

AP - 63

**STAGE 1  
REPORTS**

**DATE:**

6-6-06



**PLAINS  
ALL AMERICAN**

2006 JUN 12 PM 1 44

06 June 2006

Mr. Wayne Price  
New Mexico Energy, Minerals and Natural Resources  
New Mexico Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, New Mexico 87505

Re: Plains Marketing, L. P.  
34 Junction South Station Site (EMS: 2005-00138)  
NMOCD File Number: 1R-0456  
Unit M (SW/SW), Section 2 Township 17 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Price:

Please find attached for your information the Basin Environmental Service Technologies, LLC (Basin), report, dated 05 June 2006, for the Plains Marketing, L. P., 34 Junction South Station release site. The 34 Junction South Station release site is located in Unit M (SW/SW), Section 2, Township 17 South, and Range 36 East in Lea County, New Mexico. The Basin report details site activities conducted to date and future activities for the site.

Should you have any questions or comments, please contact me at (505) 441-0965.

Sincerely,

Camille Reynolds  
Remediation Coordinator  
Plains All American

cc: Mr. Patrick McMahon, City of Lovington Attorney  
Mr. Ed Martin, NMOCD Santa Fe ✓

Enclosures

# *Basin Environmental Service Technologies, LLC*

P. O. Box 301  
Lovington, New Mexico 88260  
kdutton@basinenv.com  
Office: (505) 396-2378 Fax: (505) 396-1429



05 June 2006

Mr. Wayne Price  
New Mexico Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: 34 Junction South Station Site (231735)  
Plains EMS: 2005-00138  
NMOCD File Number: 1R-0456  
Unit M (SW ¼, SW ¼) Section 2, Township 17 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Price:

Basin Environmental Services (Basin), on behalf of Plains Marketing, L. P. (Plains), is submitting this report of the activities conducted to date, at the 34 Junction South Station remediation site at the above referenced location.

Basin Environmental Service Technologies, LLC (Basin) responded to the pipeline release on 10 June 2005, located at the 34 Junction South Station meter facility. Approximately 100 cubic yards of impacted soils were mechanically and manually excavated and stockpiled on a 6-mil poly-liner adjacent to the site. As reported on the C-141, dated 13 June 2005, approximately 15 barrels of crude oil were released and 0.5 barrels recovered. NMOCD ranking criteria for the 34 Junction South Station release site was >19, which sets the soil remediation levels for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) at 50 mg/kg for total BTEX and 100 mg/kg for TPH-GRO/DRO.

The following remedial activities were accomplished at the 34 Junction South Station pipeline release site:

- In June 2005, Basin conducted mechanical and manual excavation activities at the release point and flow path, located within the fenced area of the 34 Junction

South Station meter facility. The excavation was approximately 20 feet long by 20 feet wide and ranged in depth from 1 to 4 feet below ground surface (bgs). The impacted soils were placed on a 6-mil poly-liner adjacent to the excavation for future remedial activities. Approximately 100 cubic yards of impacted soil was excavated and stockpiled on-site.

