-08) Soil											
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EC61706	03/17/06	03/18/06	EPA 8015M			
Carbon Ranges C28-C35	ND	10.0	U	"	"	"	**	"			
Total Hydrocarbon C6-C35	ND	10.0		"	n	*	"	"			
Surrogate: 1-Chlorooctane		116 %	70-1	130	"	17	"	17			
Surrogate: 1-Chlorooctadecane		120 %	7 <b>0</b> -2	130	"	"	"	n			
MW-3 25' (6C16005-09) Soil											
Benzene	ND	0.0250	mg/kg dry	25	EC62103	03/20/06	03/21/06	EPA 8021B			
Toluene	ND	0.0250	n	n	"	"	*	н			
Ethylbenzene	ND	0.0250	U	"	"	H	n	"			
Xylene (p/m)	ND	0.0250	"	н		"	**	11			
Xylene (o)	ND	0.0250	n	"		"	"	n			
Surrogate: a,a,a-Trifluorotoluene		94.5 %	80-1	120	#	n	n	n			
Surrogate: 4-Bromofluorobenzene		90.2 %	80-1	120	"	"	"	"			
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EC61706	03/17/06	03/18/06	EPA 8015M			
Carbon Ranges C12-C28	ND	10.0	"	11	н	н '	n	11			
Carbon Ranges C28-C35	ND	10.0	"	"	n	11	н	ч			
Total Hydrocarbon C6-C35	ND	10.0	"	11	**	"	n	"			
Surrogate: 1-Chlorooctane		129 %	70-1	130	"	"	"	n			
Surrogate: 1-Chlorooctadecane		129 %	70-1	130	"	"	"	"			

### General Chemistry Parameters by EPA / Standard Methods

### **Environmental Lab of Texas**

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 5' (6C16005-01) Soil									
% Moisture	5.1	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-1 15' (6C16005-02) Soil									
% Moisture	14.7	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-1 25' (6C16005-03) Soil									
% Moisture	10.0	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-2 5' (6C16005-04) Soil									
% Moisture	6.4	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-2 15' (6C16005-05) Soil									
% Moisture	11.2	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-2 25' (6C16005-06) Soil									
% Moisture	7.7	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-3 5' (6C16005-07) Soil									
% Moisture	7.0	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-3 15' (6C16005-08) Soil									
% Moisture	9.7	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	
MW-3 25' (6C16005-09) Soil									
% Moisture	10.6	0.1	%	1	EC61702	03/16/06	03/17/06	% calculation	

Environmental Lab of Texas

Plains All American EH & S	Project:	Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/23/06 17:05

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC61618 - Solvent Extraction (GC)										
Blank (EC61618-BLK1)				Prepared: (	03/16/06 A	nalyzed: 03	/17/06			
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	**							
Carbon Ranges C28-C35	ND	10.0	"							

п

10.0

ND

57.2

Surrogate: 1-Chlorooctane	53.5		mg/kg	50.0	107	70-130	······································
Surrogate: 1-Chlorooctadecane	53.2		"	50.0	106	70-130	
LCS (EC61618-BS1)				Prepared: 03/1	6/06 Analyzed: 03	/17/06	
Carbon Ranges C6-C12	526	10.0	mg/kg wet	500	105	75-125	
Carbon Ranges C12-C28	496	10.0	н	500	99.2	75-125	
Total Hydrocarbon C6-C35	1020	10.0	n	1000	102	75-125	
Surrogate: 1-Chlorooctane	57.4		mg/kg	50.0	115	70-130	
Surrogate: 1-Chlorooctadecane	50.8		"	50.0	102	70-130	
Calibration Check (EC61618-CCV1)				Prepared: 03/1	6/06 Analyzed: 03	/17/06	
Carbon Ranges C6-C12	245		mg/kg	250	98.0	80-120	
Carbon Ranges C12-C28	288			250	115	80-120	
Total Hydrocarbon C6-C35	533		н	500	107	80-120	
Surrogate: 1-Chlorooctane	54.0		n	50.0	108	70-130	

Matrix Spike (EC61618-MS1)	Sourc	e: 6C15005	5-01	Prepared: 0	)3/16/06 A	nalyzed: 0	3/17/06
Carbon Ranges C6-C12	577	10.0	mg/kg dry	536	24.4	103	75-125
Carbon Ranges C12-C28	652	10.0	"	536	104	102	75-125
Total Hydrocarbon C6-C35	1230	10.0	"	1070	128	103	75-125
Surrogate: 1-Chlorooctane	63.3		mg/kg	50.0		127	70-130
Surrogate: 1-Chlorooctadecane	56.6		"	50.0		113	70-130

"

50.0

Environmental Lab of Texas

Total Hydrocarbon C6-C35

Surrogate: 1-Chlorooctadecane

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70-130

Plains All American EH & S	Project: Abandoned Vacuum 10"								Fax: (432)	687-4914	
1301 S. County Road 1150		Project N	umber: EM	(S: 2004-00)	208				Reported:		
Midland TX, 79706-4476		Project M	anager: Car	nille Reynol	ds				03/23/0	6 17:05	
	0	rganics by	y GC - Q	uality Co	ontrol						
		Environ	nental L	ab of Te	xas						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EC61618 - Solvent Extraction (GC)		· · · · · · · · · · · · ·	****	• * * *						· · · · · · · · · · · · · · · · · · ·	
Matrix Spike Dup (EC61618-MSD1)	Soi	arce: 6C1500	5-01	Prepared: (	)3/16/06 A	nalyzed: 03	/17/06				
Carbon Ranges C6-C12	596	10.0	mg/kg dry	536	24.4	107	75-125	3.24	20		
Carbon Ranges C12-C28	666	10.0	n	536	104	105	75-125	2.12	20		
Total Hydrocarbon C6-C35	1260	10.0	"	1070	128	106	75-125	2.41	20		
Surrogate: 1-Chlorooctane	60.9		mg/kg	50.0		122	70-130				
Surrogate: 1-Chlorooctadecane	58.1		"	50.0		116	70-130				
Batch EC61706 - Solvent Extraction (GC)											
Blank (EC61706-BLK1)	Prepared & Analyzed: 03/17/06										
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 Hydrocarbon C6-C35	ND	10.0	"								
Surrogate: 1-Chlorooctane	50.5		mg/kg	50.0		101	70-130				
Surrogate: 1-Chlorooctadecane	<b>49</b> .7		"	50.0		99.4	70-130				
LCS (EC61706-BS1)				Prepared &	Analyzed:	03/17/06					
Carbon Ranges C6-C12	527	10.0	mg/kg wet	500		105	75-125				
Carbon Ranges C12-C28	489	10.0	"	500		97.8	75-125				
Total Hydrocarbon C6-C35	1020	10.0	"	1000		102	75-125				
Surrogate: 1-Chlorooctane	58.8		mg/kg	50.0		118	70-130		· · · · · · · · · · · · · · · · · · ·		
Surrogate: 1-Chlorooctadecane	51.9		"	50.0		104	70-130				
Calibration Check (EC61706-CCV1)				Prepared: 0	3/17/06 A	nalyzed: 03	/18/06				
Carbon Ranges C6-C12	276		mg/kg	250		110	80-120				
Carbon Ranges C12-C28	297		"	250		119	80-120				
Total Hydrocarbon C6-C35	573			500		115	80-120				
Surrogate: 1-Chlorooctane	55.1		H	50.0		110	70-130				
Surrogate: 1-Chlorooctadecane	52.4		"	50.0		105	70-130				

