

1R - 119

# REPORTS

DATE:

7-25-12



July 25, 2012

Mr. Ed Hansen  
New Mexico Oil Conservation Division  
1220 South Francis Drive  
Santa Fe, New Mexico 87505

Re: Plains Marketing, L.P. Monument 10 (Plains SRS # TNM-Monument 10  
Solar Recovery System Summary - Second Quarter 2012  
NMOCD Reference # 1R-0119  
Unit Letter-F (SE1/4 of the NW1/4), Section 30, T19S, R37E  
Lea County, New Mexico

Dear Mr. Hansen:

NOVA Safety and Environmental (NOVA), on behalf of Plains Marketing, L.P. (Plains) is submitting this letter report summarizing the progress of the PSH solar recovery system operating at the above referenced site during the second quarter of 2012.

### **Remediation Activities**

The solar recovery system installed in Monitor Wells MW-2 and MW-3 utilizes total fluids pumps to recover phase separated hydrocarbons (PSH) and inhibit migration of the PSH plume. The total fluids pump is powered by two 12 volt solar panels and a 12 volt wind turbine generator maintaining charge on a marine 12 volt battery. The pump is operated on a cycle of approximately 3 minutes every 3 hours at an average pumping rate of approximately 2 gallons per minute (gpm). Pumping rates along with pump position within the well have been adjusted periodically to minimize the volume of water and maximize the volume of PSH recovered. PSH thicknesses in MW-2 averaged approximately 0.38 feet and approximately 7.5 gallons (0.18 barrels) of PSH was recovered during the 2<sup>nd</sup> quarter of 2012. PSH thicknesses in MW-3 averaged approximately 1.02 feet and approximately 12 gallons (0.28 barrels) of PSH was recovered during the 2<sup>nd</sup> quarter of 2012. The monthly recovery for the site averaged approximately 7.75 gallons (0.18 barrels) per month during the 2<sup>nd</sup> quarter. A summary of the historical gauging and recovery data is presented Table 1. Chart 1 through Chart 2 demonstrates the PSH thicknesses in MW-2 and MW-3 during the 2<sup>nd</sup> quarter of 2012. All recovered fluids are properly disposed at the Cooper Disposal Facility located approximately 5 miles south of the Monument 10 site.

2012 AUG - 9 A 10:11  
RECEIVED 0000

If you have any questions, or if additional information is needed, please feel free to call us at 432-520-7720 or 432-894-7166.