- On 19 September 2005, vertical delineation of the subsurface crude oil impact at the release point was initiated utilizing an air rotary drill rig operated by Straub Corporation, Stanton, Texas. Initially a soil boring was to be installed; however, once deeper crude oil impact was indicated, a recovery well at the release point was installed. Plains personnel informed Hobbs and Santa Fe NMOCD of groundwater impact on 19 September 2005. Soil samples were collected at 5 feet intervals and the selected soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Laboratory results indicated that constituent concentrations of BTEX were either not detected above laboratory method detection limits or were below NMOCD regulatory standards. Laboratory results indicated that concentrations of TPH-GRO/DRO exceeded NMOCD regulatory standards for the six (6) soil samples analyzed. Laboratory results are attached as Table 1, Soil Chemistry Table.
- On 17 October 2005, horizontal and vertical delineation of the 34 Junction South Station release site was initiated with the installation of five (5) groundwater monitoring wells to evaluate groundwater quality. Monitoring well MW-1 was installed at an up gradient position from the release point, MW-2 and MW-5 at cross gradient positions, and MW-3 and MW-4 at down gradient positions from the release point. Soil samples were collected at 5 feet intervals and the selected soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Laboratory results for the 31 soils samples collected from the installation of the monitoring wells indicated that constituent concentrations of BTEX and TPH-GRO/DRO were either below laboratory method detection limits or below NMOCD regulatory standards, with the exception of monitoring well MW-3, which exceeded NMOCD regulatory standards for concentrations of TPH-GRO/DRO. Visual observations during the installation of monitoring well MW-3 indicated crude oil impact on the groundwater was apparent and Plains personnel notified Hobbs and Santa Fe NMOCD of the groundwater impact. Laboratory results are attached as Table 1, Soil Chemistry Table.
- Manual recovery of phase-separated hydrocarbons (PSH) was initiated from recovery well RW-1 and monitoring well MW-3. Evaluation of the crude oil impact prompted a more aggressive PSH recovery system be employed and an electrical submersion pump was utilized to recover the maximum extent of PSH as possible three times a week. A bermed 1000-gallon poly-tank was installed on-site with a sand cushion above and beneath a 40-mil poly liner to temporarily store the recovered PSH. As necessary, the poly-tank will be pumped and the recovered PSH will be re-introduced into the Plains pipeline system. Approximately 530 gallons of PSH have been recovered as of 01 June 2006.

- On 24 and 25 October 2005, the five (5) monitoring wells on-site were developed and purged in accordance with NMOCD protocols with the exception of monitoring well MW-3 that had measurable PSH. Groundwater samples were analyzed for constituent concentrations of BTEX. Laboratory results indicated that constituent concentrations of BTEX were not detected above laboratory method detection limits for the four (4) groundwater monitoring well samples.
- On 28 February 2006, installation of monitoring wells MW-6, MW-7 and MW-8 completed the delineation of the crude oil impact on-site. Soil samples were collected at 5 feet intervals and selected soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. A total of thirteen (13) soil samples from the installation of the three (3) monitoring wells were analyzed and laboratory results indicated that BTEX and TPH-GRO/DRO concentrations were not detected above laboratory detection limits for the selected soil samples.
- On 28 and 29 March 2006, monitoring wells MW-6, MW-7 and MW-8 were developed and purged in accordance with NMOCD protocols. Groundwater samples were analyzed for constituent concentrations of BTEX. Laboratory results indicated that concentrations of BTEX were not detected above laboratory method detection limits for monitoring wells MW-6 and MW-7, however, MW-8 slightly exceeded NMOCD regulatory standards for BTEX concentrations in groundwater.
- Basin and Plains are currently researching automated PSH recovery systems to evaluate their efficiency and effectiveness. Once an automated system is chosen, installation of the system will be initiated.

Should you have any questions or comments, please contact me at (505) 441-2124.