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch EC61706 - Solvent Extraction (GC)

Matrix Spike (EC61706-MS1)	Sourc	e: 6C17009	9-03	Prepared &	Analyzed	: 03/17/06			
Carbon Ranges C6-C12	560	10.0	mg/kg dry	522	ND	107	75-125	 	
Carbon Ranges C12-C28	534	10.0	"	522	25.1	97.5	75-125		
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		
Total Hydrocarbon C6-C35	1090	10.0	11	1040	25.1	102	75-125		
Surrogate: 1-Chlorooctane	54.7		mg/kg	50.0		109	70-130	 	
Surrogate: 1-Chlorooctadecane	48.4		"	50.0		96.8	70-130		
Matrix Spike Dup (EC61706-MSD1)	Sourc	e: 6C17009	-03	Prepared &	z Analyzed	: 03/17/06			
0 1 D 0/ 010		10.0		500	200	107		 ••	

Carbon Ranges C6-C12	553	10.0 mg/kg dry	522	ND	106	75-125	1.26	20	
Carbon Ranges C12-C28	522	10.0 "	522	25.1	95.2	75-125	2.27	20	
Carbon Ranges C28-C35	ND	10.0 "	0.00	ND		75-125		20	
Total Hydrocarbon C6-C35	1080	10.0 "	1040	25.1	101	75-125	0.922	20	
Surrogate: 1-Chlorooctane	53.9	mg/kg	50.0		108	70-130	- , pr		
Surrogate: 1-Chlorooctadecane	47.1	"	50.0		94.2	70-130			

### Batch EC62103 - EPA 5030C (GC)

Blank (EC62103-BLK1)				Prepared: 03/20/	/06 Analyzed: 03	/21/06	
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	18				
Surrogate: a,a,a-Trifluorotoluene	37.5		ug/kg	40.0	<i>93.8</i>	80-120	
Surrogate: 4-Bromofluorobenzene	34.5		"	40.0	86.2	80-120	
LCS (EC62103-BS1)				Prepared: 03/20/	/06 Analyzed: 03	/21/06	
Benzene	1.03	0.0250	mg/kg wet	1.25	82.4	80-120	
Toluene	1.17	0.0250	*	1.25	93.6	80-120	
Ethylbenzene	1.31	0.0250	"	1.25	105	80-120	
Xylene (p/m)	2.66	0.0250		2.50	106	80-120	
Xylene (o)	1.31	0.0250		1.25	105	80-120	
Surrogate: a,a,a-Trifluorotoluene	36.9		ug/kg	40.0	92.2	80-120	
Surrogate: 4-Bromofluorobenzene	35.6		"	40.0	89.0	80-120	

Plains All American EH & S	Project:	Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/23/06 17:05

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC62103 - EPA 5030C (GC)							a			
Calibration Check (EC62103-CCV1)				Prepared:	03/20/06 A	nalyzed: 03	/22/06			
Benzene	41.2		ug/kg	50.0		82.4	80-120			
Toluene	44.3		н	50.0		88.6	80-120			
Ethylbenzene	48.6			50.0		97.2	80-120			
Xylene (p/m)	100		"	100		100	80-120			
Xylene (o)	50.4		n	50.0		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.2	· · · · · · · · · · · · · · · · · · ·	n	40.0		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	37.4		"	40.0		93.5	80-120			
Matrix Spike (EC62103-MS1)	Sou	rce: 6C1601	5-01	Prepared: (	03/20/06 A	nalyzed: 03	/21/06			
Benzene	1.18	0.0250	mg/kg dry	1.42	ND	83.1	80-120			
Foluene	1.34	0.0250	n	1.42	ND	94.4	80-120			
Ethylbenzene	1.53	0.0250	"	1.42	ND	108	80-120			
Xylene (p/m)	3.10	0.0250	н	2.84	ND	109	80-120			
Xylene (o)	1.54	0.0250	"	1.42	ND	108	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.4		ug/kg	40.0		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	41.5		"	40.0		104	80-120			
Matrix Spike Dup (EC62103-MSD1)	Sou	rce: 6C1601	5-01	Prepared: (	)3/20/06 A	nalyzed: 03	/21/06			
Benzene	1.17	0.0250	mg/kg dry	1.42	ND	82.4	80-120	0.846	20	
Foluene	1.33	0.0250		1.42	ND	93.7	80-120	0.744	20	
Ethylbenzene	1.51	0.0250	"	1.42	ND	106	80-120	1.87	20	
Kylene (p/m)	3.07	0.0250	"	2.84	ND	108	80-120	0.922	20	
Kylene (o)	1.52	0.0250	н	1.42	ND	107	80-120	0.930	20	
Surrogate: a,a,a-Trifluorotoluene	37.0		ug/kg	40.0		92.5	80-120			

40.0

38.0

Surrogate: 4-Bromofluorobenzene

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.

95.0

80-120

Plains All American EH & S	Project: Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/23/06 17:05

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC61702 - General Preparation (Prep)										
Blank (EC61702-BLK1)				Prepared: 0	3/16/06 A	nalyzed: 03	/17/06			
% Solids	99.9		%							
Duplicate (EC61702-DUP1)	Sou	rce: 6C15014-0	)1	Prepared: 0	3/16/06 A	nalyzed: 03	/17/06			
% Solids	97.9		%		97.5			0.409	20	
Duplicate (EC61702-DUP2)	Sou	rce: 6C16004-1	4	Prepared: 0	3/16/06 A	nalyzed: 03	/17/06			
% Solids	91.7		%		91.6			0.109	20	
Duplicate (EC61702-DUP3)	Sou	rce: 6C16013-0	2	Prepared: 0	3/16/06 A	nalyzed: 03	/17/06			
% Solids	98.3		%		97.9			0.408	20	

Environmental Lab of Texas

Plains All American EH & S	Project:	Abandoned Vacuum 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS: 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/23/06 17:05

### **Notes and Definitions**

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland K Just

3/23/2006

.

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.