Thank you,



Ronald K. Rounsaville  
Senior Project Manager  
NOVA Safety and Environmental

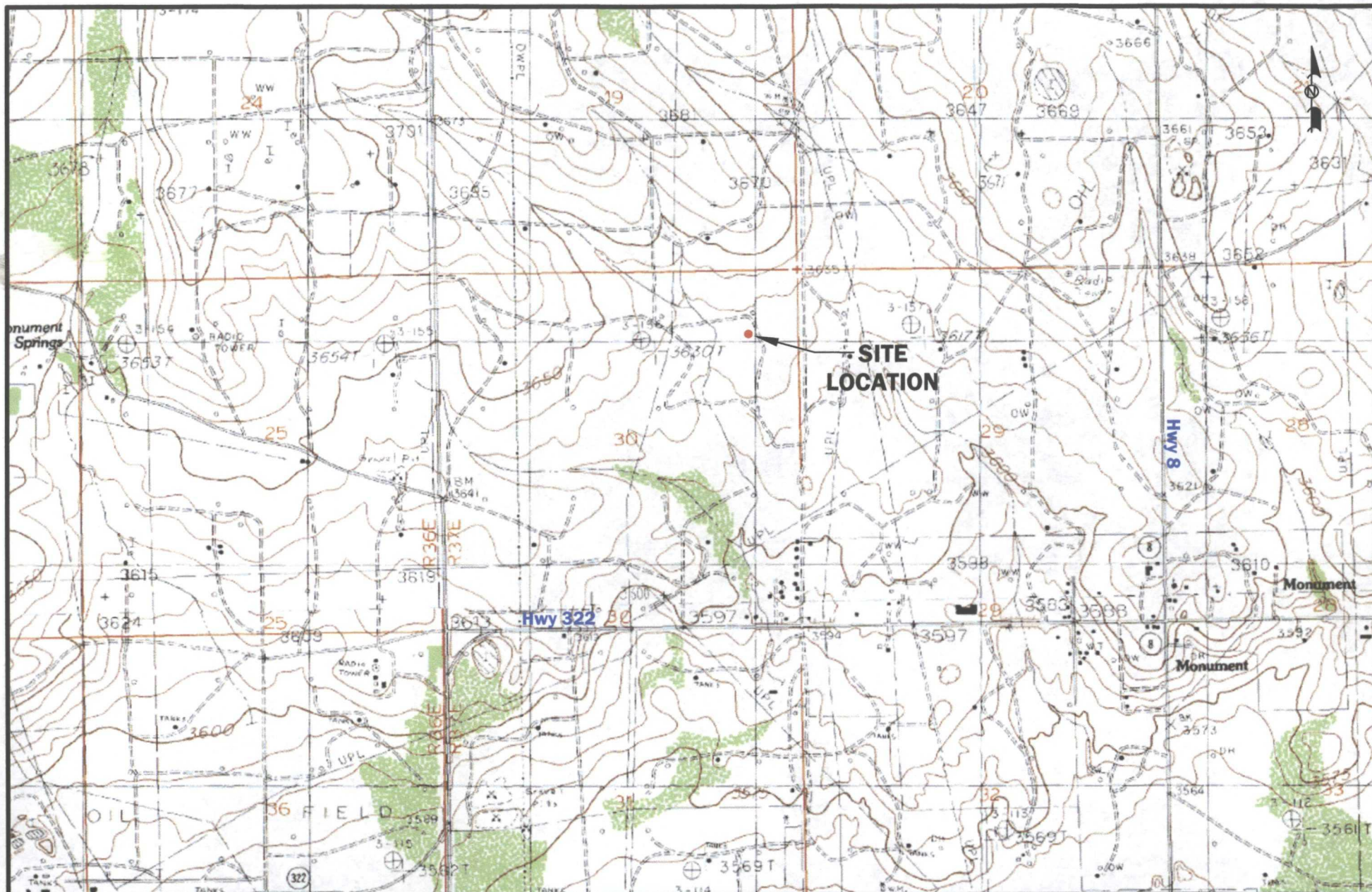
**Attachments:**

Figure 1 – Site Location Map  
Figure 2 – Inferred Groundwater Gradient Map  
Figure 3 – Groundwater Concentration and Inferred PSH Extent Map  
Table 1 – Monthly PSH Recovery Data – April, May, June 2012  
  
Chart 1 – PSH Thickness MW-2  
Chart 2 – PSH Thickness MW-3

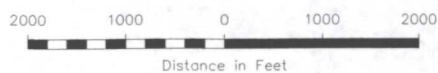
**CC:**

Geoffrey R. Leking, NMOCD, Hobbs, NM  
Jeff Dann, Plains Marketing, L.P., Houston, Texas  
Jason Henry, Plains Marketing, L.P., Denver City, Texas

## **FIGURES**



LEGEND:



NMOCD Reference #1R-0119

Figure 1  
Site Location Map  
Monument 10  
Plains Marketing, L.P.  
Lea County, NM



