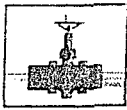


1R - 386

# Annual GW Mon. REPORTS

DATE:  
2010



PLAINS  
ALL AMERICAN

March 23, 2011

RECEIVED

MAR 29 2011

Mr. Edward Hansen  
New Mexico Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

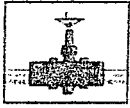
Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

Re: Plains All American – 2010 Annual Monitoring Reports  
20 Sites in Lea County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

34 Junc. to Lea Sta.	1R-0386 ✓	Section 21, Township 20 South, Range 37 East, Lea County
34 Junction South	1R-0456 ✓	Section 02, Township 17 South, Range 36 East, Lea County
Bob Durham	AP-0016 ✓	Section 32, Township 19 South, Range 37 East, Lea County
Darr Angell #1	AP-007 ✓	Section 11, Township 15 South, Range 37 East, Lea County
Darr Angell #2	AP-007 ✓	Section 11, Township 15 South, Range 37 East, Lea County Section 14, Township 15 South, Range 37 East, Lea County
Darr Angell #4	AP-007 ✓	Section 11, Township 15 South, Range 37 East, Lea County Section 02, Township 15 South, Range 37 East, Lea County
Denton Station	1R-0234 ✓	Section 14, Township 15 South, Range 37 East, Lea County
HDO-90-23	AP-009 ✓	Section 06, Township 20 South, Range 37 East, Lea County
LF-59	1R-0103	Section 32, Township 19 South, Range 37 East, Lea County
Monument 2	1R-0110	Section 06, Township 20 South, Range 37 East, Lea County Section 07, Township 20 South, Range 37 East, Lea County
Monument 10	1R-0119	Section 30, Township 19 South, Range 37 East, Lea County
Monument 17	1R-123	Section 29, Township 19 South, Range 37 East, Lea County
Monument 18	1R-0124	Section 07, Township 20 South, Range 37 East, Lea County
S. Mon. Gath. Sour	1R-951	Section 05, Township 20 South, Range 37 East, Lea County
SPS-11	GW-0140 ✓	Section 18, Township 18 South, Range 36 East, Lea County
Texaco Skelly F	1R-0420	Section 11, Township 21 South, Range 37 East, Lea County
TNM 97-04	GW-0294 ✓	Section 11, Township 16 South, Range 35 East, Lea County
TNM 97-17	AP-017 ✓	Section 21, Township 20 South, Range 37 East, Lea County
TNM 97-18	AP-0013 ✓	Section 28, Township 20 South, Range 37 East, Lea County
TNM 98-05A	AP-12	Section 26, Township 21 South, Range 37 East, Lea County



PLAINS  
ALL AMERICAN

Nova Safety and Environmental (Nova) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Nova personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Jason Henry  
Remediation Coordinator  
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM

Enclosures



**2010  
ANNUAL MONITORING REPORT**

**JUNCTION 34 TO LEA STATION**  
LEA COUNTY, NEW MEXICO  
NW ¼ SW ¼, SECTION 21, TOWNSHIP 20 SOUTH, RANGE 37 EAST  
PLAINS SRS NUMBER: 2002-10286  
NMOCD Reference # 1R-0386

PREPARED FOR:


**PLAINS MARKETING, L.P.**  
333 CLAY STREET, SUITE 1600  
HOUSTON, TEXAS 77002

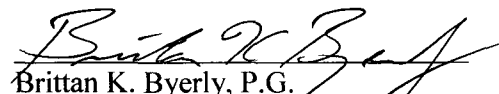


PREPARED BY:

**NOVA Safety and Environmental**  
2057 Commerce  
Midland, Texas 79703

**March 2011**

  
Ronald K. Rounsaville  
Senior Project Manager

  
Brittan K. Byerly, P.G.  
President

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### FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map – February 4, 2010

2B – Inferred Groundwater Gradient Map – May 6, 2010

2C – Inferred Groundwater Gradient Map – August 5, 2010

2D – Inferred Groundwater Gradient Map – November 4, 2010

Figure 3A – Groundwater Concentration and Inferred PSH Extent Map – February 4, 2010

3B – Groundwater Concentration and Inferred PSH Extent Map – May 6, 2010

3C – Groundwater Concentration and Inferred PSH Extent Map – August 5, 2010

3D – Groundwater Concentrations and Inferred PSH Extent Map – November 4, 2010

### TABLES

Table 1 – 2010 Groundwater Elevation Data

Table 2 – 2010 Concentrations of BTEX and TPH in Groundwater

Table 3 – 2010 Concentrations of PAH in Groundwater

### APPENDICES

Appendix A – Release Notification and Corrective Action (Form C-141)

### ENCLOSED ON DATA DISK

2010 Annual Monitoring Report

2010 Tables 1, 2 and 3 – Groundwater Elevation, BTEX and PAH Concentration Data

2010 Figures 1, 2A-2D, and 3A-3D

Electronic Copies of Laboratory Reports

Historic Table 1 and 2 – Groundwater Elevation, BTEX and PAH Concentration Tables

## INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on or about January 16, 2007, project management responsibilities were assumed by NOVA. The site was previously managed by Environmental Plus, Inc. (EPI). This report is intended to be viewed as a complete document with figures, appendices, tables and text. The report presents the results of the four quarterly groundwater monitoring events conducted in calendar year 2010. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2010 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). Each groundwater monitoring event consisted of measuring static water levels in monitor wells, checking for the presence of PSH on the water column and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 foot were not sampled.

## SITE DESCRIPTION AND BACKGROUND INFORMATION

The Junction 34 to Lea (2002-10286) Release Site is located approximately 10-miles northwest of Eunice in Lea County, New Mexico. The site is located in the NW  $\frac{1}{4}$  SW  $\frac{1}{4}$ , Section 21, Township 20 South, Range 37 East. The Release Notification and Corrective Action (Form C-141) submitted by EOTT reported approximately 300 barrels of crude oil released with 190 barrels recovered. The release is reported to have been due to internal corrosion of the pipeline. The release covered approximately 10,769 square feet of pipeline right-of-way, caliche road and land owned by the Deck Estate. Upon discovery of the release on November 6, 2002, a contractor and EOTT personnel mobilized to the site, exposed the pipeline and installed a pipe repair clamp. Hydrocarbon impacted soil excavated during the emergency response activities was transported to an NMOCD approved land farm. In February 2003, hydrocarbon impacted soil, previously identified by the advancement of nine soil borings, was excavated to a depth of approximately twenty five (25) below ground surface (bgs). The excavated soil was stockpiled on site for future remediation.

A *Soil Closure Strategy and Site Restoration Work Plan* (Work Plan) was submitted to the NMOCD in February 2008. The Work Plan proposed soil remediation activities intended to progress the site toward an NMOCD approved closure.

In February 2008, Plains received approval from the NMOCD to commence the activities outlined in the Work Plan. Following the completion of the soil remediation activities, a *Soil Closure Request* dated July 2009 was submitted to the NMOCD for approval. On October 22, 2009, Plains received an email from the NMOCD approving the *Soil Closure Request* at the Junction 34 to Lea Station release site.

Currently, there are eleven groundwater monitor wells (MW-1 through MW-11) on site.

## FIELD ACTIVITIES

### Product Recovery Efforts

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells. Table 1 displays the groundwater gauging data for the reporting period. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

### Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD.