Date:

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

Environmental Lab of Texas

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Environmental Lab of Texas I, Ltd. 12600 West I-20 East Odense, Texas 79763 Fax: 915-683-1713

12600 West |-20 East Odessa, Taxas 79763

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

Client: BASIN ENV. Main
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Date/Time: 3/16/06 10:00

Order #: 60160

Initials:

# Sample Receipt Checklist

Temperature of container/cooler?	Yes	No I	1.0 C i
Shipping container/cooler in good condition?	( CED )	No	1
Custody Seals intact on shipping container/cooler?	031	No	Not present
Custody Seals intact on sample bottles?	XES	No	Not present i
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	BE I	No	
Chain of Custody signed when relinquished and received?	83	No	
Chain of custody agrees with sample label(s)	YAS	No	
Container labels legible and intact?	835	No	
Sample Matrix and properties same as on chain of custody?	120	No	· · · · · · · · · · · · · · · · · · ·
Samples in proper container/bottle?	Yes	NO	······································
Samples properly preserved?	255	No	
Sample bottles intact?	(CEB)	No	
Preservations documented on Chain of Custody?	1 800	No	
Containers documented on Chain of Custody?	Xes	NO	
Sufficient sample amount for indicated test?	Xes	No	
All samples received within sufficient hold time?	000	No	
VOC samples have zero headspace?	600	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	Contacted by:	
Corrective Action Taken:			



# Analytical Report

# **Prepared for:**

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

Project: Abandoned Vac 10" Project Number: EMS# 2004-00208 Location: Lea Co., NM

Lab Order Number: 6C22009

Report Date: 03/30/06

Plains All American EH & S	Project: A	Abandoned Vac 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: E	EMS# 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager: C	Camille Reynolds	03/30/06 11:34

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6C22009-01	Water	03/21/06 15:25	03/22/06 15:30
MW-2	6C22009-02	Water	03/22/06 09:15	03/22/06 15:30
MW-3	6C22009-03	Water	03/22/06 10:24	03/22/06 15:30

Plains All American EH & S	Project: Abandoned Vac 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: EMS# 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager: Camille Reynolds	03/30/06 11:34

# Organics by GC

Environm	ienta	l Lab	of	Геха	S		
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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6C22009-01) Water	· · · · · · · · · · · · · · · · · · ·								
Benzene	ND	0.00100	mg/L	1	EC62419	03/24/06	03/28/06	EPA 8021B	
Toluene	ND	0.00100	n	u	"	n	4	*	
Ethylbenzene	ND	0.00100	"	п	*	"	H	4	
Xylene (p/m)	ND	0.00100	"	н		"	"	"	
Xylene (0)	ND	0.00100	n	н	H	n	*	11	
Surrogate: a,a,a-Trifluorotoluene		89.0 %	80-1	120	"	11	#	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-1	120	"	"	"	"	
MW-2 (6C22009-02) Water				-					
Benzene	ND	0.00100	mg/L	1	EC62805	03/28/06	03/29/06	EPA 8021B	
Toluene	ND	0.00100	"	**		**	**	"	
Ethylbenzene	ND	0.00100		*	"	**	"	u.	
Xylene (p/m)	ND	0.00100	"	19		17	u	**	
Xylene (o)	ND	0.00100	"	"	Ħ	rt	11	n	
Surrogate: a,a,a-Trifluorotoluene		86.8 %	80-1	120	"	n	ħ	17	
Surrogate: 4-Bromofluorobenzene		86.2 %	80-1	120	"	"	"	"	
MW-3 (6C22009-03) Water									
Benzene	ND	0.00100	mg/L	1	EC62805	03/28/06	03/29/06	EPA 8021B	
Toluene	ND	0.00100	"	•	*	n	н	n	
Ethylbenzene	ND	0.00100	n	"		"		n	
Xylene (p/m)	ND	0.00100	n	•	n	**		n	
Xylene (o)	ND	0.00100	"	н	u		u	*	

80-120

80-120

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85.8 %

86.0 %

Environmental Lab of Texas

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Plains All American EH & S	Project:	Abandoned Vac 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS# 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/30/06 11:34

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC62419 - EPA 5030C (GC)										
Blank (EC62419-BLK1)				Prepared: (	03/24/06 A	nalyzed: 03	/27/06			
Benzene	ND	0.00100	mg/L							
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	34.2		ug/l	40.0		85.5	80-120			
Surrogate: 4-Bromofluorobenzene	33.5		"	40.0		83.8	80-120			
LCS (EC62419-BS1)				Prepared: (	)3/24/06 A	nalyzed: 03	/26/06			
Benzene	0.0425	0.00100	mg/L	0.0500		85.0	80-120			
Toluene	0.0450	0.00100	n	0.0500		90.0	80-120			
Ethylbenzene	0.0461	0.00100	"	0.0500		92.2	80-120			
Xylene (p/m)	0.0943	0.00100	"	0.100		94.3	80-120			
Xylene (o)	0.0467	0.00100	"	0.0500		93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.4		ug/l	40.0		96.0	80-120			
Surrogate: 4-Bromofluorobenzene	34.3		"	40.0		85.8	80-120			
Calibration Check (EC62419-CCV1)				Prepared: (	)3/24/06 As	nalyzed: 03	/28/06			
Benzene	41.7		ug/l	50.0		83.4	80-120			
Toluene	46.7		n	50.0		93.4	80-120			
Ethylbenzene	52.3		"	50.0		105	80-120			
Xylene (p/m)	106		м	100		106	80-120			
Xylene (o)	53.0		**	50.0		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	37.7		n	40.0		94.2	80-120			
Surrogate: 4-Bromofluorobenzene	40.9		"	40.0		102	80-120			
Matrix Spike (EC62419-MS1)	Sou	rce: 6C22009-	01	Prepared: 0	)3/24/06 Ai	nalyzed: 03	/28/06			
Benzene	0.0430	0.00100	mg/L	0.0500	ND	86.0	80-120			
Toluene	0.0479	0.00100		0.0500	ND	95.8	80-120			
Ethylbenzene	0.0523	0.00100		0.0500	ND	105	80-120			
Xylene (p/m)	0.106	0.00100		0.100	ND	106	80-120			
Xylene (o)	0.0514	0.00100	"	0.0500	ND	103	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.6		ug/l	40.0		96.5	80-120			
Surrogate: 4-Bromofluorobenzene	33.5		"	40.0		83.8	80-120			

Environmental Lab of Texas

	Plains All American EH & S	Project: Abandoned Vac	10" Fax: (432) 687-4914
	1301 S. County Road 1150	Project Number: EMS# 2004-002	08 Reported:
	Midland TX, 79706-4476	Project Manager: Camille Reynold	ds 03/30/06 11:34
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**Environmental Lab of Texas** 

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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch EC62419 - EPA 5030C (GC)