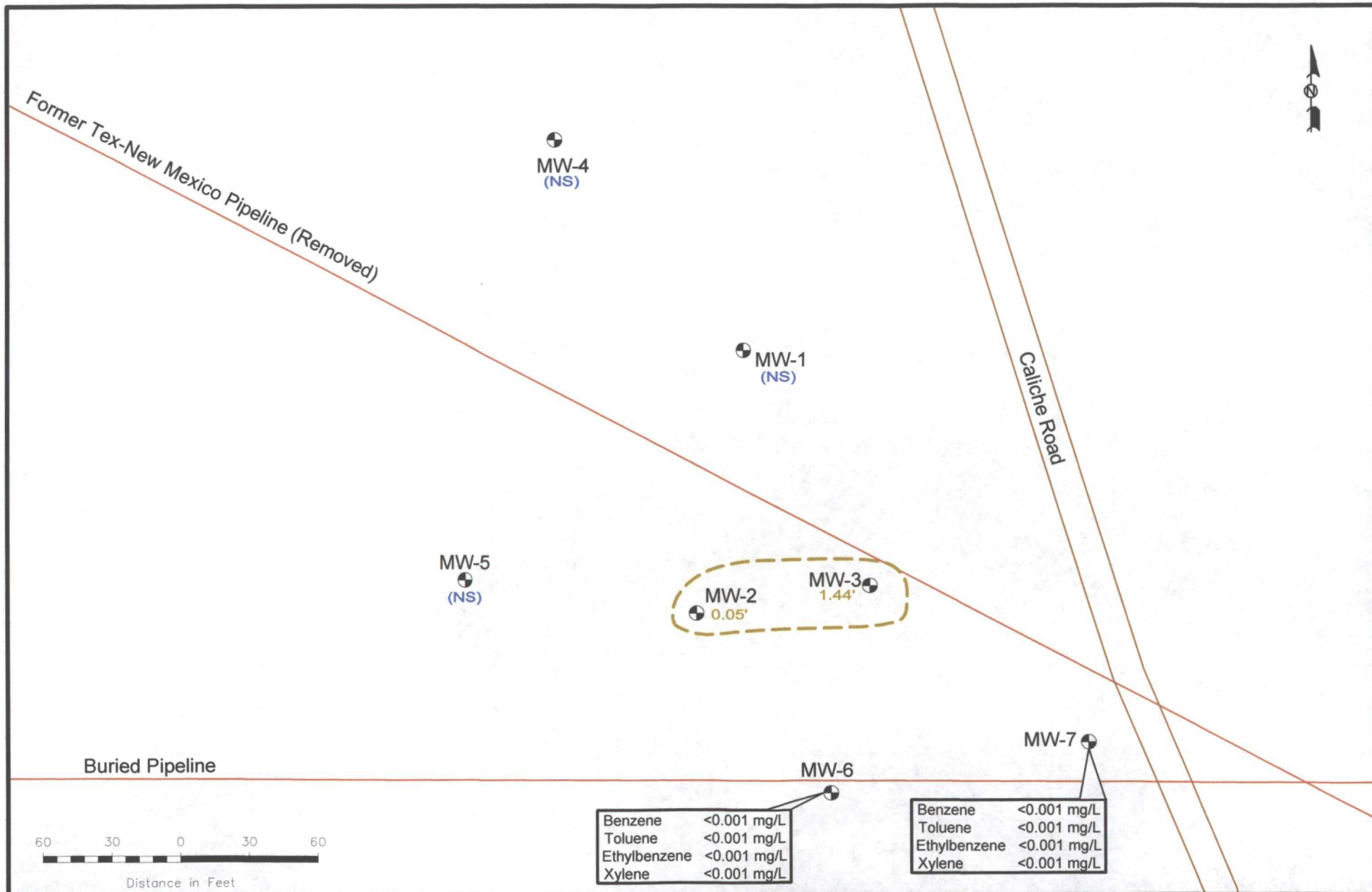
2057 Commerce Drive  
Midland, Texas 79703  
432.520.7720

[www.novasafetyandenvironmental.com](http://www.novasafetyandenvironmental.com)

March 3, 2011 Scale: 1" = 2000' CAD By: TA Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 38' 8.77" W 103° 17' 3.42"





# LEGEND:



Monitor Well Location



Pipeline



Inferred Extent of PSH



Depth of PSH (feet)

(NS)  
<0.001

Not Sampled  
Constituent Concentration (mg/L)

Figure 3B  
Groundwater Concentration  
and Inferred PSH Extents  
Map (5/12/2012)  
NMOCD Reference # 1R-0119  
Plains Marketing, L.P.  
Monument 10  
Lea County, NM