NMOCD Approved Sampling Schedule							
MW-1	Quarterly	MW-4	Annual	MW-7	Quarterly	MW-10	Quarterly
MW-2	Quarterly	MW-5	Quarterly	MW-8	Quarterly	MW-11	Quarterly
MW-3	Quarterly	MW-6	Quarterly	MW-9	Quarterly		

The site monitor wells were gauged and sampled on February 4, May 6, August 5, and November 4, 2010. During each sampling event, monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Grundfos pump and dedicated tubing. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during quarterly sampling events performed in 2010, are depicted on the Inferred Groundwater Gradient Maps, Figures 2A-2D. Groundwater elevation data for 2010 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0059 feet/foot to the south-southwest as measured between monitor wells MW-5 and MW-6. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,465.46 and 3,489.99 feet above mean sea level, in monitor wells MW-3 and MW-4 on December 13, 2010 and August 5, 2010, respectively. Groundwater elevation data for the calendar year 2010 is provided in Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed disk.

## LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2010 were delivered to Trace Analysis, Inc. in Midland, Texas for determination of Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations by EPA Method 8021B. Polynuclear Aromatic

Hydrocarbons (PAH) analysis was conducted during the 2010 calendar year on monitor well MW-3. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC standards are sampled, with the exclusion of those wells containing measurable PSH thicknesses. A listing of BTEX constituent concentrations for 2010 are summarized in Table 2 and the Historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2010 are provided on the enclosed data disk. The quarterly groundwater sample results for BTEX constituent concentrations are depicted on Figures 3A through 3D.

**Monitor well MW-1** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.248 during the 1<sup>st</sup> quarter to 0.551 mg/L during the 4<sup>th</sup> quarter of 2010. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during all four quarters of the reporting period. Toluene concentrations were below the laboratory method detection limit (MDL) and NMOCD regulatory standard of 0.75 mg/L during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.125 mg/L during the 3<sup>rd</sup> quarter to 0.409 mg/L during the 4<sup>th</sup> quarter of 2010. Ethyl-benzene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four quarters of the reporting period. Xylene concentrations ranged from <0.050 mg/L during the 3<sup>rd</sup> quarter to 0.464 mg/L during the 4<sup>th</sup> quarter of 2010. Xylene concentrations were below regulatory standard of 0.62 mg/L during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-2** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.3070 mg/L during the 1<sup>st</sup> quarter to 0.5140 mg/L during the 4<sup>th</sup> quarter of 2010. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> quarter to 0.0025 mg/L during the 2<sup>nd</sup> quarter of 2010. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.0917 mg/L during the 2<sup>nd</sup> quarter to 0.2580 mg/L during the 4<sup>th</sup> quarter. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.050 mg/L during the 4<sup>th</sup> quarter to 0.0930 mg/L during the 2<sup>nd</sup> quarter of 2010. Xylene concentrations were below regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-3** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.259 mg/L during the 2<sup>nd</sup> quarter to 0.323 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations ranged from <0.010 mg/L during the 2<sup>nd</sup> quarter to 0.005 mg/L during the 3<sup>rd</sup> quarter of 2010. Toluene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.0319 mg/L during the 2<sup>nd</sup> quarter to 0.1550 mg/L during the 4<sup>th</sup> quarter. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.0297 mg/L during the 4<sup>th</sup> quarter to 0.0896 mg/L during the 1<sup>st</sup> quarter of 2010. Xylene concentrations were below regulatory standard during all four quarters of the reporting period. PAH analysis during the 4<sup>th</sup>



quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards of naphthalene (<0.000198 mg/L), 1-methylnaphthalene (0.0606 mg/L) and 2-methylnaphthalene (<0.000198 mg/L). Additional PAH constituents detected above MDLs include fluorene (0.00508 mg/L), phenanthrene (0.00891 mg/L), pyrene (0.00101 mg/L) and dibenzofuran (0.00285 mg/L), which are below the WQCC Drinking Water Standards.

**Monitor well MW-4** is sampled on an annual schedule. Analytical results indicate benzene, toluene, ethyl-benzene and xylene concentrations were below the MDL and NMOCD regulatory standards during the 4<sup>th</sup> quarter of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-three consecutive quarters. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-5** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0223 mg/L during the 4<sup>th</sup> quarter to 0.0358 mg/L during the 3<sup>rd</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0206 mg/L during the 4<sup>th</sup> quarter. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 2<sup>nd</sup> quarter to 0.0109 mg/L during the 4<sup>th</sup> quarter of 2010. Xylene concentrations were below regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-6** is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1<sup>st</sup> and 2<sup>nd</sup> quarters to 0.0066 mg/L during the 4<sup>th</sup> quarter. Benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-four consecutive quarters. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-7** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.608 mg/L during the 3<sup>rd</sup> quarter to 0.994 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.287 mg/L during the 3<sup>rd</sup> quarter to 0.505 mg/L during the 1<sup>st</sup> quarter. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.172 mg/L during the 3<sup>rd</sup> quarter to 0.605 mg/L during the 4<sup>th</sup> quarter. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-8** is sampled on a quarterly schedule. Analytical results indicate benzene, toluene, ethyl-benzene and xylene concentrations were below the MDL and NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last eighteen consecutive quarters. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-9** is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethyl-benzene and xylene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last nineteen consecutive quarters. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-10** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0152 mg/L during the 3<sup>rd</sup> quarter to 0.220 mg/L during the 1<sup>st</sup> quarter. Benzene concentrations were above the NMOCD regulatory standard all four quarters of the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from 0.0116 mg/L during the 3<sup>rd</sup> quarter to 0.1720 mg/L during the 2<sup>nd</sup> quarter. Ethyl-benzene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from 0.0062 mg/L during the 3<sup>rd</sup> quarter to 0.0611 mg/L during the 2<sup>nd</sup> quarter. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

**Monitor well MW-11** is sampled on a quarterly schedule and analytical results indicate benzene, toluene, ethyl-benzene and xylene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-four consecutive quarters. PAH analysis was not conducted during the 4<sup>th</sup> quarter sampling event.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code.

## **SUMMARY**

This report presents the results of monitoring activities for the 2010 annual monitoring period. Currently, there are eleven groundwater monitor wells (MW-1 through MW-11) on site. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0059 feet/foot to the south-southwest.

During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells.

Review of the laboratory analytical results of the groundwater samples obtained during this annual reporting period indicate BTEX constituent concentrations are below the applicable NMOCD regulatory standards in five of the eleven monitor wells on site. At this time, dissolved phase impact appears to be delineated and limited to monitor wells MW-1 through MW-3, MW-5, MW-7 and MW-10. PAH analysis is demonstrating a stable to declining trend.

### **ANTICIPATED ACTIONS**

Quarterly monitoring and groundwater sampling will continue in 2011. Gauging will continue on a monthly schedule and will be adjusted according to site conditions. An Annual Monitoring Report will be submitted to the NMOCD by April 1, 2012.

Based on the results of the PAH analysis over the past several years, PAH analysis will be conducted only on monitor well MW-3.