Matrix Spike Dup (EC62419-MSD1)	Sou	Prepared: 0							
Benzene	0.0425	0.00100	mg/L	0.0500	ND	85.0	80-120	1.17	20
Toluene	0.0475	0.00100	n	0.0500	ND	95.0	80-120	0.839	20
Ethylbenzene	0.0527	0.00100		0.0500	ND	105	80-120	0.00	20
Xylene (p/m)	0.108	0.00100	"	0.100	ND	108	80-120	1.87	20
Xylene (o)	0.0524	0.00100	"	0.0500	ND	105	80-120	1.92	20
Surrogate: a,a,a-Trifluorotoluene	36.6		ug/l	40.0		91,5	80-120		
Surrogate: 4-Bromofluorobenzene	35.7		п	40.0		<i>89.2</i>	80-120		

### Batch EC62805 - EPA 5030C (GC)

Blank (EC62805-BLK1)		Prepared: 03/28/06 Analyzed: 03/29/06									
Benzene	ND	0.00100	mg/L		,						
Toluene	ND	0.00100	"								
Ethylbenzene	ND	0.00100	"								
Xylene (p/m)	ND	0.00100	"								
Xylene (0)	ND	0.00100	"								
Surrogate: a,a,a-Trifluorotoluene	33.7		ug/l	40.0	84.2	80-120	·····				
Surrogate: 4-Bromofluorobenzene	34.0		n	40.0	85.0	80-120					
LCS (EC62805-BS1)		Prepared: 03/28/06 Analyzed: 03/29/06									
Benzene	0.0406	0.00100	mg/L	0.0500	81.2	80-120					
Toluene	0.0453	0.00100	"	0.0500	90.6	80-120					
Ethylbenzene	0.0596	0.00100	"	0.0500	119	80-120					
Xylene (p/m)	0.106	0.00100	۳	0.100	106	80-120					
Xylene (o)	0.0513	0.00100	ŧŦ	0.0500	103	80-120					
Surrogate: a,a,a-Trifluorotoluene	35.6		ug/l	40.0	89.0	80-120					
Surrogate: 4-Bromofluorobenzene	39.6		"	40.0	99.0	80-120					

Plains All American EH & S	Project: A	bandoned Vac 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: E	EMS# 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager: C	Camille Reynolds	03/30/06 11:34

Environmental Lab of Texas

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Ampleto	Bogult	Reporting	Linite	Spike	Source	%DEC	%REC	רוממ	RPD Limit	Noter	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch EC62805 - EPA 5030C (GC)											
Calibration Check (EC62805-CCV1)	Prepared: 03/28/06 Analyzed: 03/29/06										
Benzene	42.5		ug/l	50.0		85.0	80-120				
Toluene	46.6		"	50.0		93.2	80-120				
Ethylbenzene	50.1		n	50.0		100	80-120				
Xylene (p/m)	101		*	100		101	80-120				
Xylene (o)	51.1		**	50.0		102	80-120				
Surrogate: a,a,a-Trifluorotoluene	34.5		"	40.0		86.2	80-120				
Surrogate: 4-Bromofluorobenzene	37.8		"	40.0		94.5	80-120				
Matrix Spike (EC62805-MS1)	Sou	rce: 6C22008-	-01	Prepared: (	)3/28/06 A	nalyzed: 03	/29/06				
Benzene	0.0401	0.00100	mg/L	0.0500	ND	80.2	80-120				
Toluene	0.0442	0.00100	**	0.0500	ND	88.4	80-120				
Ethylbenzene	0.0592	0.00100	*	0.0500	ND	118	80-120				
Xylene (p/m)	0.106	0.00100		0.100	ND	106	80-120				
Xylene (o)	0.0515	0.00100	"	0.0500	ND	103	80-120				
Surrogate: a,a,a-Trifluorotoluene	32.5		ug/l	40.0		81.2	80-120				
Surrogate: 4-Bromofluorobenzene	43.6		"	40.0		109	80-120				
Matrix Spike Dup (EC62805-MSD1)	Sou	rce: 6C22008-	-01	Prepared: 0	3/28/06 A	nalyzed: 03	/29/06				
Benzene	0.0407	0.00100	mg/L	0.0500	ND	81.4	80-120	1.49	20		
Toluene	0.0445	0.00100	۳	0.0500	ND	89.0	80-120	0.676	20		
Ethylbenzene	0.0597	0.00100	"	0.0500	ND	119	80-120	0.844	20		
Xylene (p/m)	0.107	0.00100	n	0.100	ND	107	80-120	0.939	20		
Xylene (o)	0.0516	0.00100	u	0.0500	ND	103	80-120	0.00	20		
Surrogate: a,a,a-Trifluorotoluene	33.0		ug/l	40.0		82.5	80-120	·			

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Surrogate: 4-Bromofluorobenzene

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.

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Plains All American EH & S	Project:	Abandoned Vac 10"	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number:	EMS# 2004-00208	Reported:
Midland TX, 79706-4476	Project Manager:	Camille Reynolds	03/30/06 11:34

### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland K Jut

3/30/2006

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.

Date:

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

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

Client.	Basin Haivs	
Date/Time:	8/22/010 3:30	
Order #:	6022009	
Initials.	CK	· .

# Sample Receipt Checklist

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Temperature of container/cooler?	Yes	No	<u>25 C</u>
Shipping container/cooler in good condition?	त्र हरू	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?		No	i
Sample Instructions complete on Chain of Custody?	200	No	
Chain of Custody signed when relinquished and received?	<b>C</b>	Na	
Chain of custody agrees with sample label(s)	XE3	No	
Container lacels legible and intact?	8000	No	
Sample Matrix and properties same as on chain of custody?	YER-	No	
Samples in proper container/bottle?	KES	No	
Samples properly preserved?	Xes	No	
Sample bottles intact?	203	No No	
Preservations documented on Chain of Custody?	1255	No	
Containers documented on Chain of Custody?	Tes,	No	
Sufficient sample amount for indicated test?	1 JES	l No	
All samples received within sufficient hold time?		No	
VOC samples have zero headspace?	(E5)	1 No	Not Applicable

Other observations:

# Variance Documentation:

Contact Person: Regarding:	Date/Time:	Contacted by					
Corrective Action Taken:							
	<del></del>						



# Analytical Report

### **Prepared for:**

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

Project: Abandoned Vac 10" Project Number: EMS# 2004-00208 Location: Lea Co., NM

Lab Order Number: 6F15011

Report Date: 06/23/06

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6F15011-01	Water	06/08/06 10:45	06/15/06 12:45
MW-2	6F15011-02	Water	06/08/06 11:55	06/15/06 12:45
MW-3	6F15011-03	Water	06/08/06 12:40	06/15/06 12:45