Sincerely,



Ken Dutton

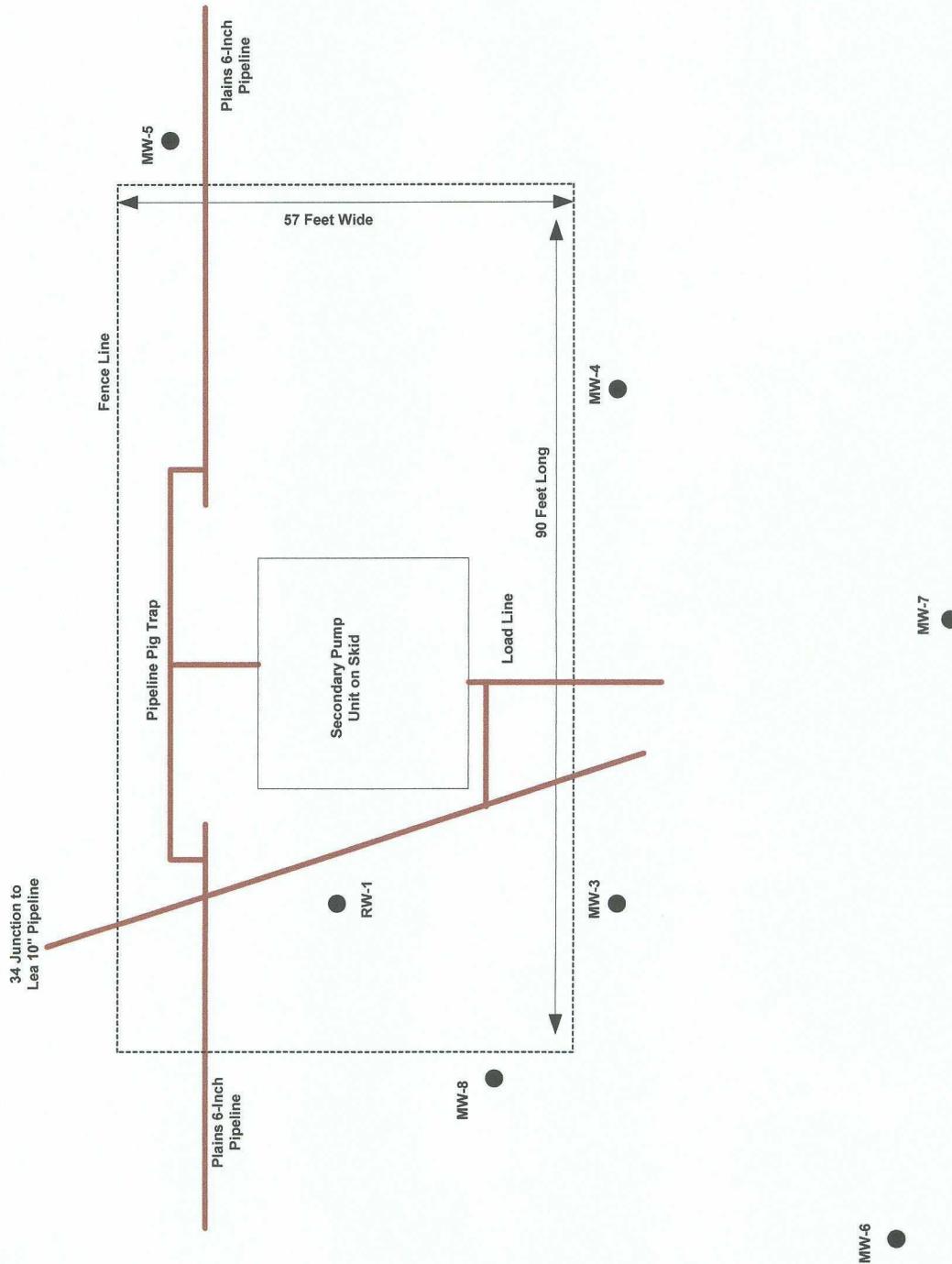
Basin Environmental Services

Attachments: Site Map & Monitoring Well Locations  
Table 1, Soil Chemistry  
Table 2, Groundwater Chemistry

Cc: Mr. Patrick McMahon, City of Lovington Attorney  
Mr. Ed Martin, NMOCD Santa, Fe



Plains Marketing, L.P.  
 34 Junction South Station  
 Lea County, NM  
 SW/SW S2, T17S, R36E  
 EMS: 2005-00138



**Legend**

- Groundwater Monitoring Well Locations

TITLE  
 Figure 2  
 Site Map & Monitoring Well Locations  
 DRAWN BY  
 Basin Environmental Services  
 kad