### **LIMITATIONS**

NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals and information generated by EPI. NOVA 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. NOVA has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA 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. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

## **DISTRIBUTION**

- Copy 1      Ed Hansen  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505
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New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division, District 1  
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2057 Commerce Street  
Midland, TX 79703  
rrounsaville@novatraining.cc

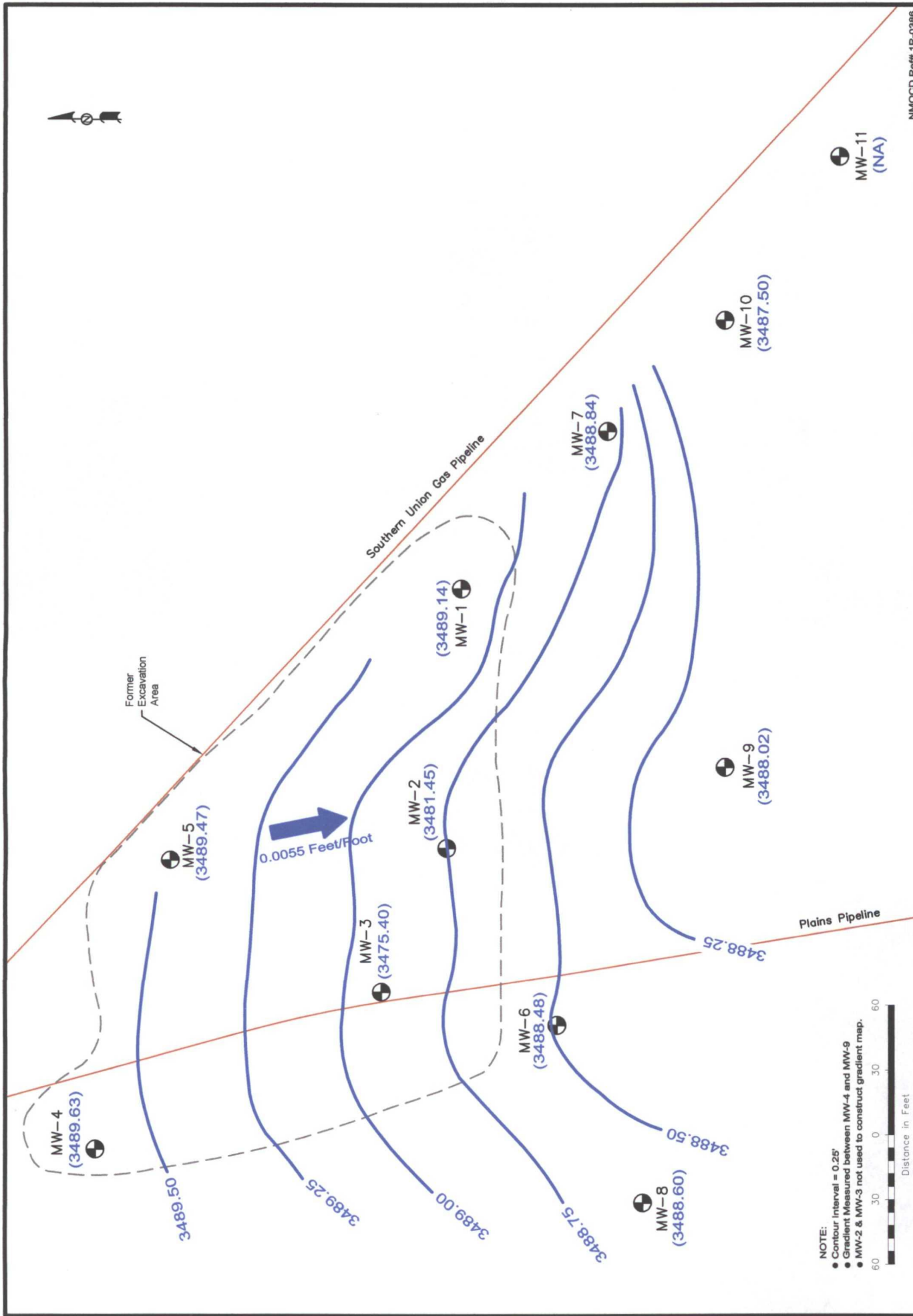


## Figures









NOTE:  
 • Contour Interval = 0.25'  
 • Gradient Measured between MW-4 and MW-9  
 • MW-2 & MW-3 not used to construct gradient map.



Figure 2B  
Inferred Groundwater  
Gradient Map  
(05/06/10)  
Plains Marketing, L.P.  
34 Junction to Lea  
Lea County, NM

NOVA Safety and Environmental

Scale: 1" = 60'  
 CAD By: SAT  
 Checked By: RNR  
 May 21, 2010

Groundwater Direction and Magnitude

0.0055 Feet/Foot

Groundwater Elevation (Feet)

(3791.68)

Groundwater Elevation Contour Line

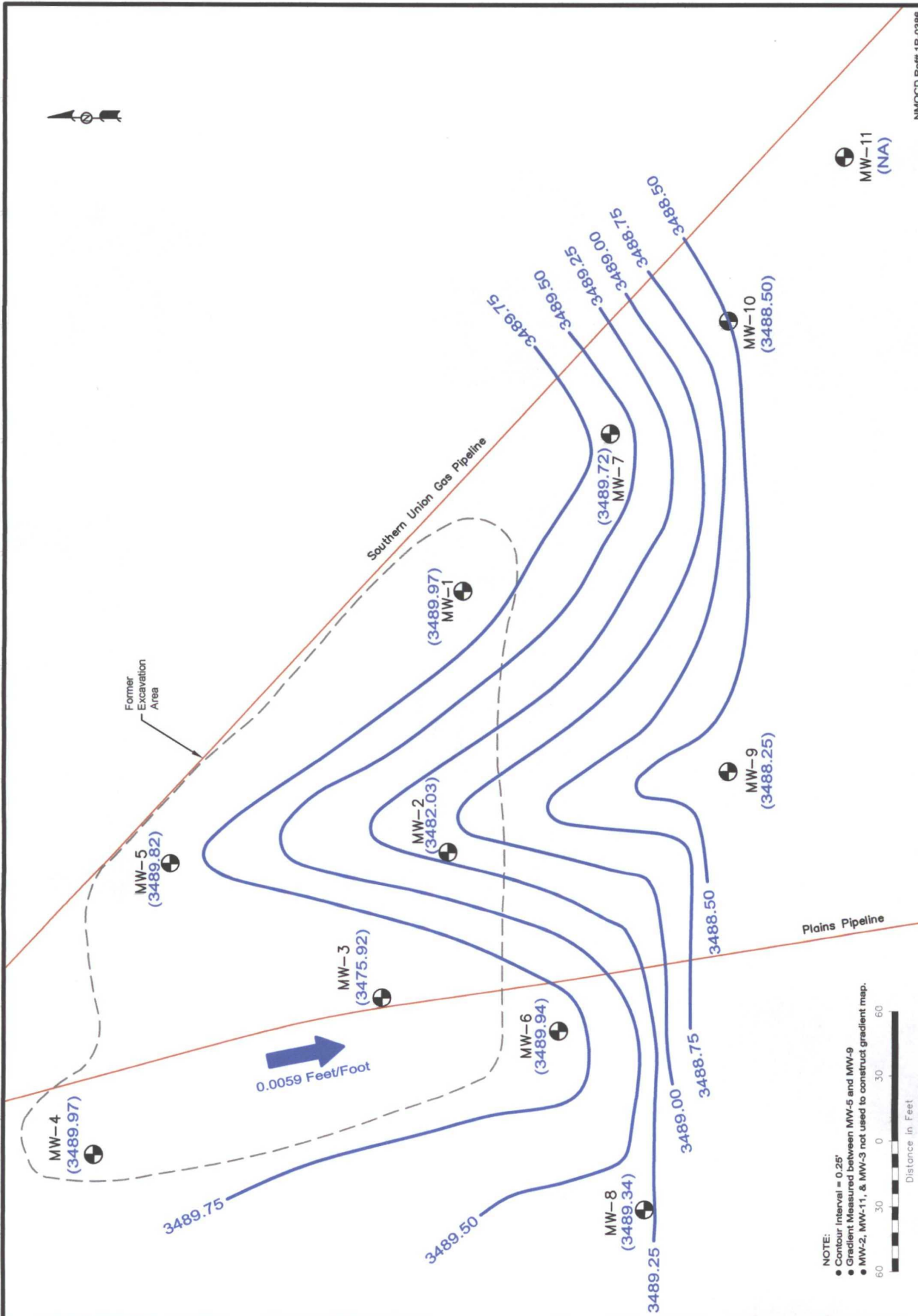
Monitor Well Location

Pipeline

NMOC Ref# 1R-0386







NMOCD Ref# 1R-0386

**NOVA Safety and Environmental**

NOVA

Scale: 1" = 60'