### Organics by GC Environmental Lab of Texas

	Dut	Reporting	TT '4						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6F15011-01) Water					· · · · · · · · · · · · · · · · · · ·	·			
Benzene	ND	0.00100	mg/L	I	EF62102	06/21/06	06/21/06	EPA 8021B	
Toluene	ND	0.00100	•		"	H	**	n	
Ethylbenzene	ND	0.00100		н	Ħ		"	14	
Xylene (p/m)	ND	0.00100	"	u	n	н	"	н	
Xylene (o)	ND	0.00100				n	"	"	
Surrogate: a,a,a-Trifluorotoluene		107 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.2 %	80-12	0	"	"	"	"	
MW-2 (6F15011-02) Water									
Benzene	ND	0.00100	mg/L	1	EF62102	06/21/06	06/21/06	EPA 8021B	
Toluene	ND	0.00100	u	"	"	н	n	n	
Ethylbenzene	ND	0.00100	n	*	**	"	"	"	
Xylene (p/m)	ND	0.00100	u	**	11	"	"	11	
Xylene (o)	ND	0.00100	"	11	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		97.5 %	80-12	0	"	n	"	n	
Surrogate: 4-Bromofluorobenzene		90.0 %	80-12	0	"	"	"	n	
MW-3 (6F15011-03) Water									
Benzene	ND	0.00100	mg/L	1	EF62102	06/21/06	06/21/06	EPA 8021B	
Toluene	ND	0.00100	11	"	"		*	M	
Ethylbenzene	ND	0.00100	n	n		*	"	n	
Xylene (p/m)	ND	0.00100	"	n	n	11	"	n	
Xylene (o)	ND	0.00100	n	"	11	"	"	11	
Surrogate: a,a,a-Trifluorotoluene		96.8 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.8 %	80-12	0	"	"	"	"	

Environmental Lab of Texas

### **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 EF62102 - EPA 5030C (GC)										
Blank (EF62102-BLK1)				Prepared &	k Analyzed	: 06/21/06				
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	н							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	0							
Xylene (o)	ND	0.00100								
Surrogate: a,a,a-Trifluorotoluene	40.8		ug/l	40.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	32.0		n	40.0		80.0	80-120			
LCS (EF62102-BS1)				Prepared &	Analyzed	: 06/21/06				
Benzene	0.0523	0.00100	mg/L	0.0500		105	80-120			
Toluene	0.0568	0.00100	п	0.0500		114	80-120			
Ethylbenzene	0.0548	0.00100	n	0.0500		110	80-120			
Xylene (p/m)	0.119	0.00100	"	0.100		119	80-120			
Xylene (o)	0.0582	0.00100	n	0.0500		116	80-120			
Surrogate: a,a,a-Trifluorotoluene	42.8		ug/l	40.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	41.1		"	40.0		103	80-120			
Calibration Check (EF62102-CCV1)				Prepared &	Analyzed:	: 06/21/06				
Benzene	58.5		ug/l	50.0		117	80-120			
Toluene	59.9		11	50.0		120	80-120			
Ethylbenzene	58.1		"	50.0		116	80-120			
Xylene (p/m)	119		"	100		119	80-120			
Xylene (o)	59.6		"	50.0		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.0		"	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	38.6		"	40.0		96.5	80-120			
Matrix Spike (EF62102-MS1)	Sou	rce: 6F15011-	01	Prepared &	: Analyzed:	06/21/06				
Benzene	0.0523	0.00100	mg/L	0.0500	ND	105	80-120			
Toluene	0.0579	0.00100	11	0.0500	ND	116	80-120			
Ethylbenzene	0.0509	0.00100	"	0.0500	ND	102	80-120			
Xylene (p/m)	0.119	0.00100	н	0.100	ND	119	80-120			
Xylene (o)	0.0598	0.00100	н	0.0500	ND	120	80-120			
Surrogate: a,a,a-Trifluorotoluene	44.0		ug/l	40.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	43.6		"	40.0		109	80-120			

Environmental Lab of Texas

### **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 EF62102 - EPA 5030C (GC)

Matrix Spike Dup (EF62102-MSD1)	Source: 6F15011-01			Prepared &	Analyzed:	06/21/06			
Benzene	0.0579	0.00100	mg/L	0.0500	ND	116	80-120 9.95	20	
Toluene	0.0576	0.00100	"	0.0500	ND	115	80-120	0.866	20
Ethylbenzene	0.0578	0.00100	n	0.0500	ND	116	80-120	12.8	20
Xylene (p/m)	0.120	0.00100	н	0.100	ND	120	80-120	0.837	20
Xylene (o)	0.0580	0.00100	n	0.0500	ND	116	80-120	3.39	20
Surrogate: a,a,a-Trifluorotoluene	40.7		ug/l	40.0		102	80-120		
Surrogate: 4-Bromofluorobenzene	41.0		"	40.0		102	80-120		

Environmental Lab of Texas
1301 S. County Road 1150     Project Number: EMS# 2004-00208       Midland TX, 79706-4476     Project Manager: Camille Revnolds	ins All American EH & S	Project:	Abandoned Vac 10"
Midland TX, 79706-4476 Project Manager: Camille Revnolds	01 S. County Road 1150	Project Number:	EMS# 2004-00208
	dland TX, 79706-4476	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:

Jeanne mcmuney

Date: 6/23/2006

Raland K. Tuttle, Lab Manager Celey 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.

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

Environmental Lab of Texas

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

lient:	Plains	
ate/Time:	6/15/06 12:45	
rder #:	10 F150/1	
itials:	CK	

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## Sample Receipt Checklist

			and the second sec
emperature of container/cooler?	Yes	No	0,5 CI
hipping container/cooler in good condition?	Fas	No	
ustody Seals intact on shipping container/cooler?	¥96	No	Not present
ustody Seals intact on sample bottles?	Yes	No	Not present
hain of custody present?	Yes	No	,
ample Instructions complete on Chain of Custody?		No	
hain of Custody signed when relinquished and received?	<b>C</b> S	No	
hain of custody agrees with sample label(s)	(Ces	No	
ontainer labels legible and intact?	(es	No	
ample Matrix and properties same as on chain of custody?	(Es)	No	
amples in proper container/bottle?	Xes	No	•
amples properly preserved?	1005	No	
ample bottles intact?	(Č5)	No	
Preservations documented on Chain of Custody?	<b>1</b>	No	· · · · · · · · · · · · · · · · · · ·
Containers documented on Chain of Custody?	¥es	Na	
Sufficient sample amount for indicated test?	E	No	
Il samples received within sufficient hold time?	6	No	
/OC samples have zero headspace?	(e)	No	Not Apolicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by: _

\_\_\_\_\_

Corrective Action Taken:



# Analytical Report

## **Prepared for:**

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

Project: Abandoned Vac 10" Project Number: EMS# 2004-00208 Location: Lea County, NM