TABLE 1

SOIL CHEMISTRY

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 EMS: 2005-00138

SAMPLE LOCATION	SAMPLE DEPTH (Below normal surface grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL TPH (mg/kg)	CHLORIDES (mg/kg)
			BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P-XYLENES (mg/kg)	O-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)		
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
RW-1 5'	5' bgs	09/19/05	<0.025	0.096	0.036	0.112	<0.025	<0.025	269	2170	2440
RW-1 15'	15' bgs	09/19/05	<0.025	0.032	<0.025	0.049	<0.025	<0.025	431	3330	3760
RW-1 25'	25' bgs	09/19/05	0.025	0.129	0.042	0.520	0.069	1030	5400	6430	
RW-1 35'	35' bgs	09/19/05	<0.025	<0.025	<0.025	<0.025	<0.025	228	2710	2940	
RW-1 45'	45' bgs	09/19/05	<0.025	<0.025	<0.025	<0.025	<0.025	528	4530	5060	
RW-1 55'	55' bgs	09/19/05	<0.025	0.027	0.027	0.067	<0.025	1080	8600	9680	
MW-1 5'	5' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-1 15'	15' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-1 25'	25' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-1 35'	35' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-1 45'	45' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-1 55'	55' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 5'	5' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 15'	15' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 25'	25' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 35'	35' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 45'	45' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0
MW-2 55'	55' bgs	10/17/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	<10.0

TABLE 1 (cont)

SOIL CHEMISTRY

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 EMS: 2005-00138

SAMPLE LOCATION	SAMPLE DEPTH (Below normal surface grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030				METHOD: 8015M			TOTAL TPH	CHLORIDES (mg/kg)
			BENZENE	TOLUENE	ETHYL- BENZENE	M, P- XYLENES	O-XYLENE	GRO	DRO		
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
MW-3 5'	5' bgs	10/18/05	<0.025	0.082	0.080	0.209	0.099	311	1490	1800	
MW-3 15'	15' bgs	10/18/05	0.242	1.95	2.19	7.33	2.77	2300	6770	9070	
MW-3 25'	25' bgs	10/18/05	0.325	3.46	4.52	13.5	5.53	2710	7280	9990	
MW-3 35'	35' bgs	10/18/05	<0.025	0.060	0.113	0.381	0.147	482	3030	3510	
MW-3 45'	45' bgs	10/18/05	0.028	0.299	0.542	1.90	0.764	1930	8200	10100	
MW-3 55'	55' bgs	10/18/05	0.057	0.742	1.43	3.58	2.02	3340	12000	15300	
MW-3 60'	60' bgs	10/18/05	<0.025	0.052	0.085	0.276	0.096	485	4090	4580	
MW-4 5'	5' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-4 15'	15' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-4 25'	25' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-4 35'	35' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-4 45'	45' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-4 55'	55' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-5 5'	5' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-5 15'	15' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-5 25'	25' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	
MW-5 35'	35' bgs	10/18/05	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<10.0	

TABLE 1 (cont)

SOIL CHEMISTRY

PLAINS MARKETING, L.P.  
 34 JUNCTION SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 EMS: 2005-00138

SAMPLE LOCATION	SAMPLE DEPTH (Below normal surface grade)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		TOTAL TPH	CHLORIDES (mg/kg)
			BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	M,P-XYLENES (mg/kg)	O-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)		
MW-5 45'	45' bgs	01/10/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-5 55'	55' bgs	01/10/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-6 5'	5' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-6 15'	15' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-6 25'	25' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-6 55'	55' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-7 5'	5' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-7 15'	15' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-7 25'	25' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-7 55'	55' bgs	02/28/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-8 5'	5' bgs	03/01/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-8 15'	15' bgs	03/01/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-8 25'	25' bgs	03/01/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-8 50'	50' bgs	03/01/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
MW-8 60'	60' bgs	03/01/06	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	
<b>NMOC D CRITERIA</b>			<b>10</b>	<b>TOTAL BTEX 50</b>						<b>100</b>	

TABLE 2

GROUND WATER CHEMISTRY

PLAINS MARKETING, L.P.  
 JUNCTION 34 SOUTH STATION  
 LEA COUNTY, NEW MEXICO  
 PLAINS EMS NO. 2005-00138

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030						Method: 160.1 TDS (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)		
MW-1	10/25/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-1	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-2	10/25/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-2	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-4	10/25/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-4	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-5	10/25/05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-5	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-6	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-7	03/29/06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
MW-8	03/29/06	0.011	0.008	0.003	0.006	<0.001	<0.001	