Checked By: RNR

December 6, 2010

Figure 2D  
Inferred Groundwater  
Gradient Map  
(11/04/10)  
Plains Marketing, L.P.  
34 Junction to Lea  
Lea County, NM

**Legend:**

● Monitor Well Location

— Pipeline

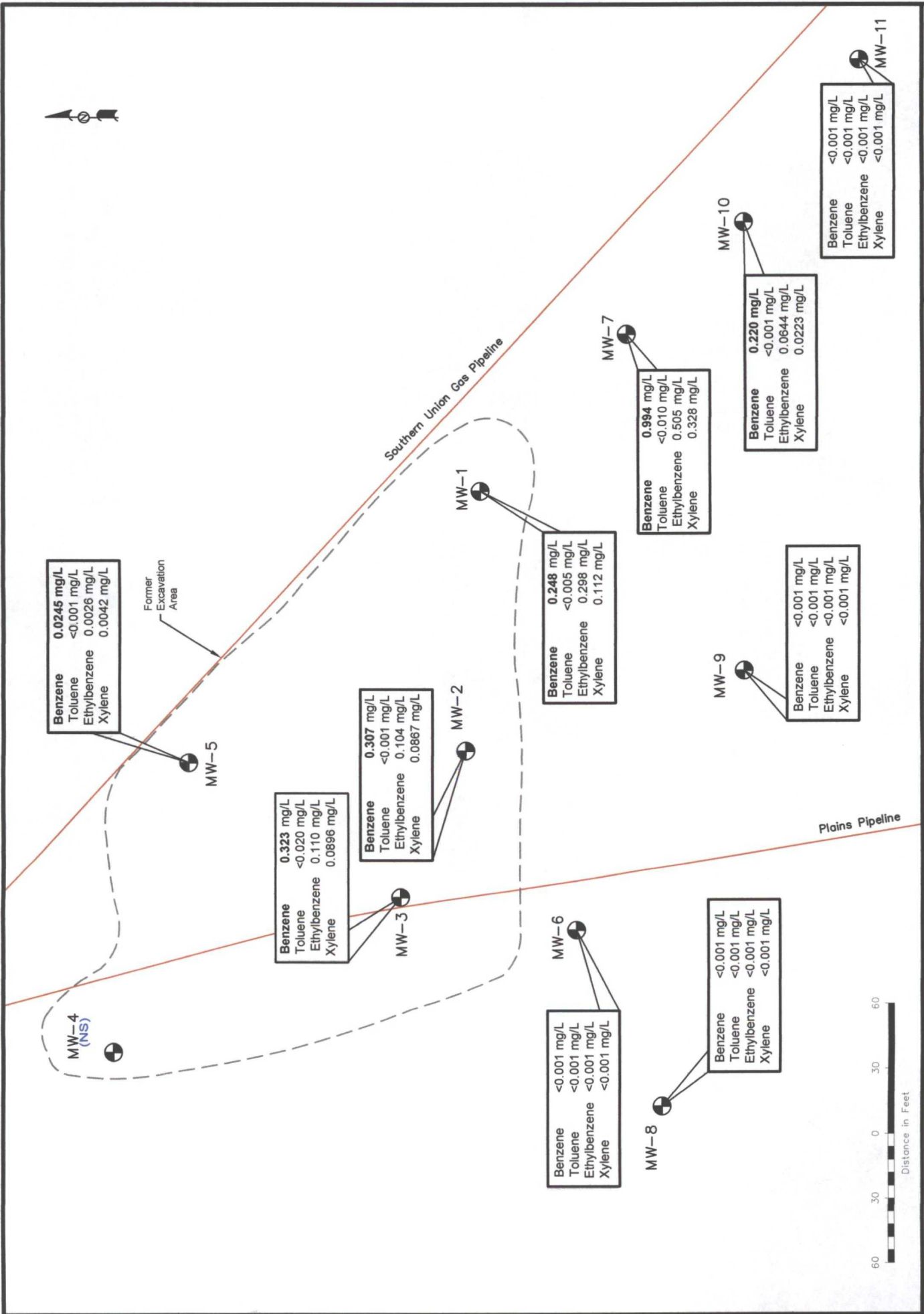
Groundwater Direction and Magnitude

0.0059 Feet/Foot

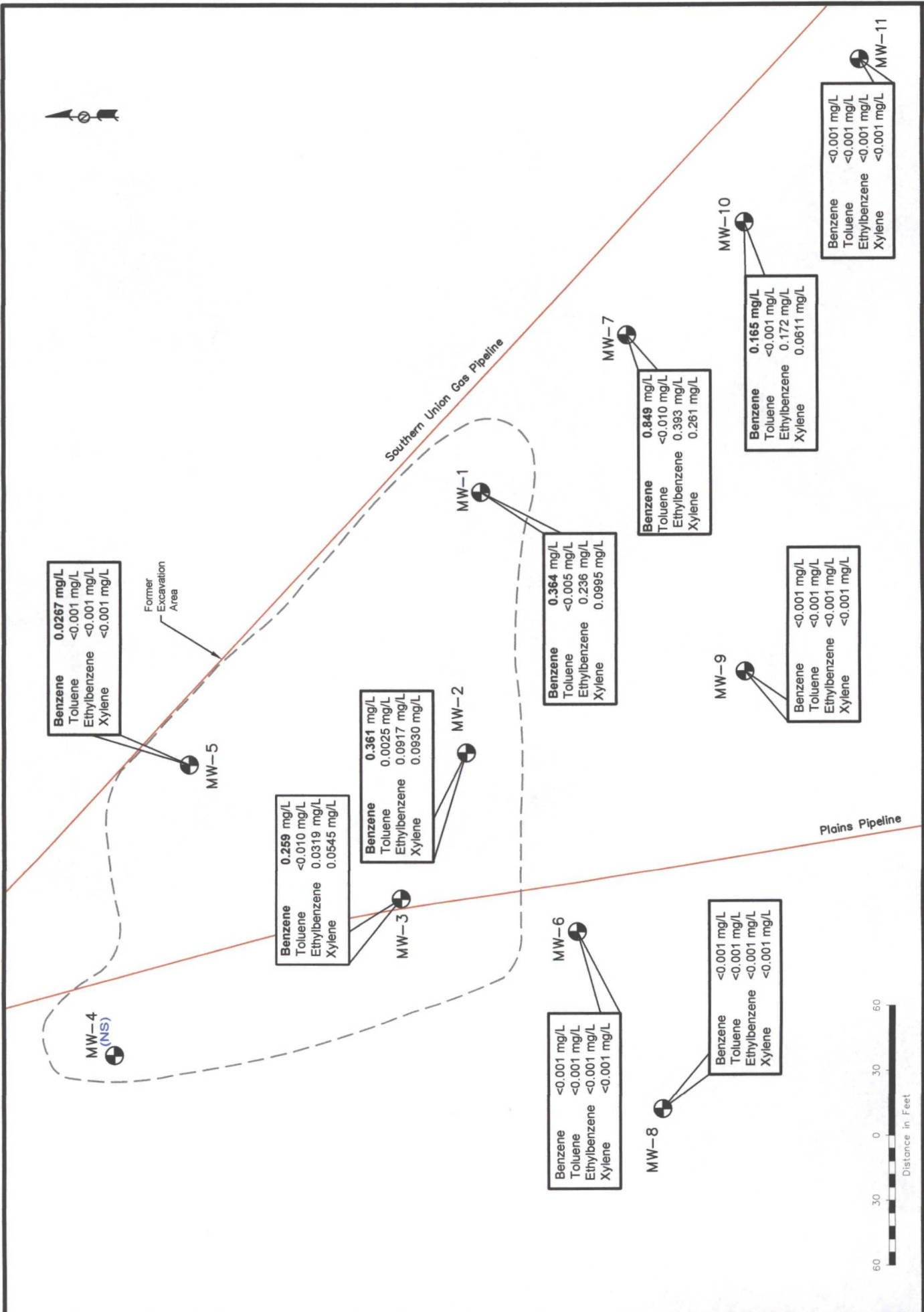
Groundwater Elevation (Feet)