Lab Order Number: 6I15014

Report Date: 09/21/06

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6115014-01	Water	09/13/06 09:47	09-15-2006 13:35
MW-2	6115014-02	Water	09/13/06 10:20	09-15-2006 13:35
MW-3	6115014-03	Water	09/13/06 11:10	09-15-2006 13:35

## Organics by GC Environmental Lab of Texas

		Reporting			··· · · · · · · · · · · · · · · · · ·				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6115014-01) Water									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100		"		n	u	"	
Ethylbenzene	ND	0.00100	11	"	"	11	n		
Xylene (p/m)	ND	0.00100	n	"	"	n	n		
Xylene (o)	ND	0.00100	11	n	n	n	H	"	
Surrogate: a,a,a-Trifluorotoluene		86.0 %	80-12	0	n	n	n	"	
Surrogate: 4-Bromofluorobenzene		84.8 %	80-12	0	"	n	"	п	
MW-2 (6115014-02) Water									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100	*	u	u	u	*	"	
Ethylbenzene	ND	0.00100	*	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	Ħ	"	u	
Xylene (o)	ND	0.00100	"	"	н		ŧ	п	
Surrogate: a,a,a-Trifluorotoluene		96.8 %	80-12	0	"	"	n	п	
Surrogate: 4-Bromofluorobenzene		94.0 %	80-12	0	"	"	"	"	
MW-3 (6115014-03) Water									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100	"			"	n	u	
Ethylbenzene	ND	0.00100	n			*1	н	u	
Xylene (p/m)	ND	0.00100	9	"	*	n	*	*1	
Xylene (o)	ND	0.00100	n	"	"	n	"	"	
Surrogate: a,a,a-Trifluorotoluene		88.5 %	80-12	0	n	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-12	0	"	n	n	"	

Environmental Lab of Texas

#### **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 EI61906 - EPA 5030C (GC)										
Blank (EI61906-BLK1)				Prepared: 0	9/19/06 A	nalyzed: 09	/20/06			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	**							
Ethylbenzene	ND	0.00100	*							
Xylene (p/m)	ND	0.00100	"							
Xylene (0)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	41.7	· · · · · · · · · · · · · · · · · · ·	ug/l	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	42.7		"	40.0		107	80-120			
LCS (EI61906-BS1)				Prepared &	Analyzed:	09/19/06				
Benzene	0.0553	0.00100	mg/L	0.0500	,	111	80-120			
Toluene	0.0473	0.00100	н	0.0500		94.6	80-120			
Ethylbenzene	0.0437	0.00100	**	0.0500		87.4	80-120			
Xyiene (p/m)	0.105	0.00100	"	0.100		105	80-120			
Xylene (o)	0.0506	0.00100	*1	0.0500		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.9		ug/l	40.0		<i>99</i> .8	80-120			
Surrogate: 4-Bromofluorobenzene	36.7		"	40.0		91.8	80-120			
Calibration Check (EI61906-CCV1)				Prepared: 0	9/19/06 Ai	nalyzed: 09	/20/06			
Benzene	0.0540		mg/L	0.0500		108	80-120			
Toluene	0.0482		"	0.0500		96.4	80-120			
Ethylbenzene	0.0489			0.0500		97.8	80-120			
Xylene (p/m)	0.0966		**	0.100		96.6	80-120			
Xylene (o)	0.0480		"	0.0500		<del>9</del> 6.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.1		ug/l	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	43.3		"	40.0		108	80-120			
Matrix Spike (EI61906-MS1)	Sou	rce: 6I14005-0	)1	Prepared: 0	19/19/06 At	nalyzed: 09	/20/06			
Benzene	0.0597	0.00100	mg/L	0.0500	ND	119	80-120			
Toluene	0.0503	0.00100		0.0500	ND	101	80-120			
Ethylbenzene	0.0502	0.00100	n	0.0500	ND	100	80-120			
Xylene (p/m)	0.106	0.00100	"	0.100	ND	106	80-120			
Xylene (o)	0.0511	0.00100	"	0.0500	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.8		ug/l	40.0		99.5	80-120			
Surrogate: 4-Bromofluorobenzene	46.6		н	40.0		116	80-120			

Environmental Lab of Texas

#### **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 EI61906 - EPA 5030C (GC)

Matrix Spike Dup (EI61906-MSD1)	Sou	rce: 6114005-0	)1	Prepared: 0					
Benzene	0.0580	0.00100	mg/L	0.0500	ND	116	80-120	2.55	20
Toluene	0.0510	0.00100	n	0.0500	ND	102	80-120	0.985	20
Ethylbenzene	0.0506	0.00100	н	0.0500	ND	101	80-120	0.995	20
Xylene (p/m)	0.106	0.00100	"	0.100	ND	106	80-120	0.00	20
Xylene (o)	0.0534	0.00100	n	0.0500	ND	107	80-120	4.78	20
Surrogate: a,a,a-Trifluorotoluene	40.0		ug/l	40.0		100	80-120		
Surrogate: 4-Bromofluorobenzene	46.0		"	40.0		115	80-120		

#### **Notes and Definitions**

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland K Juli

9/21/2006

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.

Date:

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Environmental Lab of Texas

ntal Lab of Texas CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST	12600 West I-20 East Phone: 432-563-1800 Odesea, Texes 79765 Fax: 432-563-1713	r: Ken Dutton Project Name: Abandoned Vacuum 10"	e Basin Environmental Service Technologies, LLC	sss: P. O. Box 301 Project Loc: Lea County, NM	Lovington, NM 83260 PO #. PAA/C. Raynolds	(505) 441-2124 Fax No: (505) 386-1429 Report Format: X Standard TRRP NPDES	ure: Rev. Duration Be-mail: <u>kdutton@basinenv.com</u>		The Sampled Beginning Depth Beginning Depth Ending Depth Ending Depth Ending Depth Ending Depth Date Sampled Meters Fet Ag Be Cd Ct Ph Hg 5 Chiorides (EPA 300.0) Meters Fet Ag Be Cd Ct Ph Hg 5 Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Chiorides (EPA 300.0) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Alter (Stecht) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Alter (Stecht) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Alter (Stecht) Meters Fet Ag Be Cd Ct Ph Hg 5 Anions (Ct, SO4, CO3, HCO3) Alter (Stecht) Alter	MW-1 NVA N/A 13-Sep-06 947 2 X X GW GW X X	MW-2 N/A N/A 13-Sep-06 1020 2 X X X C 3 C 1 C 2 X X X X X X 2 C 1 C 1 X X X X X X X X X X X X X X X X	MW-3 N/A N/A 13-Sep-06 1110 2 X X C GW GW X X C			Laboratory Comments:     Sample Containers interd?	Date         Time         Received by:         March Pack         Date         Time         VOCS. Free of HeadSpace?         D         N         N           155         1 年 6         ガバッケ         ブスパクト         1 年 6         ブスパクト         ガ         N	
tal Lab of Texa		Ken Dutton	Basin Environmental Servi	:: P. O. Box 301	Lovington, NM 88260	(505) 441-2124	Yes Dutte	Le la	ម្ពាជម្លាយ ពួចសរុម អ្នក ប្រ ប្រ ប្រ ប្រ ប្រ ប្រ ប្រ ប្រ ប្រ ប្រ	MW-1 N/A	WW-2 N/A	MW-3 N/A				JSSC Pate 1 &	Cate T