2057 Commerce Drive  
Midland, Texas 79703  
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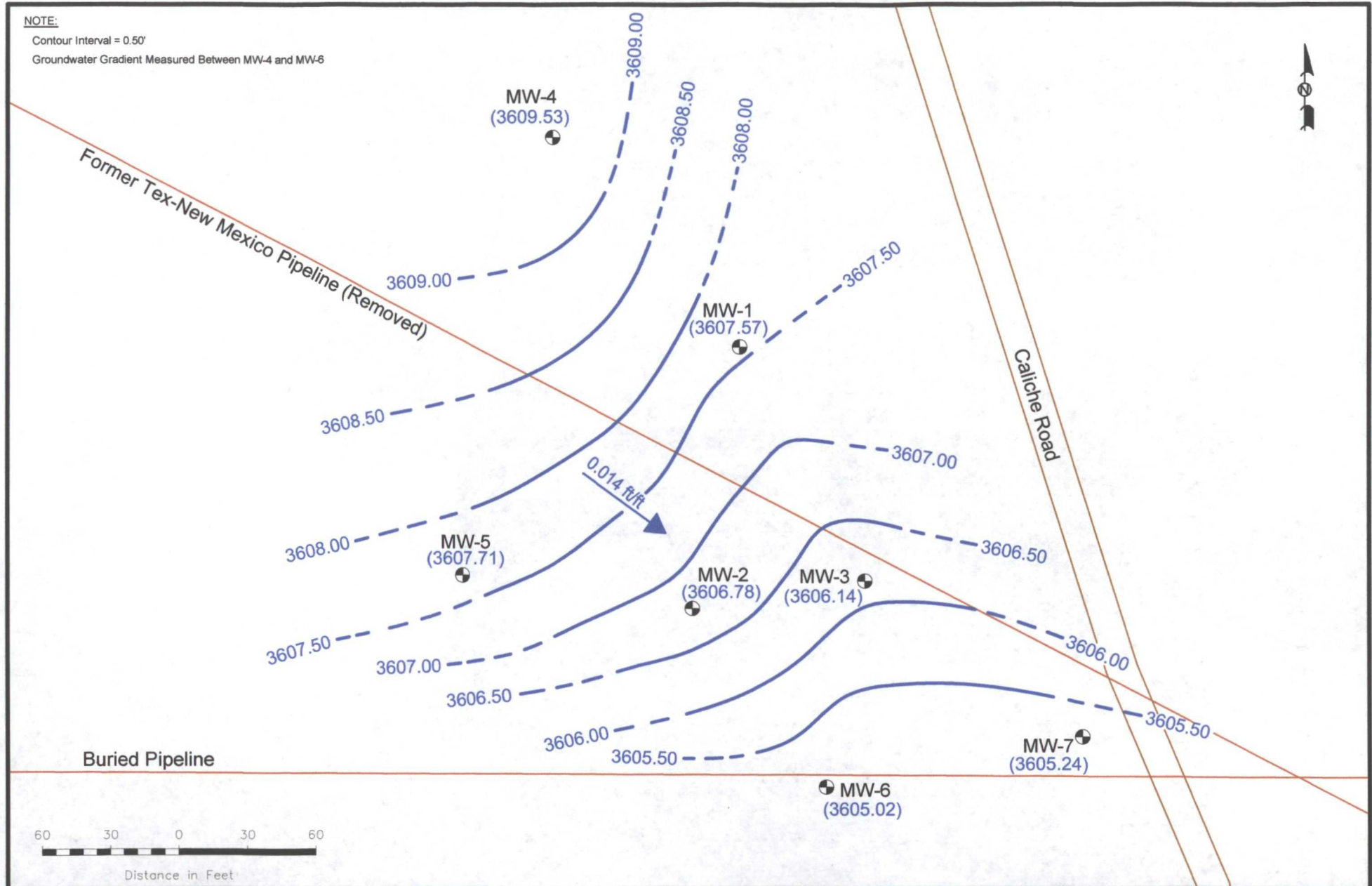
www.novasafetyandenvironmental.com

May 31, 2012	Scale: 1" = 60'	CAD By: TA	Checked By: RKR
Lat. N 32° 38' 14" Long. W 103° 17' 4"		NE1/4 Section 30 T19S R37E	

**NOTE:**

Contour Interval = 0.50'

Groundwater Gradient Measured Between MW-4 and MW-6



**LEGEND:**

- Monitor Well Location
- Pipeline
- Groundwater Elevation Contour Line
- (3606.94) Groundwater Elevation (feet)
- 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2B  
Inferred Groundwater  
Gradient Map  
(5/21/2012)  
NMOCD Reference # 1R-0119  
Plains Marketing, L.P.  
Monument 10  
Lea County, NM



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May 31, 2012	Scale: 1" = 60'	CAD By: TA	Checked By: RKR
Lat. N 32° 38' 14" Long. W 103° 17' 4"		NE1/4 Section 30 T19S R37E	

## **TABLES**



**MONTHLY PSH RECOVERY DATA - APRIL 2012**

**PLAINS MARKETING, L.P.  
MONUMENT 10  
LEA COUNTY, NEW MEXICO  
NMOCD Reference # 1R-0119**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS (Feet)	CORRECTED GROUNDWATER ELEVATION	OIL RECOVERED (Gallons)	WATER RECOVERED (Gallons)
MW - 2	04/02/12	3,629.43	22.64	22.67	0.03	3,606.79	0.25	5
MW - 2	04/09/12	3,629.43	22.67	23.08	0.41	3,606.70	1	10
MW - 2	04/12/12	3,629.43	22.65	23.04	0.39	3,606.72	4	10
MW - 2	04/17/12	3,629.43	22.65	23.07	0.42	3,606.72	1	10
MW - 2	04/19/12	3,629.43	22.56	23.05	0.49	3,606.80	0.5	10
MW - 2	04/23/12	3,629.43	22.51	22.97	0.46	3,606.85	0.5	5
MW - 2	04/26/12	3,629.43	22.72	22.73	0.01	3,606.71	0.25	10
TOTAL VOLUME OF PSH AND WATER RECOVERED - APRIL 2012							7.50	60.00
MW - 3	04/02/12	3,628.90	22.45	24.09	1.64	3,606.20	1	2
MW - 3	04/09/12	3,628.90	22.81	22.88	0.07	3,606.08	0.25	5
MW - 3	04/12/12	3,628.90	22.78	22.86	0.08	3,606.11	0.25	5
MW - 3	04/17/12	3,628.90	22.81	22.90	0.09	3,606.08	0.5	5
MW - 3	04/19/12	3,628.90	22.65	22.66	0.01	3,606.25	0.25	5
MW - 3	04/23/12	3,628.90	22.48	22.51	0.03	3,606.42	0.25	5
MW - 3	04/26/12	3,628.90	22.64	23.02	0.38	3,606.20	0.5	10
TOTAL VOLUME OF PSH AND WATER RECOVERED - APRIL 2012							3.00	37.00

CUMULATIVE TOTAL OF PSH RECOVERED - APRIL 2012 (Gallons)

10.50	97.00
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**MONTHLY PSH RECOVERY DATA - MAY 2012**

**PLAINS MARKETING, L.P.  
MONUMENT 10  
LEA COUNTY, NEW MEXICO  
NMOCD Reference # 1R-0119**

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS (Feet)	CORRECTED GROUNDWATER ELEVATION	OIL RECOVERED (Gallons)	WATER RECOVERED (Gallons)
MW - 2	05/21/12	3,629.43	22.64	22.69	0.05	3,606.78	0.00	0.00
TOTAL VOLUME OF PSH AND WATER RECOVERED - MAY 2012							0.00	0.00
MW - 3	05/21/12	3,628.90	22.54	23.98	1.44	3,606.14	0.00	0.00
TOTAL VOLUME OF PSH AND WATER RECOVERED - MAY 2012							0.00	0.00

CUMULATIVE TOTAL OF PSH RECOVERED - MAY 2012 (Gallons)

0.00	0.00
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**TABLE 1**  
**MONTHLY PSH RECOVERY DATA - JUNE 2012**

**PLAINS MARKETING, L.P.**  
**MONUMENT 10**  
**LEA COUNTY, NEW MEXICO**  
**NMOCD Reference # 1R-0119**

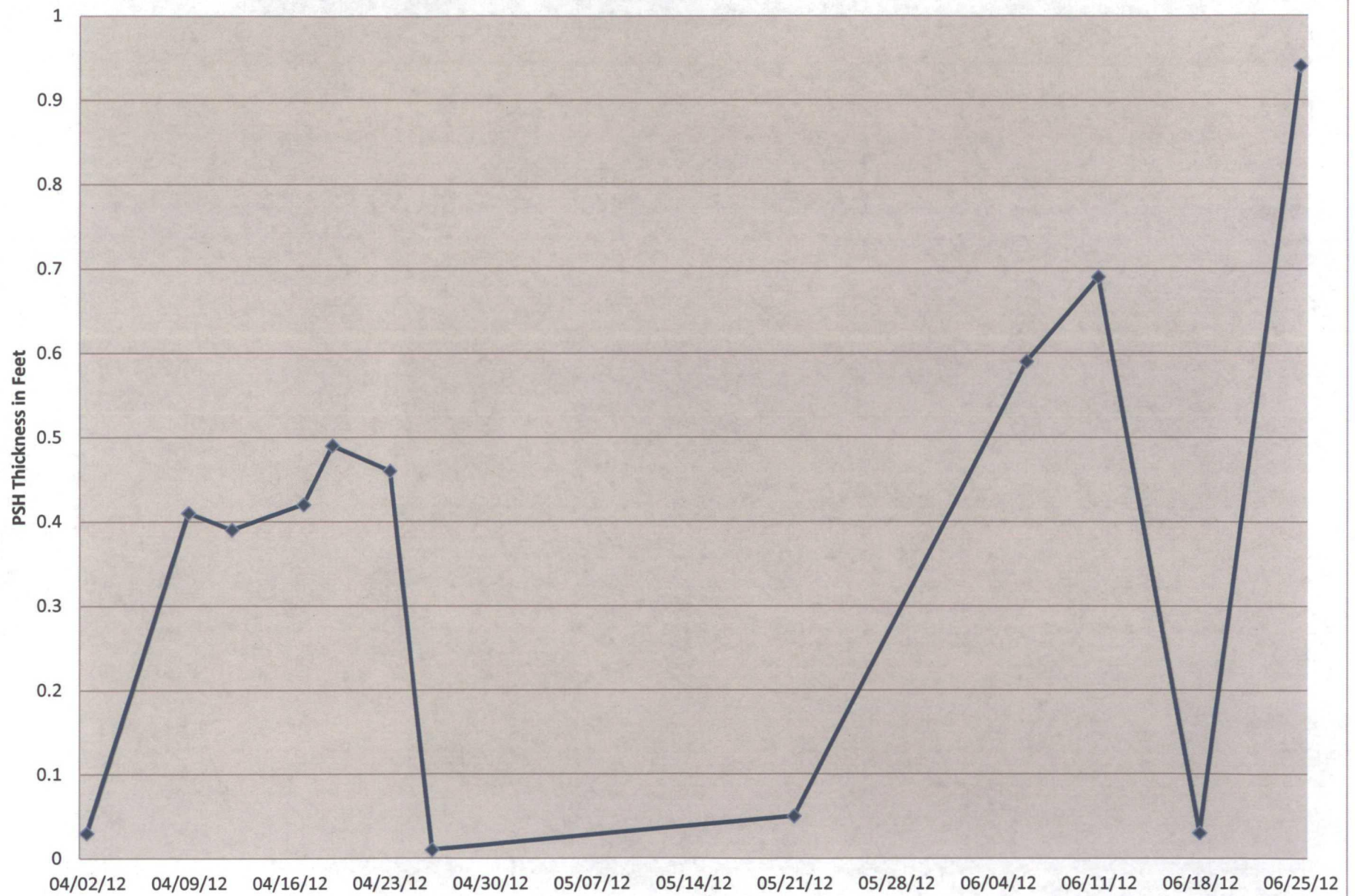
WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS (Feet)	CORRECTED GROUNDWATER ELEVATION	OIL RECOVERED (Gallons)	WATER RECOVERED (Gallons)
MW - 2	06/06/12	3,629.43	22.55	23.14	0.59	3,606.79	0.75	10
MW - 2	06/11/12	3,629.43	22.54	23.23	0.69	3,606.79	0.5	5
MW - 2	06/18/12	3,629.43	22.58	22.61	0.03	3,606.85	0.25	5
MW - 2	06/25/12	3,629.43	22.52	23.46	0.94	3,606.77	2	5
TOTAL VOLUME OF PSH AND WATER RECOVERED - JUNE 2012							3.50	25.00
MW - 3	06/06/12	3,628.90	22.55	24.95	2.40	3,605.99	3	20
MW - 3	06/11/12	3,628.90	23.34	25.03	1.69	3,605.31	1.5	5
MW - 3	06/18/12	3,628.90	22.39	24.03	1.64	3,606.26	1.5	10
MW - 3	06/25/12	3,628.90	22.36	25.16	2.80	3,606.12	3	10
TOTAL VOLUME OF PSH AND WATER RECOVERED - JUNE 2012							9.00	45.00

CUMULATIVE TOTAL OF PSH RECOVERED - JUNE 2012 (Gallons)

12.50	70.00
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## CHARTS

## MW-2





# MW-3