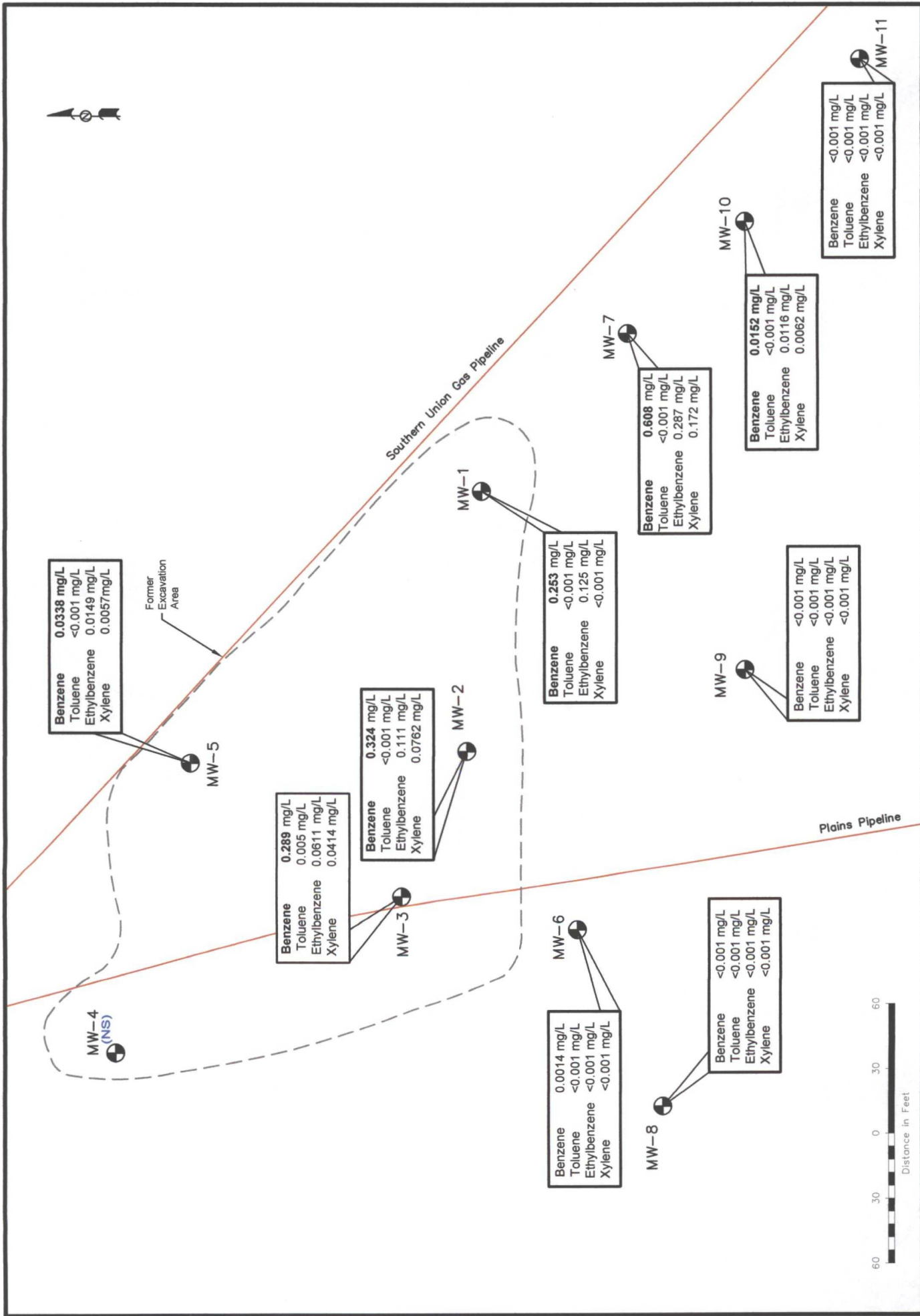
Groundwater Elevation Contour Line

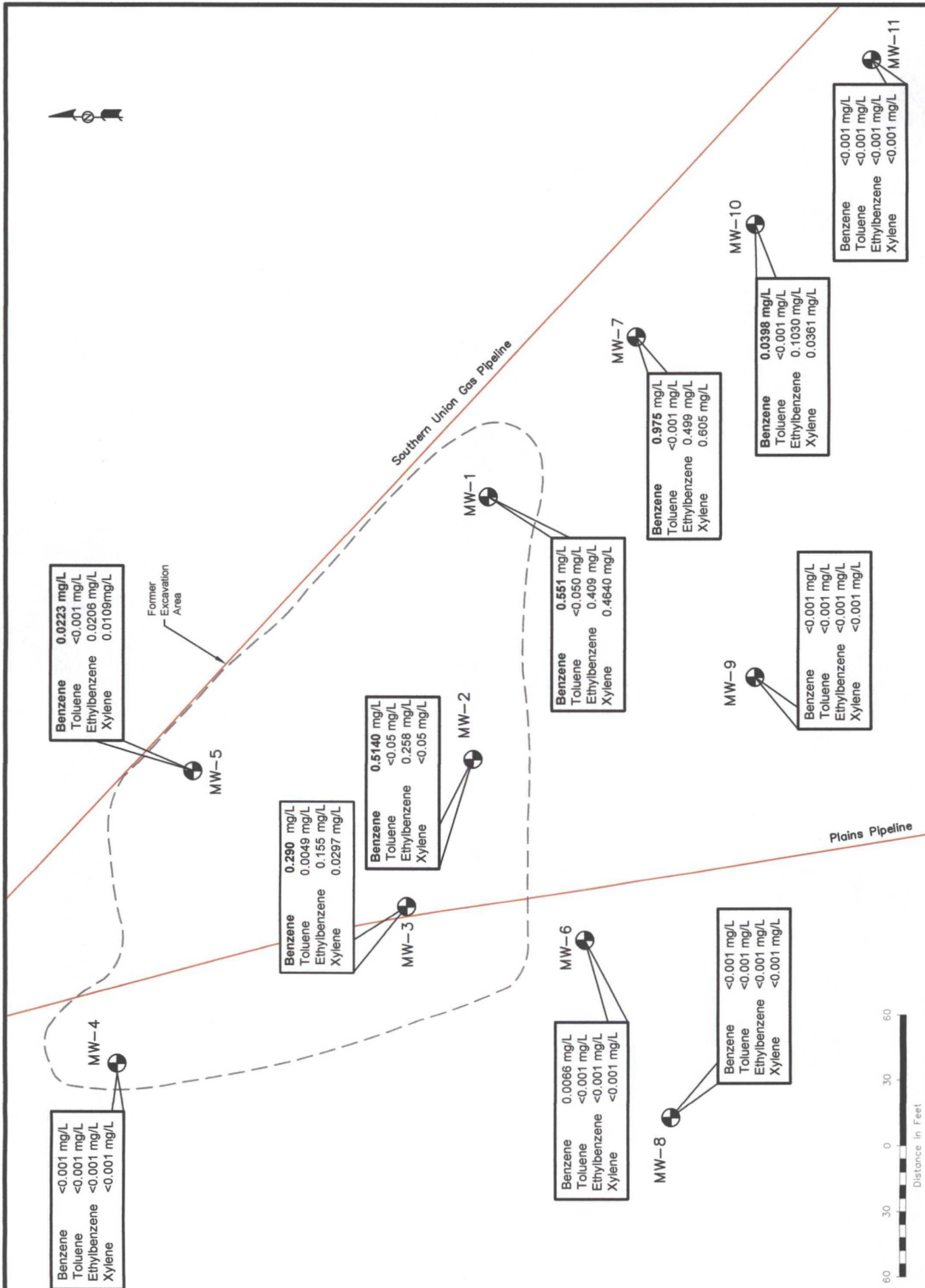
(3791.69)