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

lient:	Plains
ate/ Time:	9/15/06 1:35
ab ID # :	10F15014
nitials:	()/-

## Sample Receipt Checklist

					Client Initials
1	Temperature of container/ cooler?	Yes	No	4.0 °C	
2	Shipping container in good condition?	(Tes	No		
3	Custody Seals intact on shipping container/ cooler?	() es	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	198	No	Not Present	
5	Chain of Custody present?	Yes	No		
5	Sample instructions complete of Chain of Custody?	) des	No		
7	Chain of Custody signed when relinquished/ received?	206	No		
3	Chain of Custody agrees with sample label(s)?	Ves	No	ID written on Cont./ Lid	
3	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?	Yeş	No	See Below	
13	Samples properly preserved?	Yêş	No	See Below	
14	Sample bottles intact?	765	No		
15	Preservations documented on Chain of Custody?	Xes	No		
16	Containers documented on Chain of Custody?	755	No		
17	Sufficient sample amount for indicated test(s)?	Ves	No	See Below	
8	All samples received within sufficient hold time?	Yes	No	See Below	
9	VOC samples have zero headspace?	Yes	No	Not Applicable	

### Variance Documentation

ontact:		Contacted by:	Date/ `	Time:
garding:				
prrective Action Taker	1:			·
eck 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

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	•	CFG	O/RFO			
Report No.		2. Reviewer's Initia	ls/Date	3.1	MCRIS No.: 919	933
		ACCEPTED() R	EJECTED ( )			
of Report:	Negat	ive (X)	Positive ( )			<u></u>
of Report: III archaeological su	urvey of an area t	o be impacted by cle	eanup on an oil spill fr	om a	6. Fieldwork Da from 17 Fet	ate(s): 5. 2005 to
·					7. Report Date	: 25 Feb. 2(
s). Alli Boole	dress:					
soone Archaeologica	al Services				9. Cultural Reso	ource Permit
030 North Canal Ca	arlshad NM 882	20			BLM: 190-29	920-03-Е
ect Charge: Danny B	loone				STATE: NM	-05-157
d Personnel Names:	Danny Boone				10. Consultant	Report No.
ne: (505) 885-1352	2000				BAS 02-05-1	9
tomer Name: Plains	All American	······································			12. Customer P	roject No.:
sible Individual: Ker	n Dutton (Agent)				EMS 2004-002	08
: 3112 W Highway 8	32					
Lovington, NM 88	260					
(505)393-5611						
1 Status:	BLM	STATE	PRIVATE		OTHER	
Surveyed (acres)	1.01 (+/-)	0	0		0	1.01 (
of Effect (acres)	0.5 (-/+)	0	0		0	0.5 (+/
inear: Length; NA	Width;	NA				
lock: 210' x 210' (+/	′-)					
ation: (Maps Attache	ed if Negative Su	rvey)				
State: New Mexico						
County: Lea						
3LM Office: Carlsba	d					
Nearest City or Town	n: Monument, NN	M				
Legal Location: T 20	)S, R 37E, Sec. 8	, SW SW.				
Vell Pad Footages: N	I/A					
USGS 7.5 Map Nam	e(s) and Code N	umber(s): MONUMI	ENT SOUTH, NM (Pi	ov. Ed.	1985) 32103-E3	

NEGATIVE SITE REPORT

16. Project Data:
a. Records Search: Date(s) of BLM File Review: 14 Feb. 2005 Name of Reviewer (s): Ann Boone
Date(s) of ARMS Data Review: 14 Feb. 2005 Name of Reviewer (s): Ann Boone Findings (see Field Office requirements to determine area to be reviewed during records search):
b. Description of Undertaking:
A block estimated to be 210 feet by 210 feet square was surveyed in order to clean up an oil spill from a buried pipeline. This project is not staked but Mr. Ken Dutton met at the location with Danny Boone. Location, footage and survey acres are estimates based on a hand held GPS Unit. Impact acres are estimated, but will be within the surveyed area.
c. Environmental Setting (NRCS soil designation; vegetative community; etc.):
Topography: Slightly rolling dunal plain.
Vegetation: Overall ground cover is approximately 30% and consists primarily of shinoak, yucca cactus, prickly pear cactus, various grasses and other flora.
NRCS: Peyote-Maljamar-Kermit association: Gently undulating and rolling, deep, sandy soils.
d. Field Methods: (transect intervals; crew size; time in field, etc.):
Transects: Parallel grid spaced up to 15 meters apart.
Crew Size: One
Time in Field: 1.0 hour.
e. Artifacts Collected (?): None
17. Cultural Resource Findings:
a. Identification and description: None
b. Evaluation of significance of Each Resource: None
18. Management Summary (Recommendations):
No cultural resources were located during the survey, therefore archaeological clearance is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.
19.
I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.
Responsible Archaeologist Way Brown 257-th. 2005

Signature

Date

De	pth	Soil Column	PID	Petroleum	Petroleum	Soil	Plain	s Marketing, L. P.	
	L		function of		Otalli		Lea Co NW/S	ieg vacuum 10° Sour bunty, New Mexico W S8, T20S, R37E	
	n			None	None	Sang (SM) Writte-Brown, Very Fine Grained, Well Sorted, Dry	EN	IS: 2004-00208	
							Monitor V	Vell Completion Data	
	10		0.0 ppm	None	None		T Groundwa	ter Depth	
							TD: 40 Feet b	Ø	
							Installed 15 Basin Environr Techno	March 2006 nental Service ologies	
	15		0.0 ppm	None	None		Sampl	es selected for analysis	
							20 Feet 2" 01	) PVC Screen	
	20		0.0 ppm	None	None		23 Feet 2" PV(	Riser	
							15 Feet bgs to	Sand Pack	
							15 Feet to S Hydrated Bent	urface, onite Seal	
	25		0.0 ppm	None	None	Sand (SM) Red-Brown, Very Fine Grained, Well Sorted, Dry	2 X 2 Feet C w/4 X 60 Inch F	ncrete Surface Pad, Metal Locking Square rotector	
	工 DTW 28' bas								
	30		0.0 ppm	None	None				
	35					L			
						<u> </u>	ITLE Annendix F	DESCRIPTION	
							Abandoned Vacuum 10" Sour	Monitoring Well-1	
	40 TD						RAWN BY	DATE	
							KAD	30 September 2006	

Plains Marketing, L. P. Abandoned Vacuum 10" Sour	Lea County, New Mexico NW/SW S8, T20S, R37E EMS: 2004-00208	Monitor Weil Completion Data	T Groundwater Depth	TD: 40 Feet bgs	Installed 15 March 2006 Basin Environmental Service Technologies	Samples selected for analysis	20 Feet 2" 010 PVC Screen	23 Feet 2" PVC Riser	16 Feet bgs to Sand Pack	16 Feet to Surface, Hydrated Bentonite Seal	2 X 2 Feet Concrete Surface Pad, w/4 X 60 Inch Metal Locking Square Protector				DESCRIPTION	ed Vacuum 10" Monitoring Well-2 Sour	BY DATE	KAD 30 September 2006
Soil Description	Sand (SM) White-Brown, Very Fine Grained, Well Sorted, Dry										Sand (SM) Red-Brown, Very Fine Grained, Well Sorted, Dry					Abandon	DRAWN	
Petroleum Stain	None		None			None		None			None	None						
Petroleum Odor	None		None		:	None		None			None	None						
PID Reading	0.0 ppm		0.0 ppm					0.0 ppm			0.0 ppm	0.0 mdd						
soil Column																		
-	2		10		ł	15		20			25	<u>√</u> DTW 29 <sup>, bgs</sup> 30		35			40 TD	
Dept																		

Sour	<u>я</u> ш											 	<u>.</u> .			~	Τ
ns Marketing, L. P. ned Vacuum 10" S	ounty, new mexic SW S8, T20S, R37F NS: 2004-00208 NS: 2004-00208	Well Completion Data	ater Depth	SD	March 2006 mental Service ologies	les selected for analysis	0 PVC Screen	C Riser	o Sand Pack	burface, onite Seal	oncrete Surface Pad, Metal Locking Square Protector				DESCRIPTION	Monitoring Well-3	DATE
Abando		Monitor	Groundw	TD: 40 Feet b	Installed 15 Basin Environ Techn	Samp	20 Feet 2" 01	23 Feet 2" PV	15 Feet bgs to	15 Feet to S Hydrated Bent	2 X 2 Feet C w/4 X 60 Inch				E	Appendix E andoned Vacuum 10" Sour	AWN BY
Soil Description	Sand (SM) White-Brown, Very Fine Grained, Well Sorted, Dry										Sand (SM) Red-Brown, Very Fine Grained, Well Sorted, Dry					At .	DR
Petroleum Stain	None		None			None		None			None	None					
Petroleum Odor	None		None			None		None			None	None					
PID Reading	0.0 ppm		0.0 ppm			0.0 ppm		0.0 ppm			0.0 ppm	0.0 ppm					
Soil Column																	
£	Q		10			15		20			25	₩ DTW 29' bgs 30		35			40 TD
Dept												•					1

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesin, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

			Rek	ease Notific	atio	on and Co	orrective A	ctio	1			
						OPER/	TOR		x Initi	al Report		Final Repor
Name of Co	ompany Pl	ains Marketi	ng, LP			Contact Car	nille Reynolds					
Address 58	05 East Hy	wy. 80, Midl	and, TX '	79706		Telephone 1	No. 505-441-09	65				
Facility Na	me Aband	oned Vacuum	n 10" So	<b>r</b>		Facility Typ	e 10"Steel Pipe	eline	· · · · · · · · · · · · · · · · · · ·			
Surface Ow	mer BLM			Mineral O	wner				Lease ?	No.		
				LOCA	TIO	N OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	Nort	h/South Line	Feet from the	East/	West Line	County		
м	31	205	37E							La		
$\square$	 71	T atitu	de 27º 2'	<u> </u>		Longitude	1030 16' 46 6'	- <u> </u>		1		
2	1	Little	uc <u>_34_3</u> .				105 10 40.0			-		
Trees of Date		041		NAT	UK	OF REL	CASE Balance & hand		Vehren	Decement 1	h	
Source of Rea	lease 10" S	teel Pineline				Date and H	Relates Source	<u>.</u>	Date and	Hour of Die	Durite	<u>s</u>
		aout e dourro				10/7/04	10:30	~	10/7/04 @	R 10:40		,
Was Immedi	ate Notice (	Given?	Yes [	No 🗌 Not Re	quired	If YES, To Larry John	Whom? son		1	Growine.	÷.	
By Whom? (	Camille Rev	molds				Date and H	lour 10-12-04@	15.30	-/~		ų.	<u></u>
Was a Water	course Rea	ched?				If YES, Vo	blume Impacting	the Wal	ercentse.	for		
			Yes 🛛	No					415			
If a Waterco	urse was im	pacted, Descr	ibe Fully."						10	Hobbe	tu	in f
									12	0CD		e la composición de la composicinde la composición de la composición de la composici
									<u>```</u>	Second	, 7.	
Describe Can cut and capp	ase of Probl ed. The lin	em and Reme e is abandoned	dial Actio i so inform	n Taken.* Abanda nation concerning	volum	0 line separate ie and pressure	d at weld connec on line is unavai	tion of 4 ilable.	4 inch adjoi	ning line. T	hé 10	inch line was
Describe Are	a Affected	and Cleanup /	Action Tal	ten.* The impacted	d soil ·	was excavated	and stockpiled or	n p <b>las</b> tic	Acrial ex	tent of surfi	ce imp	pact was
1,372 square	icci.											
				<b>`</b>								
Thomphot counti	f. that the 2	-fametica at		to Amure and an amure 1	-	the bart of					~~~~	
regulations al public health should their o or the environ federal, state,	or the environment. In a	are required to ronment. The ave failed to a ddition, NMO ws and/or requi	acceptance dequately CD acceptance lations.	ind/or file certain re the of a C-141 report investigate and re tance of a C-141 r	rt by ti media report	the best of my notifications at he NMOCD m the contaminati does not reliev	and perform corre- arked as "Final R on that pose a that e the operator of	ctive act coport" ( reat to g	ions for rel loes not rel round water ibility for c	cases which ieve the ope r, surface wa compliance v	may e rator o iter, hi vith an	ndenger Indenger I liebility uman health ny other
	V -	· · · ·	· )	_			OIL CON	SERV	<b>ATION</b>	DIVISIO	<u>N</u>	
Signature	am	eller	tin	nolda								
Printed Name	: Camille R	teynolds		•		Approved by	District Supervis	eor:				
Title: Remedi	ation Coon	dinator				Approval Del	e:		Expiration	Date:		
E-mail Addre	ss: cjreynol	ids@paaip.com	<u>n</u>			Conditions of	Approval:			Attached		
Date: 10-21-0	4			Phone: 505-441-09	965							

<sup>1</sup> Attach Additional Sheets If Necessary

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