**Legend:**

- Monitor Well Location
- Pipeline

**Figure 3D**  
Groundwater Concentration and Inferred PSH Extent Map (11/06/2010)  
Plains Marketing, L.P.  
34 Junction to Lea  
Lea County, NM

**Scale:** 1" = 60'  
November 18, 2010  
Checked By: RHR

**Monitor Well Location**

**PSH Thickness (in feet)**

0.18'

<0.001

**Inferred PSH Extent**

**Constituent Concentration (mg/L)**

**Not Sampled (NS)**

**NOVA Safety and Environmental**

**NOVA**  
safety and environmental

NMOCID Ref# 1R-0368



## Tables

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2010**

Plains Marketing, L.P.  
34 Junction to Lea Station  
Lea County, New Mexico  
NMOCD Reference #1R-0386

Well Number	Date Measured	Casing Well Elevation	Depth To Product	Depth To Water	PSH Thickness	Corrected Groundwater Elevation
MW - 1	01/05/10	3,508.17	-	19.10	0.00	3,489.07
MW - 1	02/04/10	3,508.17	-	19.02	0.00	3,489.15
MW - 1	05/06/10	3,508.17	-	19.03	0.00	3,489.14
MW - 1	08/05/10	3,508.17	-	18.18	0.00	3,489.99
MW - 1	11/04/10	3,508.17	-	18.20	0.00	3,489.97
MW - 2	01/05/10	3,501.45	-	20.56	0.00	3,480.89
MW - 2	01/22/10	3,501.45	-	20.34	0.00	3,481.11
MW - 2	02/04/10	3,501.45	-	19.39	0.00	3,482.06
MW - 2	03/01/10	3,501.45	-	20.34	0.00	3,481.11
MW - 2	03/10/10	3,501.45	-	20.36	0.00	3,481.09
MW - 2	03/12/10	3,501.45	-	20.33	0.00	3,481.12
MW - 2	03/15/10	3,501.45	-	20.36	0.00	3,481.09
MW - 2	03/17/10	3,501.45	-	20.15	0.00	3,481.30
MW - 2	03/22/10	3,501.45	-	20.35	0.00	3,481.10
MW - 2	03/31/10	3,501.45	-	20.34	0.00	3,481.11
MW - 2	04/05/10	3,501.45	-	20.36	0.00	3,481.09
MW - 2	04/14/10	3,501.45	-	20.36	0.00	3,481.09
MW - 2	04/16/10	3,501.45	-	20.38	0.00	3,481.07
MW - 2	04/19/10	3,501.45	-	20.10	0.00	3,481.35
MW - 2	04/26/10	3,501.45	-	20.12	0.00	3,481.33
MW - 2	05/06/10	3,501.45	-	20.00	0.00	3,481.45
MW - 2	05/14/10	3,501.45	-	20.55	0.00	3,480.90
MW - 2	05/21/10	3,501.45	-	20.38	0.00	3,481.07
MW - 2	05/24/10	3,501.45	-	20.36	0.00	3,481.09
MW - 2	06/08/10	3,501.45	-	20.03	0.00	3,481.42
MW - 2	06/16/10	3,501.45	-	20.15	0.00	3,481.30
MW - 2	06/29/10	3,501.45	-	20.24	0.00	3,481.21
MW - 2	07/08/10	3,501.45	-	19.83	0.00	3,481.62
MW - 2	07/13/10	3,501.45	-	19.67	0.00	3,481.78
MW - 2	07/22/10	3,501.45	-	19.58	0.00	3,481.87
MW - 2	07/30/10	3,501.45	-	19.49	0.00	3,481.96
MW - 2	08/04/10	3,501.45	-	19.47	0.00	3,481.98
MW - 2	08/05/10	3,501.45	-	19.42	0.00	3,482.03
MW - 2	08/19/10	3,501.45	-	19.52	0.00	3,481.93
MW - 2	08/27/10	3,501.45	-	19.52	0.00	3,481.93
MW - 2	09/03/10	3,501.45	-	19.58	0.00	3,481.87
MW - 2	09/09/10	3,501.45	-	19.59	0.00	3,481.86
MW - 2	09/17/10	3,501.45	-	19.52	0.00	3,481.93
MW - 2	10/01/10	3,501.45	-	19.60	0.00	3,481.85
MW - 2	10/04/10	3,501.45	-	19.59	0.00	3,481.86
MW - 2	10/13/10	3,501.45	-	19.77	0.00	3,481.68
MW - 2	10/19/10	3,501.45	-	19.57	0.00	3,481.88
MW - 2	10/26/10	3,501.45	-	19.54	0.00	3,481.91
MW - 2	11/04/10	3,501.45	-	19.42	0.00	3,482.03
MW - 2	11/05/10	3,501.45	-	19.75	0.00	3,481.70
MW - 2	11/12/10	3,501.45	-	19.92	0.00	3,481.53
MW - 2	11/19/10	3,501.45	-	19.88	0.00	3,481.57
MW - 2	12/10/10	3,501.45	-	31.94	0.00	3,469.51
MW - 2	12/13/10	3,501.45	-	33.82	0.00	3,467.63



**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2010**

**Plains Marketing, L.P.**  
**34 Junction to Lea Station**  
**Lea County, New Mexico**  
**NMOCD Reference #1R-0386**

Well Number	Date Measured	Casing Well Elevation	Depth To Product	Depth To Water	PSH Thickness	Corrected Groundwater Elevation
MW - 3	01/05/10	3,495.97	-	21.34	0.00	3,474.63
MW - 3	01/22/10	3,495.97	-	21.02	0.00	3,474.95
MW - 3	02/04/10	3,495.97	-	21.06	0.00	3,474.91
MW - 3	03/01/10	3,495.97	-	21.03	0.00	3,474.94
MW - 3	03/10/10	3,495.97	-	21.06	0.00	3,474.91
MW - 3	03/12/10	3,495.97	-	20.95	0.00	3,475.02
MW - 3	03/15/10	3,495.97	-	20.97	0.00	3,475.00
MW - 3	03/17/10	3,495.97	-	20.72	0.00	3,475.25
MW - 3	03/22/10	3,495.97	-	21.08	0.00	3,474.89
MW - 3	03/31/10	3,495.97	-	20.93	0.00	3,475.04
MW - 3	04/05/10	3,495.97	-	21.05	0.00	3,474.92
MW - 3	04/14/10	3,495.97	-	20.92	0.00	3,475.05
MW - 3	04/16/10	3,495.97	-	21.08	0.00	3,474.89
MW - 3	04/19/10	3,495.97	-	20.74	0.00	3,475.23
MW - 3	04/26/10	3,495.97	-	20.75	0.00	3,475.22
MW - 3	05/06/10	3,495.97	-	20.57	0.00	3,475.40
MW - 3	05/14/10	3,495.97	-	20.02	0.00	3,475.95
MW - 3	05/21/10	3,495.97	-	21.08	0.00	3,474.89
MW - 3	05/24/10	3,495.97	-	21.09	0.00	3,474.88
MW - 3	06/08/10	3,495.97	-	20.58	0.00	3,475.39
MW - 3	06/16/10	3,495.97	-	20.67	0.00	3,475.30
MW - 3	06/29/10	3,495.97	-	20.84	0.00	3,475.13
MW - 3	07/08/10	3,495.97	-	20.51	0.00	3,475.46
MW - 3	07/13/10	3,495.97	-	20.36	0.00	3,475.61
MW - 3	07/22/10	3,495.97	-	20.23	0.00	3,475.74
MW - 3	07/30/10	3,495.97	-	20.04	0.00	3,475.93
MW - 3	08/04/10	3,495.97	-	20.01	0.00	3,475.96
MW - 3	08/05/10	3,495.97	-	20.02	0.00	3,475.95
MW - 3	08/19/10	3,495.97	-	20.10	0.00	3,475.87
MW - 3	08/27/10	3,495.97	-	20.09	0.00	3,475.88
MW - 3	09/03/10	3,495.97	-	20.12	0.00	3,475.85
MW - 3	09/09/10	3,495.97	-	20.12	0.00	3,475.85
MW - 3	09/17/10	3,495.97	-	20.08	0.00	3,475.89
MW - 3	10/01/10	3,495.97	-	20.12	0.00	3,475.85
MW - 3	10/04/10	3,495.97	-	20.11	0.00	3,475.86
MW - 3	10/13/10	3,495.97	-	20.29	0.00	3,475.68
MW - 3	10/19/10	3,495.97	-	20.10	0.00	3,475.87
MW - 3	10/26/10	3,495.97	-	20.08	0.00	3,475.89
MW - 3	11/04/10	3,495.97	-	20.05	0.00	3,475.92
MW - 3	11/05/10	3,495.97	-	20.12	0.00	3,475.85
MW - 3	11/12/10	3,495.97	-	20.57	0.00	3,475.40
MW - 3	11/19/10	3,495.97	-	20.44	0.00	3,475.53
MW - 3	12/10/10	3,495.97	-	30.26	0.00	3,465.71
MW - 3	12/13/10	3,495.97	-	30.51	0.00	3,465.46
MW - 4	01/05/10	3,509.01	-	19.90	0.00	3,489.11
MW - 4	02/04/10	3,509.01	-	19.84	0.00	3,489.17
MW - 4	05/06/10	3,509.01	-	19.38	0.00	3,489.63
MW - 4	08/05/10	3,509.01	-	19.02	0.00	3,489.99
MW - 4	11/04/10	3,509.01	-	19.04	0.00	3,489.97

**TABLE 1**  
**GROUNDWATER ELEVATION DATA - 2010**

**Plains Marketing, L.P.**  
**34 Junction to Lea Station**  
**Lea County, New Mexico**  
**NMOCD Reference #1R-0386**

Well Number	Date Measured	Casing Well Elevation	Depth To Product	Depth To Water	PSH Thickness	Corrected Groundwater Elevation
MW - 5	01/05/10	3,508.74	-	19.78	0.00	3,488.96
MW - 5	02/04/10	3,508.74	-	19.71	0.00	3,489.03
MW - 5	05/06/10	3,508.74	-	19.27	0.00	3,489.47
MW - 5	08/05/10	3,508.74	-	18.91	0.00	3,489.83
MW - 5	11/04/10	3,508.74	-	18.92	0.00	3,489.82
MW - 6	02/04/10	3,509.76	-	21.24	0.00	3,488.52
MW - 6	05/06/10	3,509.76	-	21.28	0.00	3,488.48
MW - 6	08/05/10	3,509.76	-	19.83	0.00	3,489.93
MW - 6	11/04/10	3,509.76	-	19.82	0.00	3,489.94
MW - 7	01/05/10	3,507.38	-	18.60	0.00	3,488.78
MW - 7	02/04/10	3,507.38	-	18.53	0.00	3,488.85
MW - 7	05/06/10	3,507.38	-	18.54	0.00	3,488.84
MW - 7	08/05/10	3,507.38	-	17.64	0.00	3,489.74
MW - 7	11/04/10	3,507.38	-	17.66	0.00	3,489.72
MW - 8	01/05/10	3,512.14	-	23.66	0.00	3,488.48
MW - 8	02/04/10	3,512.14	-	23.58	0.00	3,488.56
MW - 8	05/06/10	3,512.14	-	23.54	0.00	3,488.60
MW - 8	08/05/10	3,512.14	-	22.78	0.00	3,489.36
MW - 8	11/04/10	3,512.14	-	22.80	0.00	3,489.34
MW - 9	01/05/10	3,509.34	-	21.88	0.00	3,487.46
MW - 9	02/04/10	3,509.34	-	21.83	0.00	3,487.51
MW - 9	05/06/10	3,509.34	-	21.32	0.00	3,488.02
MW - 9	08/05/10	3,509.34	-	21.06	0.00	3,488.28
MW - 9	11/04/10	3,509.34	-	21.09	0.00	3,488.25
MW - 10	01/05/10	3,506.66	-	19.12	0.00	3,487.54
MW - 10	02/04/10	3,506.66	-	19.05	0.00	3,487.61
MW - 10	05/06/10	3,506.66	-	19.16	0.00	3,487.50
MW - 10	08/05/10	3,506.66	-	18.17	0.00	3,488.49
MW - 10	11/04/10	3,506.66	-	18.16	0.00	3,488.50
MW - 11	01/05/10		-	21.05	0.00	
MW - 11	02/04/10		-	20.98	0.00	
MW - 11	05/06/10		-	21.06	0.00	
MW - 11	08/05/10		-	21.12	0.00	
MW - 11	11/04/10		-	21.15	0.00	

\* Complete Historical Tables are provided on the attached CD.

TABLE 2

## CONCENTRATIONS OF BTEX IN GROUNDWATER - 2010

PLAINS MARKETING, L.P.  
 34 JUNCTION TO LEA  
 LEA COUNTY, NEW MEXICO  
 NMOCD Reference Number 1R-0386

Sample Location	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	m,p-Xylenes (mg/L)	o-Xylene (mg/L)
NMOCD Regulatory Limit		0.01 (mg/L)	0.75 (mg/L)	0.75 (mg/L)	0.62 (mg/L)	
MW - 1	02/04/10	0.248	<0.005	0.298	0.1120	
MW - 1	05/06/10	0.364	<0.005	0.236	0.0995	
MW - 1	08/05/10	0.253	<0.050	0.125	<0.050	
MW - 1	11/04/10	0.551	<0.050	0.409	0.4640	
MW - 2	02/04/10	0.3070	<0.001	0.104	0.0867	
MW - 2	05/06/10	0.3610	0.0025	0.0917	0.0930	
MW - 2	08/05/10	0.3240	<0.050	0.111	0.0762	
MW - 2	11/04/10	0.5140	<0.050	0.258	<0.050	
MW - 3	02/04/10	0.323	<0.020	0.1100	0.0896	
MW - 3	05/06/10	0.259	<0.010	0.0319	0.0545	
MW - 3	08/05/10	0.289	0.005	0.0611	0.0414	
MW - 3	11/04/10	0.290	0.0049	0.1550	0.0297	
MW - 4	02/04/10	Not Sampled on Current Sample Schedule				
MW - 4	05/06/10	Not Sampled on Current Sample Schedule				
MW - 4	08/05/10	Not Sampled on Current Sample Schedule				
MW - 4	11/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 5	02/04/10	0.0245	<0.001	0.0026	0.0042	
MW - 5	05/06/10	0.0267	<0.001	<0.001	<0.001	
MW - 5	08/05/10	0.0358	<0.001	0.0149	0.0057	
MW - 5	11/04/10	0.0223	<0.001	0.0206	0.0109	
MW - 6	02/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 6	05/06/10	<0.001	<0.001	<0.001	<0.001	
MW - 6	08/05/10	0.0014	<0.001	<0.001	<0.001	
MW - 6	11/04/10	0.0066	<0.001	<0.001	<0.001	
MW - 7	02/04/10	0.994	<0.010	0.505	0.3280	
MW - 7	05/06/10	0.849	<0.010	0.393	0.2610	
MW - 7	08/05/10	0.608	<0.050	0.287	0.1720	
MW - 7	11/04/10	0.975	<0.001	0.499	0.6050	
MW - 8	02/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 8	05/06/10	<0.001	<0.001	<0.001	<0.001	
MW - 8	08/05/10	<0.001	<0.001	<0.001	<0.001	
MW - 8	11/04/10	<0.001	<0.001	<0.001	<0.001	

TABLE 2

## CONCENTRATIONS OF BTEX IN GROUNDWATER - 2010

PLAINS MARKETING, L.P.  
 34 JUNCTION TO LEA  
 LEA COUNTY, NEW MEXICO  
 NMOCD Reference Number 1R-0386

Sample Location	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	m,p-Xylenes (mg/L)	o-Xylene (mg/L)
NMOCD Regulatory Limit		0.01 (mg/L)	0.75 (mg/L)	0.75 (mg/L)	0.62 (mg/L)	
MW - 9	02/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 9	05/06/10	<0.001	<0.001	<0.001	<0.001	
MW - 9	08/05/10	<0.001	<0.001	<0.001	<0.001	
MW - 9	11/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/04/10	0.2200	<0.001	0.0644	0.0223	
MW - 10	05/06/10	0.1650	<0.001	0.1720	0.0611	
MW - 10	08/05/10	0.0152	<0.001	0.0116	0.0062	
MW - 10	11/04/10	0.0398	<0.001	0.1030	0.0361	
MW - 11	02/04/10	<0.001	<0.001	<0.001	<0.001	
MW - 11	05/06/10	<0.001	<0.001	<0.001	<0.001	
MW - 11	08/05/10	<0.001	<0.001	<0.001	<0.001	
MW - 11	11/04/10	<0.001	<0.001	<0.001	<0.001	

\* Complete Historical Tables are provided on the attached CD.

TABLE 3

## POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
34 JUNCTION TO LEA STATION  
LEA COUNTY, NEW MEXICO  
NMOC REFERENCE NUMBER 1R-0386

EPA SW846-8270C, 3510


All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[e]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.																			
MW-1	03/20/07	<0.0002	<0.0002	0.0019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0026	0.0026	<0.0004	<0.0002	<0.0002	0.0558	---	---	0.0025
	11/20/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.00216	0.00216	<0.000185	0.00139	<0.000185	0.01	0.0303	0.00294	0.00134
	11/10/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000843	<0.000184	0.00135	0.0101	0.00102	0.000547
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																	
MW-2	03/20/07	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	0.001	<0.0004	<0.0002	<0.0002	0.0214	---	---	0.0008
	11/20/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.000383	0.000383	<0.000185	0.000367	<0.000185	0.000269	0.00614	<0.000185	<0.000185
	11/10/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000833	0.00572	<0.000183	<0.000183
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																	
MW-3	03/20/07	0.0166	<0.001	0.216	0.0067	0.0081	<0.001	<0.001	0.0315	<0.001	0.0236	0.148	<0.002	<0.001	0.0246	0.417	---	---	0.111
	11/20/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000218	0.00329	<0.000183	0.00263	<0.000183	0.00547	0.0366	0.00206	0.00245
	11/10/09	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.00193	<0.000185	0.00213	<0.000185	0.000734	0.0214	<0.000185	0.00146
	11/04/10	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	<0.000198	0.00508	<0.000198	0.00891	0.00101	<0.000198	0.0606	<0.000198	0.00285
MW-4	03/20/07	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	0.0006	<0.0004	<0.0002	<0.0002	<0.0002	---	---	0.0007
	11/20/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.00045	0.00045	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.00035
	11/10/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																	
MW-5	03/20/07	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	0.0006	<0.0004	<0.0002	<0.0002	0.0059	---	---	0.0006
	11/20/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000555	0.000555	<0.000184	0.000788	<0.000184	<0.000184	0.0034	<0.000184	0.00086
	11/10/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																	
MW-6	03/20/07	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	---	---	0.0003
	11/20/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184
	11/10/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																	

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.  
34 JUNCTION TO LEA STATION  
LEA COUNTY, NEW MEXICO  
NMOCID REFERENCE NUMBER IR-0386

EPA SW846-8270C, 3510																				
SAMPLE LOCATION	SAMPLE DATE	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Phenanthrene	Pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Dibenzofuran	
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		—	—	—	0.0001 mg/L	0.0007 mg/L	0.0002 mg/L	—	0.0002 mg/L	0.0002 mg/L	0.0003 mg/L	—	—	0.0004 mg/L	—	—	0.03 mg/L	—	—	
		<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	0.0009	<0.0004	<0.0002	<0.0002	0.0252	—	—	0.0092
		<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00125	<0.000184	0.00073	<0.000184	0.0216	0.0212	0.00878	0.00104
		<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00169	0.00241	<0.000184	<0.000184
		Not Sampled as part of Quarterly Monitoring Event.																		
	11/04/10																			
MW-8	03/20/07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/20/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	
	11/10/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																		
MW-9	03/20/07	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	---	---	<0.0002	
	11/20/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/10/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																		
MW-10	03/20/07	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	0.0085	---	---	0.0005
	11/20/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.000646	0.000828	0.000196	<0.000185
	11/10/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																		
MW-11	03/20/07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/20/08	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	
	11/10/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/04/10	Not Sampled as part of Quarterly Monitoring Event.																		



## Appendices

Appendix A  
Release Notification and Corrective Action  
(Form C-141)



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised March 17, 1999

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

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company <b>EOTT Energy LLC</b>	Contact <b>Frank Hernandez</b>
Address PO Box 1660 5805 East Highway 80 Midland, Texas 79702	Telephone No. 915.638.3799
Facility Name Juction JCT 34 Line to Lea #2002-10286	Facility Type 10" Steel Pipeline

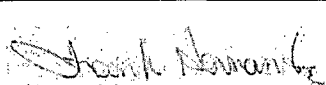
Surface Owner Deck Estate	Mineral Owner	Lease No.
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**LOCATION OF RELEASE**

Unit Letter 21	Section 21	Township T20S	Range R37E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat. 32 32' 20.828"N Lon. 103 15' 38.480"W
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**NATURE OF RELEASE**

Type of Release Crude Oil	Volume of Release 300 bbls. barrels	Volume Recovered 190 bbls barrels
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence 11-06-02 @ 11:00 AM	Date and Hour of Discovery 11-6-02 @ 4:00 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley	
By Whom? Pat McCasland, EPI	Date and Hour 11-07-02 @ 6:30 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	
If a Watercourse was Impacted, Describe Fully.* NA		
Describe Cause of Problem and Remedial Action Taken.* Pipe repair clamp installed.		
Describe Area Affected and Cleanup Action Taken.* Site will be delineated and a remediation plan developed. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Frank Hernandez		Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:	
Date: 9-10-02 Phone: 915.638.3799	Conditions of Approval:		Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary