1R-123

# Annual GW Mon. Report

Year: 2011

# 2011
# ANNUAL MONITORING REPORT

## MONUMENT 17

**SE ¼ NW ¼ of SECTION 29, TOWNSHIP 19 SOUTH, RANGE 37 EAST**
**LEA COUNTY, NEW MEXICO**
**PLAINS SRS NUMBER: TNM MONUMENT-17-KNOWN**
**NMOCD REFERENCE: 1R-123**

Prepared For:

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

NOVA
safety and environmental

Prepared By:

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

**March 2012**

Ronald K. Rounsaville
Senior Project Manager

Brittan K. Byerly, P.G.
President

PLAINS
ALL AMERICAN

March 22, 2012

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

RECEIVED
MAR 26 2012
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Re: Plains All American – 2011 Annual Monitoring Reports
15 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 |
| 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<br>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 |
| 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 |

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.

PLAINS
ALL AMERICAN

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

## TABLE OF CONTENTS

## 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 May 29, 2004, project management responsibilities for the Monument 17 Site (the site) were assumed by NOVA. The site, which was formerly the responsibility of Enron Oil Trading and Transportation (EOTT), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2011 only. Historic data tables as well as 2011 laboratory analytical reports are provided on the enclosed disk. For reference, the Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2011 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 legal description of the site location is SE ¼ of the NW ¼ of Section 29, Township 19 South, Range 37 East. No information with respect to the release date, volume of crude oil released or recovered, excavation volumes, or pipeline repair is currently available as the release occurred while the pipeline was operated by Texas New Mexico Pipe Line Company (TNM). The Release Notification and Corrective Action Form (C-141) is provided as Appendix B. The initial site investigation, consisting of the installation of eight groundwater monitor wells (MW-1 through MW-8), was performed by previous consultants.

Currently, there are eight groundwater monitor wells (MW-1 through MW-5 and MW-7 through MW-9) on site.

## FIELD ACTIVITIES

### Product Recovery Efforts

Based on gauging data collected during the 2011 reporting period, no monitor wells exhibited a measurable thickness of PSH during the reporting period.

### Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended in NMOCD correspondence dated June 21, 2005:

| NMOCD Approved Sampling Schedule | | | | | |
|---|---|---|---|---|---|
| MW-1 | Quarterly | MW-4 | Semi-Annual | MW-7 | Quarterly |
| MW-2 | Quarterly | MW-5 | Annually | MW-8 | Annually |
| MW-3 | Quarterly | MW-6 | Plugged and Abandoned | MW-9 | Quarterly |

The site monitor wells were gauged and sampled on the following dates: February 7, May 16, August 8, and November 11, 2011. During each sampling event, sampled monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water using a PVC bailer or electric Grundfos pump. 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 at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Map(s). Groundwater elevation data for 2011 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 0.0013 feet/foot to the southeast as measured between groundwater monitor wells MW-5 and MW-9. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,587.17 and 3,589.13 feet above mean sea level, in monitor wells MW-9 on November 11, 2011 and MW-5 on February 7, 2011, respectively.

## LABORATORY RESULTS

Groundwater samples obtained during the quarterly sampling events of 2011 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 only on monitor well MW-7 during 2011. 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 2011 are summarized in Table 2 and the historic PAH constituent concentrations are summarized in Table 3. Copies of the laboratory reports generated for 2011 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 <0.001 mg/L during the 1st and 2nd quarters to 0.0145 mg/L during the 3rd quarter of the reporting period. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during the 3rd quarter of 2011. Toluene concentrations were below laboratory method detection limits (MDL) and NMOCD regulatory standard of 0.75 mg/L during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.001 mg/L during the 1st, 2nd and 4th quarters to 0.0069 mg/L during the 3rd quarter of the

reporting period. Ethyl-benzene concentrations were below the NMOCD regulatory standard of 0.75 mg/L during all four quarters of 2011. Xylene concentrations ranged from <0.001 mg/L during the 2nd, 3rd and 4th quarters to 0.0198 mg/L during the 1st quarter of the reporting period. Xylene concentrations were below the NMOCD regulatory standard of 0.62 mg/L during all four quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-2** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.001 mg/L during the 1st and 2nd quarters to 0.0428 mg/L during the 3rd quarter of the reporting period. Benzene concentrations were above NMOCD regulatory standards during the 3rd and 4th quarters of the reporting period. Toluene and ethyl-benzene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 2nd and 3rd quarters to 0.0191 mg/L during the 1st quarter of the reporting period. Xylene concentrations were below the NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-3** is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0100 mg/L during the 2nd quarter to 0.0175 mg/L during the 1st quarter of the reporting period. Benzene concentrations were above the NMOCD regulatory standard during all four quarters of 2011. Toluene, ethyl-benzene and xylene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-4** is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 2nd and 4th quarter sampling events. Monitor well MW-4 has exhibited forty-one consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-5** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standard for each constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirty-eight consecutive quarters. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-7** is sampled on a quarterly schedule and analytical results indicate benzene, toluene and ethyl-benzene concentrations were below the MDL and NMOCD regulatory standard during all four quarters of the reporting period. Xylene concentrations ranged from <0.001 mg/L during the 2nd, 3rd and 4th quarters to 0.0188 mg/L during the 1st quarter of the reporting period. Monitor well MW-7 has exhibited twenty-four consecutive monitoring events below NMOCD regulatory limits. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

**Monitor well MW-8** is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during the 4th quarter sampling event. Monitor well MW-8 has exhibited twenty-six

consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4th quarter sampling event.

**Monitor well MW-9** is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory standards for each constituent during all four quarters of the reporting period. Monitor well MW-9 has exhibited twenty consecutive monitoring events below NMOCD regulatory limits. PAH analysis was not conducted during the 4th 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 four groundwater monitoring and sampling events for the annual monitoring period of calendar year 2011. Currently, there are eight groundwater monitor wells (MW-1 through MW-5 and MW-7 through MW-9) on-site. The most recent inferred groundwater gradient indicates a general gradient of approximately 0.0013 feet/foot to the southeast as measured between groundwater monitor wells MW-5 and MW-9. During the reporting period, no measurable thickness of PSH was detected in any of the site monitor wells.

A review of the laboratory analytical results indicates benzene concentrations were above applicable NMOCD regulatory standards in three of the eight monitor wells during at least one quarter of the reporting period. Toluene, ethyl-benzene and xylene concentrations were below NMOCD regulatory standards for all eight monitor wells during the four quarters of the 2011 reporting period. Review of PAH analysis indicates constituent concentrations in monitor well MW-7 were below MDLs during the 2011 annual sampling event and have been below WQCC Standards for the past two consecutive sampling events.

## ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling will continue in 2012. Plains respectfully requests NMOCD approval to modify the sampling schedule for the following monitor wells:

- Monitor well MW-4 is currently sampled on a semi-annual schedule. Plains proposes to modify the schedule to an annual schedule. This down-gradient monitor well was installed during the 3rd quarter 1999 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last thirty-three consecutive quarters.

- Monitor well MW-7 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to a semi-annual schedule. This cross-gradient monitor well was installed during the 4th quarter 2002 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty-five consecutive quarters.

- Monitor well MW-9 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to a semi-annual schedule. This down-gradient monitor well was installed during the 4th quarter 2004 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last twenty consecutive quarters.

Groundwater monitoring and quarterly sampling will continue through 2012. An annual groundwater monitoring report will be submitted by April 1, 2013.

Based on the results of the PAH analysis over the past several years, Plains requests that no further PAH analysis be conducted on monitor well MW-7 and that PAH analysis be switched to monitor well MW-2 due to elevated benzene concentration levels.

A Soil Closure Proposal will be submitted to the NMOCD in the future. The proposal will present a strategy to address the remaining soil issues at the site.

**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. 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
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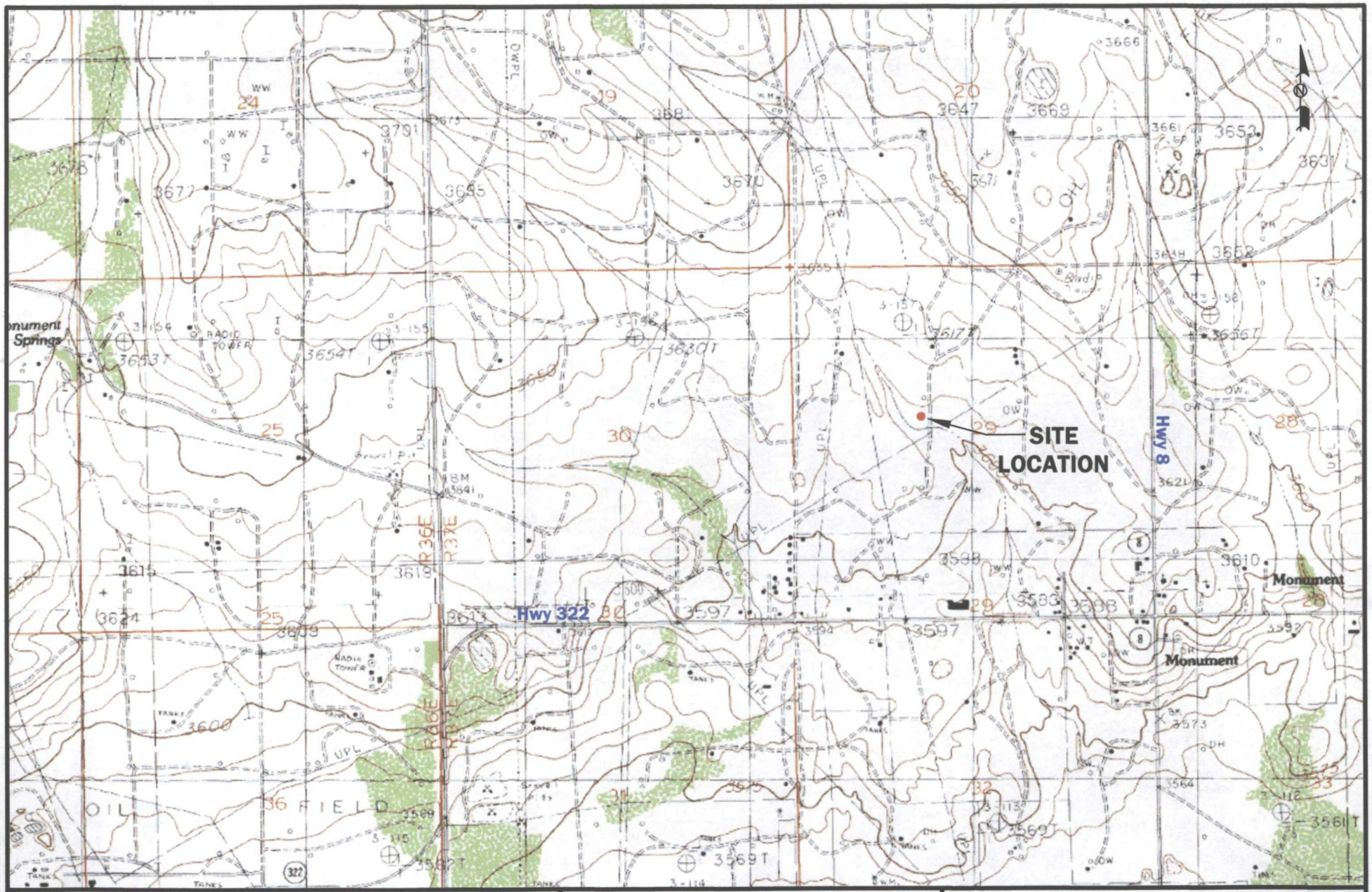
NOVA Safety and Environmental
2057 Commerce Street
Midland, TX 79703
rrounsaville@novatraining.cc

# Figures




LEGEND:

2000 1000 0 1000 2000

Distance in Feet

NMOCD Reference #1R-123

Figure 1
Site Location Map
Monument 17
Plains Marketing, L.P.
Lea County, NM

NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

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

LATITUDE & LONGITUDE COORDINATES: N 32° 37' 59.34" W 103° 16' 33.78"

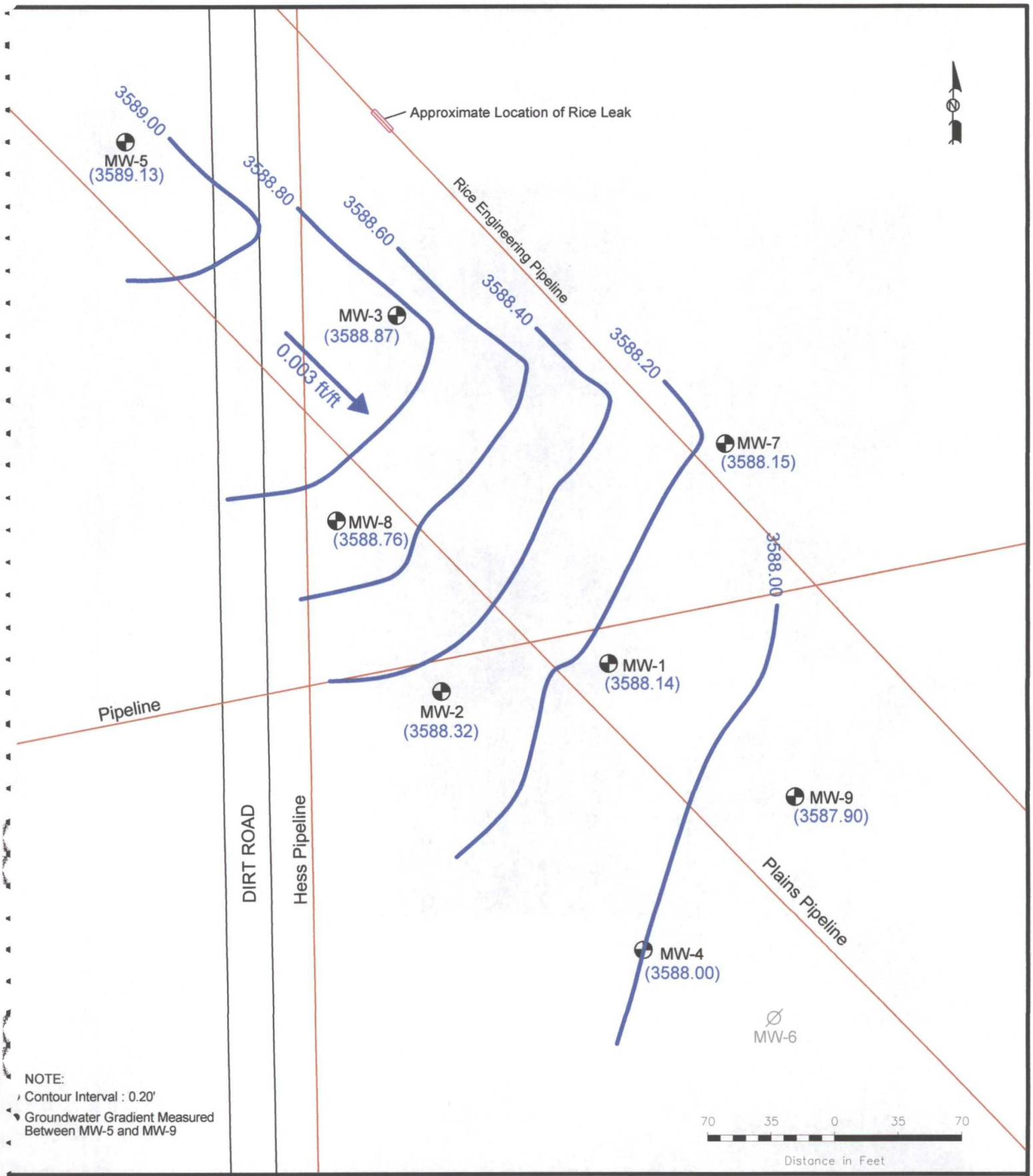



Figure 2A
Inferred Groundwater Gradient Map
(2/7/11)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

| April 20, 2011 | Scale: 1" = 70' | CAD By: TA | Checked By: RKR |
|---|---|---|---|
| Lat. N 32° 37' 57.7" Long. W 103° 16' 31.6" | | | SE1/4 NW1/4 Sec 29 T19S R37E |

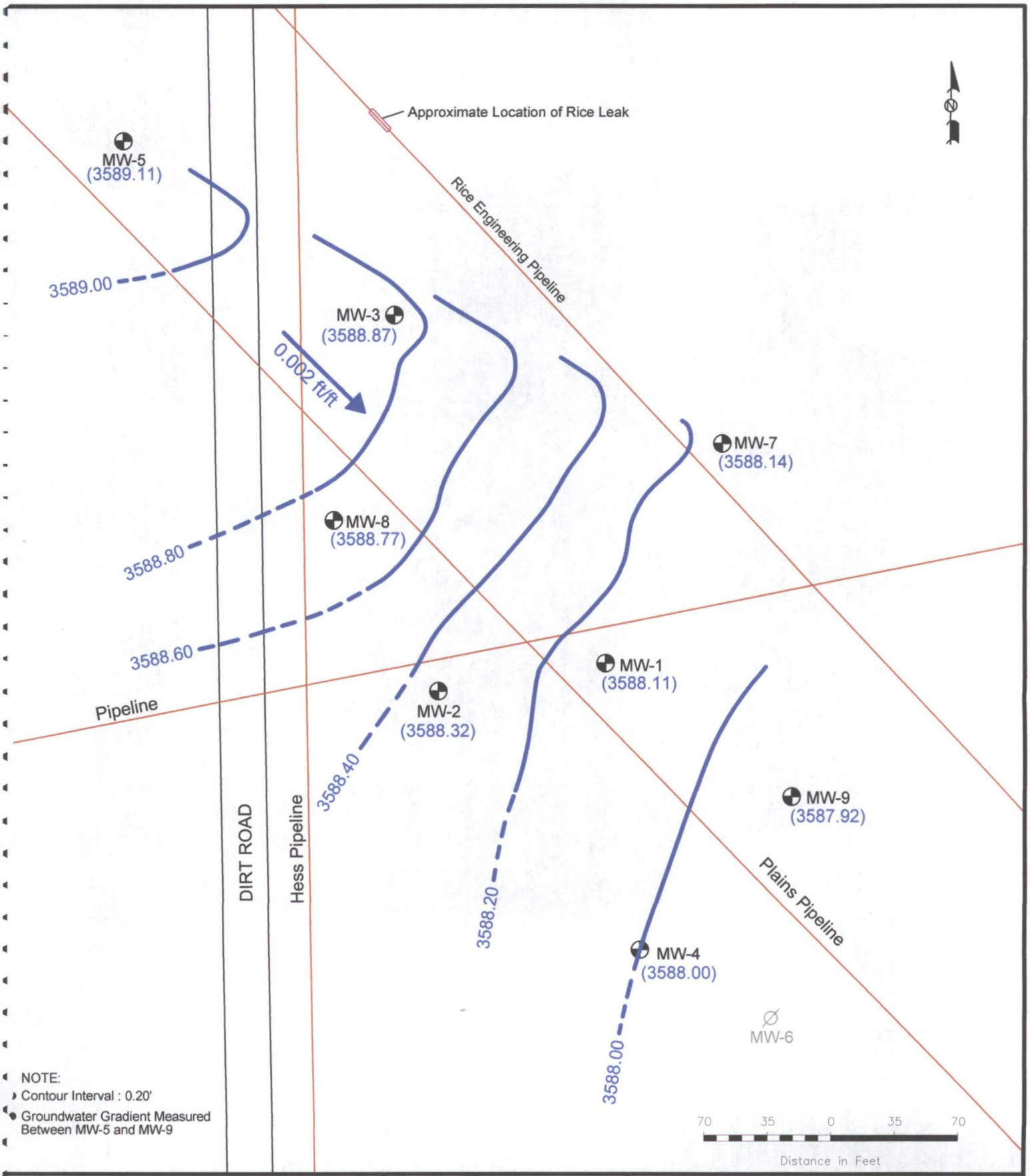



Figure 2B
Inferred Groundwater Gradient Map
(5/16/2011)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

| June 7, 2011 | Scale: 1" = 70' | CAD By: TA | Checked By: RKR |
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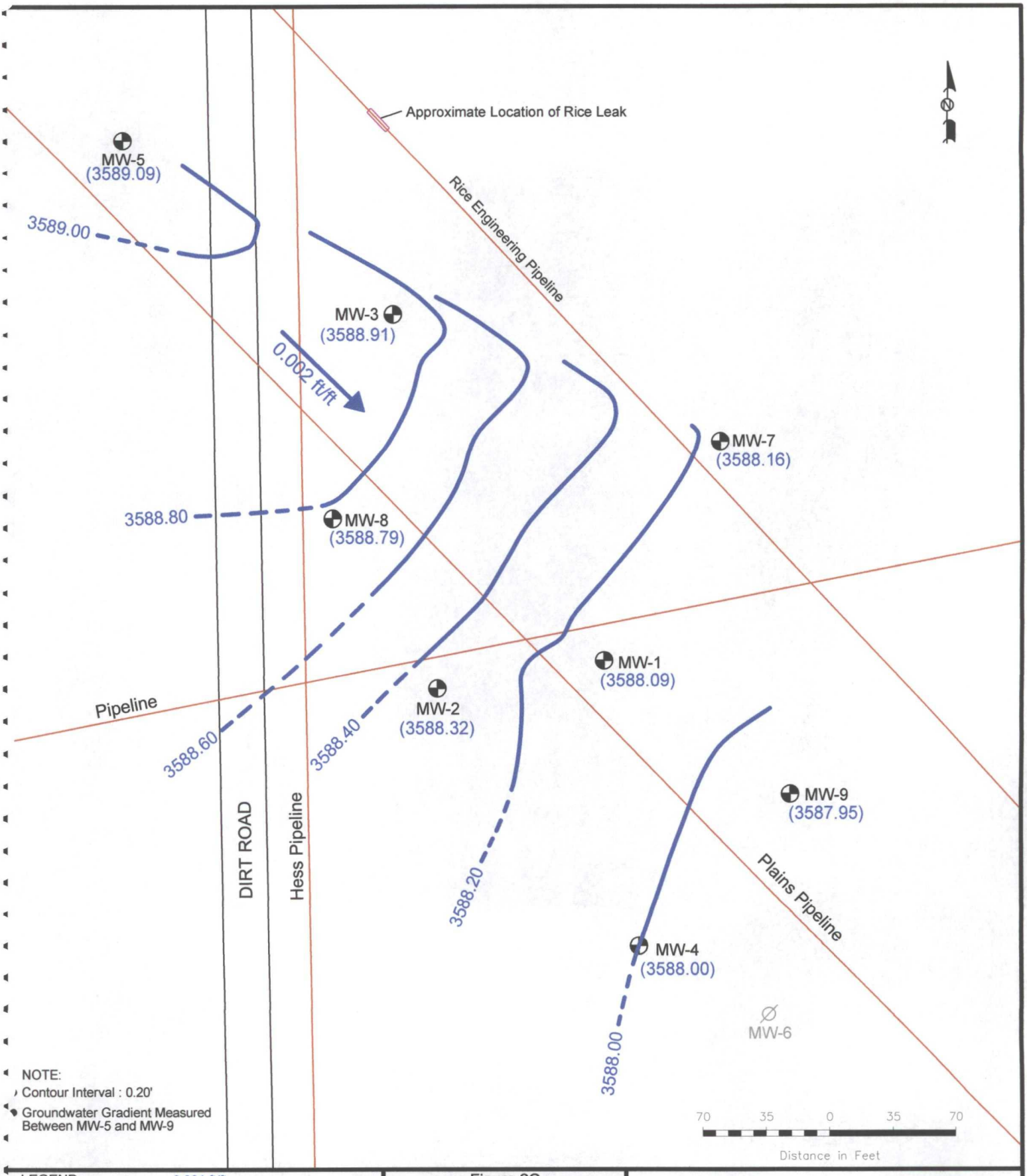


Figure 2C
Inferred Groundwater Gradient Map
(8/8/2011)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

| September 14, 2011 | Scale: 1" = 70' | CAD By: TA | Checked By: RKR |
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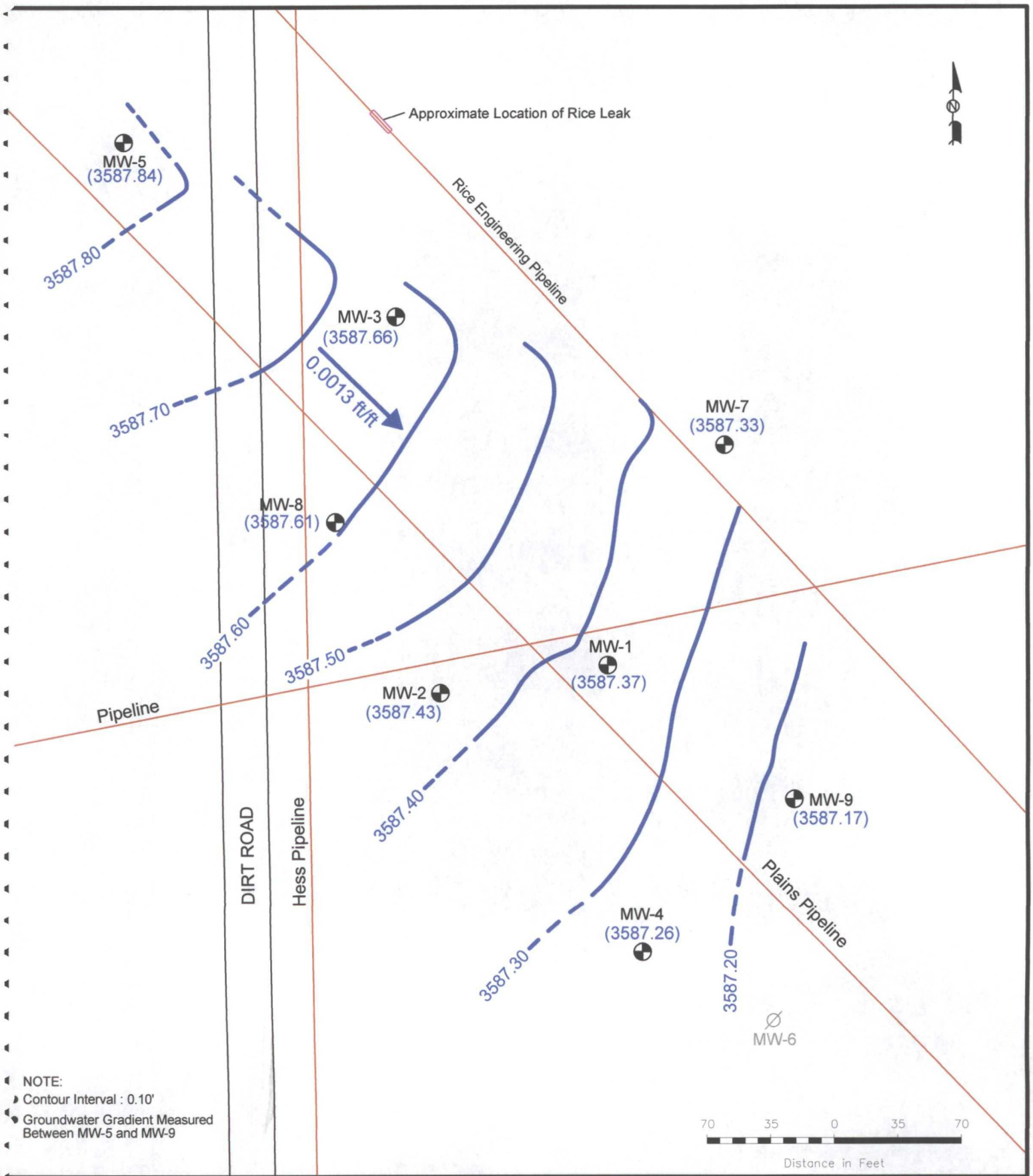


Figure 2D
Inferred Groundwater Gradient Map
(11/11/2011)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

| November 17, 2011 | Scale: 1" = 70' | CAD By: TA | Checked By: RKR |
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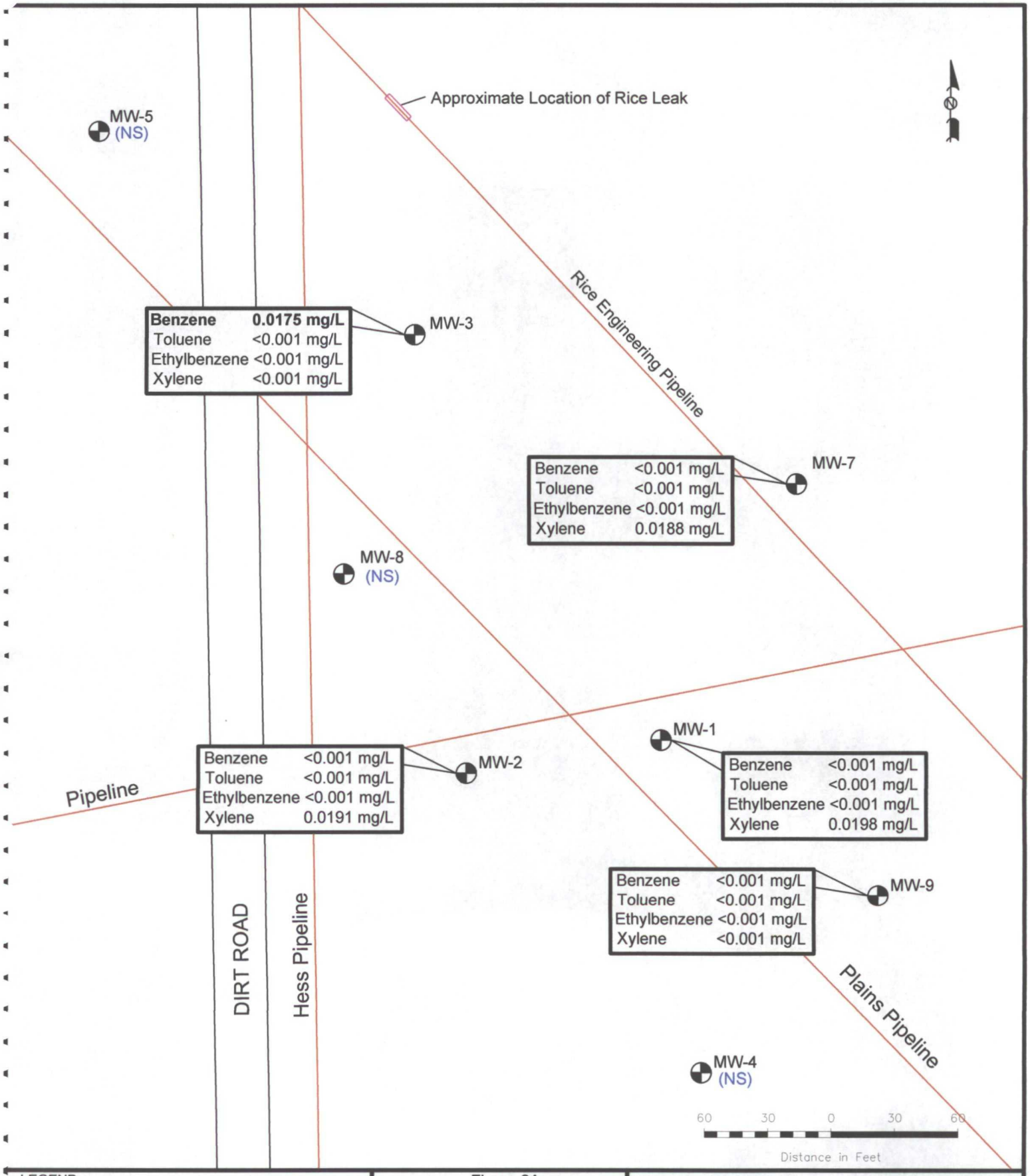


LEGEND:

- Monitor Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (2/7/11)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
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| April 4, 2011 | Scale: 1" = 60' | CAD By: TA | Checked By: RKR |
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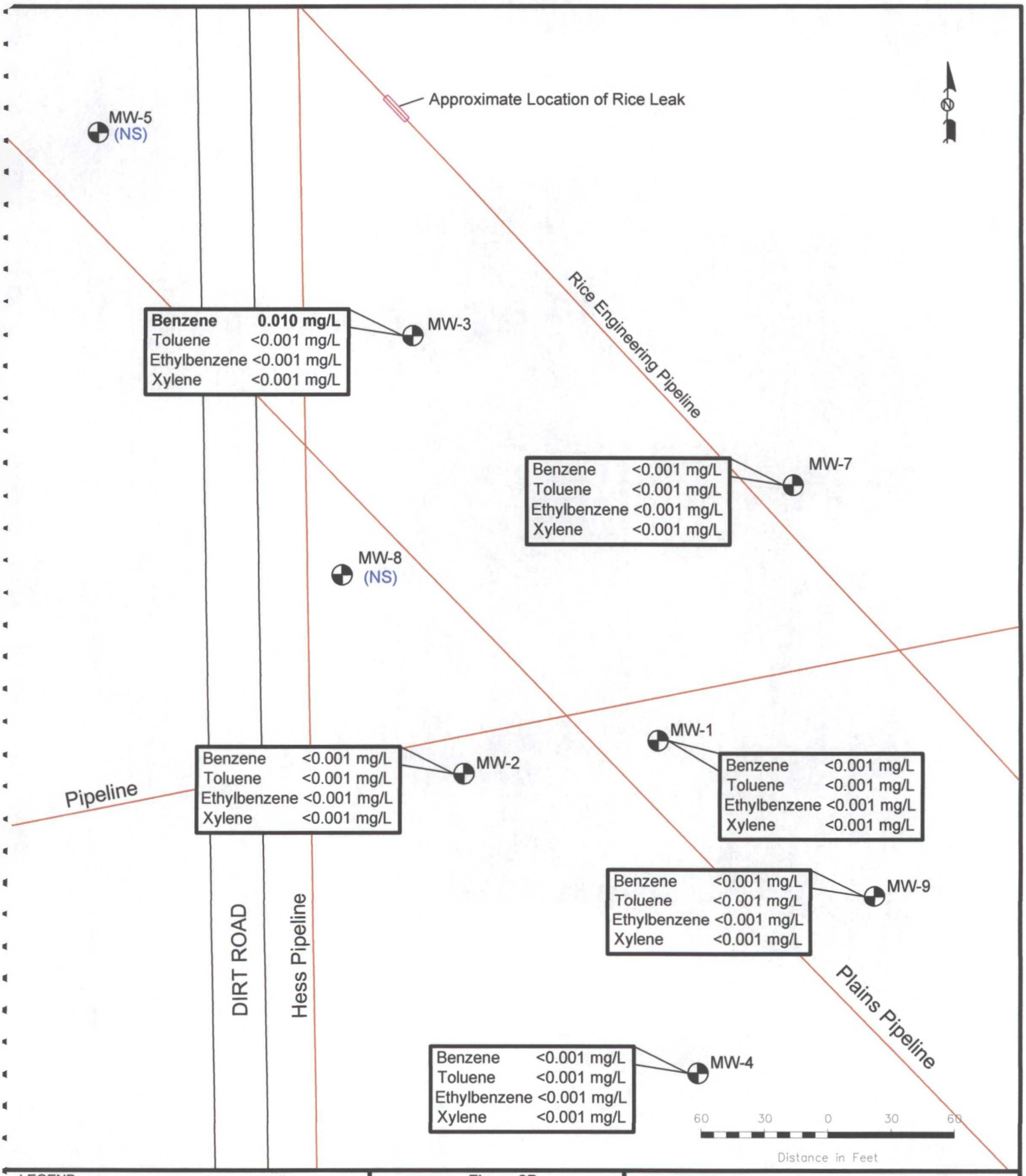


LEGEND:

- Monitor Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

**Figure 3B**
**Groundwater Concentration and Inferred PSH Extent Map (5/16/2011)**
**NMOCD Reference # IR 0123**
**Plains Marketing, L.P.**
**Monument 17**
**Lea County, NM**


NOVA safety and environmental
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Midland, Texas 79703
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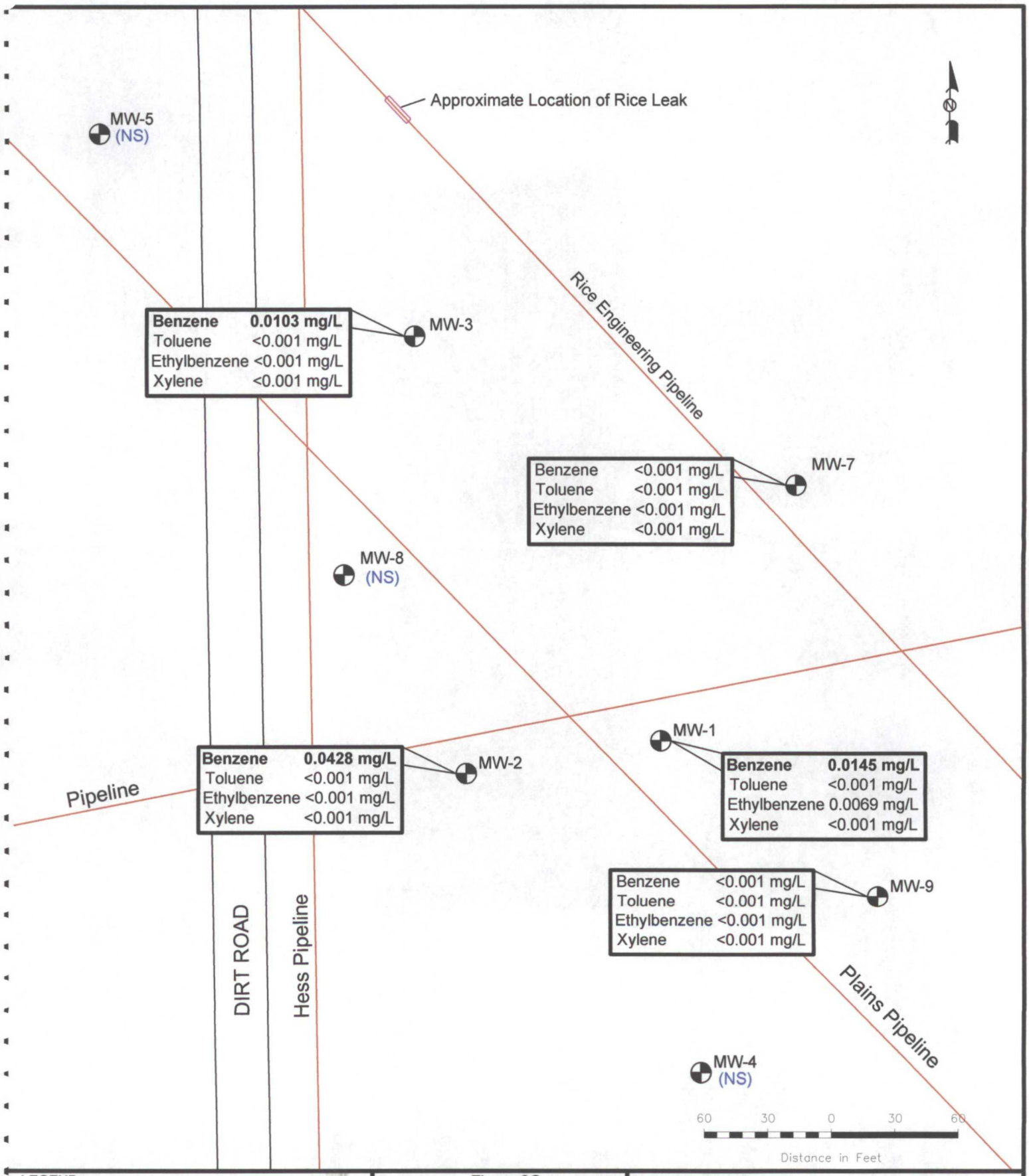
| June 8, 2011 | Scale: 1" = 60' | CAD By: TA | Checked By: RKR |
|---|---|---|---|
| Lat. N 32° 37' 57.7" Long. W 103° 16' 31.6" | SE1/4 NW1/4 Sec 29 T19S R37E | | |




LEGEND:

- Monitor Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (8/8/2011)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

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432.520.7720
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| September 14, 2011 | Scale: 1" = 60' | CAD By: TA | Checked By: RKR |
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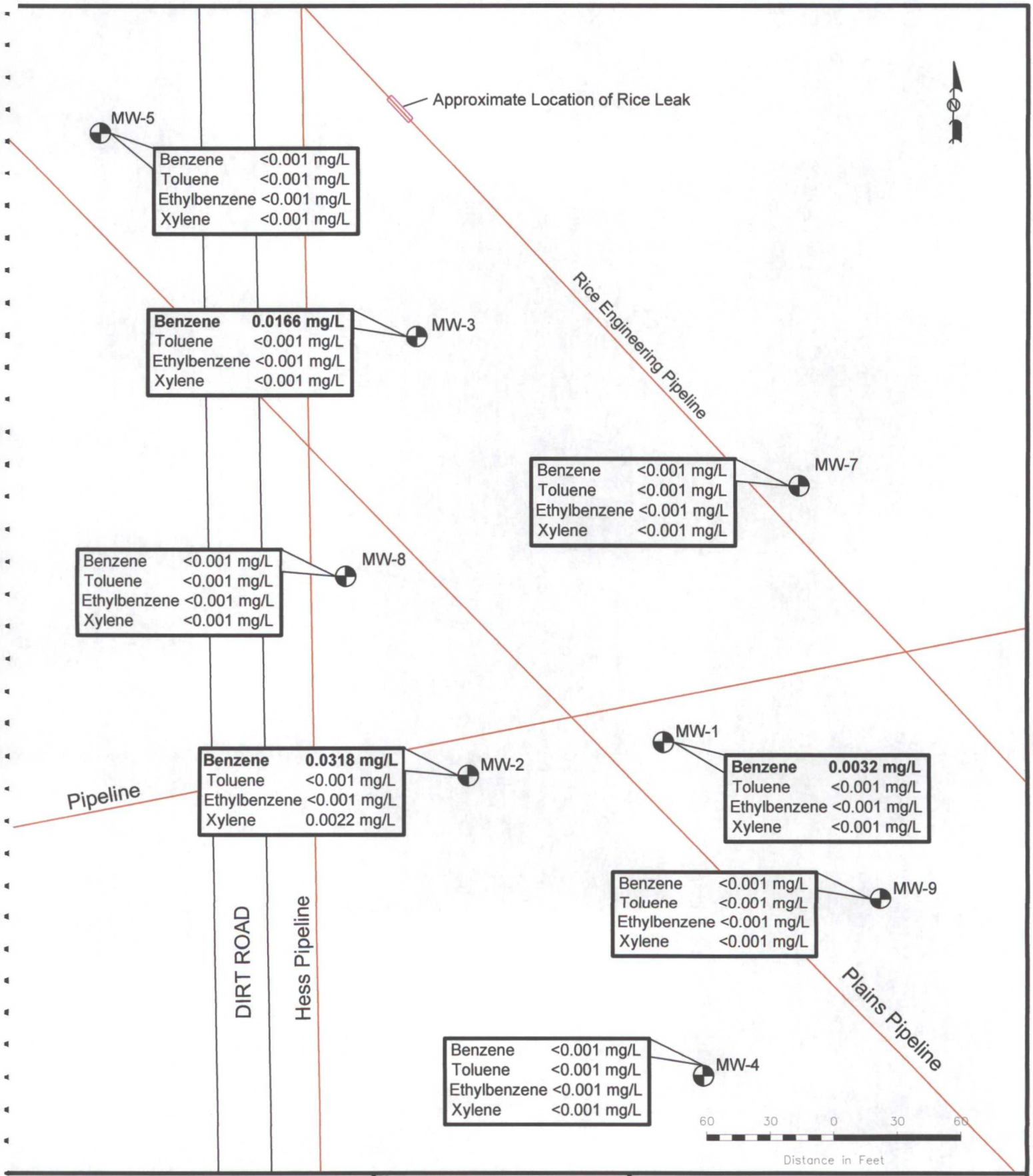
| Lat. N 32° 37' 57.7" Long. W 103° 16' 31.6" | | SE1/4 NW1/4 Sec 29 T19S R37E | |




LEGEND:

- Monitor Well Location
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- (NS) Not Sampled

Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/11/2011)
NMOCD Reference # IR 0123
Plains Marketing, L.P.
Monument 17
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
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432.520.7720
www.novasafetyandenvironmental.com

| November 17, 2011 | Scale: 1" = 60' | CAD By: TA | Checked By: RKR |
|---|---|---|---|
| Lat. N 32° 37' 57.7" Long. W 103° 16' 31.6" | SE1/4 NW1/4 Sec 29 T19S R37E | | |

# Tables

**TABLE 1**

**GROUNDWATER ELEVATION DATA - 2011**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 1 | *02/07/11* | 3,607.16 | - | 19.02 | 0.00 | 3,588.14 |
| MW - 1 | *05/16/11* | 3,607.16 | - | 19.05 | 0.00 | 3,588.11 |
| MW - 1 | 05/19/11 | 3,607.16 | - | 19.65 | 0.00 | 3,587.51 |
| MW - 1 | 05/27/11 | 3,607.16 | - | 19.71 | 0.00 | 3,587.45 |
| MW - 1 | 06/10/11 | 3,607.16 | - | 19.68 | 0.00 | 3,587.48 |
| MW - 1 | 06/24/11 | 3,607.16 | - | 19.65 | 0.00 | 3,587.51 |
| MW - 1 | 07/01/11 | 3,607.16 | - | 19.66 | 0.00 | 3,587.50 |
| MW - 1 | *08/08/11* | 3,607.16 | - | 19.07 | 0.00 | 3,588.09 |
| MW - 1 | *11/11/11* | 3,607.16 | - | 19.79 | 0.00 | 3,587.37 |
| | | | | | | |
| MW - 2 | *02/07/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |
| MW - 2 | *05/16/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |
| MW - 2 | 05/19/11 | 3,607.08 | - | 19.48 | 0.00 | 3,587.60 |
| MW - 2 | 05/27/11 | 3,607.08 | - | 19.53 | 0.00 | 3,587.55 |
| MW - 2 | 06/10/11 | 3,607.08 | - | 19.54 | 0.00 | 3,587.54 |
| MW - 2 | 06/24/11 | 3,607.08 | - | 19.55 | 0.00 | 3,587.53 |
| MW - 2 | 07/01/11 | 3,607.08 | - | 19.61 | 0.00 | 3,587.47 |
| MW - 2 | 07/12/11 | 3,607.08 | - | 19.64 | 0.00 | 3,587.44 |
| MW - 2 | 08/04/11 | 3,607.08 | - | 19.71 | 0.00 | 3,587.37 |
| MW - 2 | *08/08/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |
| MW - 2 | *11/11/11* | 3,607.08 | - | 19.65 | 0.00 | 3,587.43 |
| | | | | | | |
| MW - 3 | *02/07/11* | 3,608.43 | - | 19.56 | 0.00 | 3,588.87 |
| MW - 3 | *05/16/11* | 3,608.43 | - | 19.56 | 0.00 | 3,588.87 |
| MW - 3 | 05/19/11 | 3,608.43 | - | 20.56 | 0.00 | 3,587.87 |
| MW - 3 | 05/27/11 | 3,608.43 | - | 21.65 | 0.00 | 3,586.78 |
| MW - 3 | 06/10/11 | 3,608.43 | - | 20.60 | 0.00 | 3,587.83 |
| MW - 3 | 06/24/11 | 3,608.43 | - | 20.64 | 0.00 | 3,587.79 |
| MW - 3 | 07/01/11 | 3,608.43 | - | 20.70 | 0.00 | 3,587.73 |
| MW - 3 | 07/12/11 | 3,608.43 | - | 20.78 | 0.00 | 3,587.65 |
| MW - 3 | 08/04/11 | 3,608.43 | - | 20.72 | 0.00 | 3,587.71 |
| MW - 3 | *08/08/11* | 3,608.43 | - | 19.52 | 0.00 | 3,588.91 |
| MW - 3 | *11/11/11* | 3,608.43 | - | 20.77 | 0.00 | 3,587.66 |
| | | | | | | |
| MW - 4 | *02/07/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *05/16/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *08/08/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *11/11/11* | 3,606.12 | - | 18.86 | 0.00 | 3,587.26 |
| | | | | | | |
| MW - 5 | *02/07/11* | 3,610.17 | - | 21.04 | 0.00 | 3,589.13 |
| MW - 5 | *05/16/11* | 3,610.17 | - | 21.06 | 0.00 | 3,589.11 |
| MW - 5 | *08/08/11* | 3,610.17 | - | 21.08 | 0.00 | 3,589.09 |
| MW - 5 | *11/11/11* | 3,610.17 | - | 22.33 | 0.00 | 3,587.84 |
| | | | | | | |
| MW - 7 | *02/07/11* | 3,607.38 | - | 19.23 | 0.00 | 3,588.15 |
| MW - 7 | *05/16/11* | 3,607.38 | - | 19.24 | 0.00 | 3,588.14 |
| MW - 7 | *08/08/11* | 3,607.38 | - | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | *11/11/11* | 3,607.38 | - | 20.05 | 0.00 | 3,587.33 |
| | | | | | | |
| MW - 8 | *02/07/11* | 3,607.99 | - | 19.23 | 0.00 | 3,588.76 |
| MW - 8 | *05/16/11* | 3,607.99 | - | 19.22 | 0.00 | 3,588.77 |
| MW - 8 | *08/08/11* | 3,607.99 | - | 19.20 | 0.00 | 3,588.79 |
| MW - 8 | *11/11/11* | 3,607.99 | - | 20.38 | 0.00 | 3,587.61 |
| | | | | | | |
| MW - 9 | *02/07/11* | 3,606.83 | - | 18.93 | 0.00 | 3,587.90 |
| MW - 9 | *05/16/11* | 3,606.83 | - | 18.91 | 0.00 | 3,587.92 |
| MW - 9 | *08/08/11* | 3,606.83 | - | 18.88 | 0.00 | 3,587.95 |
| MW - 9 | *11/11/11* | 3,606.83 | - | 19.66 | 0.00 | 3,587.17 |
| | | | | | | |

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

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER - 2011**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| NMOCD Regulatory Limit | | 0.0100 | 0.75 | 0.75 | Total XYLENES 0.62 | |
| MW - 1 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0198 | |
| MW - 1 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 08/08/11 | **0.0145** | <0.001 | 0.0069 | <0.001 | |
| MW - 1 | 11/11/11 | 0.0032 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0191 | |
| MW - 2 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 08/08/11 | **0.0428** | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 11/11/11 | **0.0318** | <0.001 | <0.001 | 0.0022 | |
| MW - 3 | 02/07/11 | **0.0175** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 05/16/11 | **0.0100** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 08/08/11 | **0.0103** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 11/11/11 | **0.0166** | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 05/16/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0188 | |
| MW - 7 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 08/08/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 05/16/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 02/07/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 08/08/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 11/11/11 | <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.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-123**

*All water concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | EPA SW846-8270C, 3510 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Acenaphthene | Acenaphthylene | Anthracene | Benzo[a]anthracene | Benzo[a]pyrene | Benzo[b]fluoranthene | Benzo[g,h,i]perylene | Benzo[k]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.** | | - | - | 0.001 mg/L | 0.0001 mg/L | 0.0007 mg/L | 0.001 mg/L | - | 0.001 mg/L | 0.0002 mg/L | 0.0003 mg/L | 0.001 mg/L | 0.001 mg/L | 0.0004 mg/L | 0.001 mg/L | 0.001 mg/L | 0.03 mg/L | | | - |
| MW-1 | 11/13/08 | <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 | 0.000861 |
| | 11/05/09 | <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 | <0.000185 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-2 | 11/13/08 | <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 | <0.000185 |
| | 11/05/09 | <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 | <0.000185 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-3 | 11/13/08 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | 0.000252 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | 0.00159 |
| | 11/05/09 | <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 | 0.000645 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-4 | 11/13/08 | <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 | <0.000185 |
| | 11/05/09 | <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 | <0.000184 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-5 | 11/13/08 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | 0.000408 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | <0.000184 | 0.00117 |
| | 11/05/09 | <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 | 0.000404 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-7 | 11/13/08 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | <0.000926 | **0.00262** | <0.000926 | **0.00123** | <0.000926 | <0.000926 | <0.000926 | <0.000926 | 0.0065 |
| | 11/05/09 | <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 | 0.0022 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | <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 | <0.000183 |

**TABLE 3**

**POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-123**

*All water concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | EPA SW846-8270C, 3510 | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Acenaphthene | Acenaphthylene | Anthracene | Benzo[a]anthracene | Benzo[a]pyrene | Benzo[b]fluoranthene | Benzo[g,h,i]perylene | Benzo[k]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.** | | — | — | 0.001 mg/L | 0.0001 mg/L | 0.0007 mg/L | 0.001 mg/L | — | 0.001 mg/L | 0.0002 mg/L | 0.0003 mg/L | 0.001 mg/L | 0.001 mg/L | 0.0004 mg/L | 0.001 mg/L | 0.001 mg/L | 0.03 mg/L | | | — |
| MW-8 | 11/13/08 | <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 | <0.000184 |
| | 11/05/09 | <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 | <0.000184 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| MW-9 | 11/13/08 | <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 | 0.000223 |
| | 11/05/09 | <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 | <0.000185 |
| | 11/08/10 | Not Sampled as part of Quarterly Monitoring Event. | | | | | | | | | | | | | | | | | | |
| | 12/16/11 | 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 October 10, 2003

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

# Release Notification and Corrective Action

## OPERATOR

x Initial Report ☐ Final Report

| | | | |
|---|---|---|---|
| Name of Company | Plains Pipeline, LP | Contact: | Camille Reynolds |
| Address: | 3705 E. Hwy 158, Midland, TX 79706 | Telephone No. | 505-441-0965 |
| Facility Name | Monument # 17 | Facility Type: | Pipeline |

| Surface Owner: | Mineral Owner | Lease No. |
|---|---|---|
| New Mexico State Land Office | | |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| F | 29 | 19S | 37E | | | | | Lea |

**Latitude** 32 degrees 37' 57.7" N **Longitude** 103 degrees 16' 31.6" W

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release: | Volume of Release: | Volume Recovered |
| Source of Release: | Date and Hour of Occurrence Unknown | Date and Hour of Discovery |
| Was Immediate Notice Given? Yes ☐ No ☐ Not Required | If YES, To Whom? | |
| By Whom? | Date and Hour | |
| Was a Watercourse Reached? ☐ Yes ☒ No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*
**NOTE: Texas-New Mexico Pipeline was the owner/operator of the pipeline system at the time of the release, initial response information is unavailable.**

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: | OIL CONSERVATION DIVISION | |
| Printed Name: Camille Reynolds | Approved by District Supervisor: | |
| Title: Remediation Coordinator | Approval Date: | Expiration Date: |
| E-mail Address: cjreynolds@paalp.com | Conditions of Approval: | Attached ☐ |
| Date: 3/21/2005 Phone: (505)441-0965 | | |

* Attach Additional Sheets If Necessary

# Laboratory Analytical Reports

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: February 10, 2011

Work Order: 11020904

Project Location: New Mexico
Project Name: Monument #17
Project Number: TNM Monument #17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 256890 | MW-1 | water | 2011-02-07 | 15:00 | 2011-02-09 |
| 256891 | MW-2 | water | 2011-02-07 | 17:00 | 2011-02-09 |
| 256892 | MW-3 | water | 2011-02-07 | 16:00 | 2011-02-09 |
| 256893 | MW-7 | water | 2011-02-07 | 14:00 | 2011-02-09 |
| 256894 | MW-9 | water | 2011-02-07 | 13:00 | 2011-02-09 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

Samples for project Monument #17 were received by TraceAnalysis, Inc. on 2011-02-09 and assigned to work order 11020904. Samples for work order 11020904 were received intact without headspace and at a temperature of -0.4 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 66485 | 2011-02-09 at 10:50 | 77507 | 2011-02-09 at 10:50 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11020904 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 256890 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 77507 | Date Analyzed: | 2011-02-09 | Analyzed By: | ME |
| Prep Batch: | 66485 | Sample Preparation: | 2011-02-09 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.0198** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.107 | mg/L | 1 | 0.100 | 107 | 75.4 - 119.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0902 | mg/L | 1 | 0.100 | 90 | 78.6 - 122.8 |

**Sample: 256891 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 77507 | Date Analyzed: | 2011-02-09 | Analyzed By: | ME |
| Prep Batch: | 66485 | Sample Preparation: | 2011-02-09 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.0191** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.102 | mg/L | 1 | 0.100 | 102 | 75.4 - 119.4 |
| 4-Bromofluorobenzene (4-BFB) | [1] | 0.0728 | mg/L | 1 | 0.100 | 73 | 78.6 - 122.8 |

**Sample: 256892 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 77507 | Date Analyzed: | 2011-02-09 | Analyzed By: | ME |
| Prep Batch: | 66485 | Sample Preparation: | 2011-02-09 | Prepared By: | ME |

[1] Surrogate out due to peak interference.

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0175** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0976 | mg/L | 1 | 0.100 | 98 | 75.4 - 119.4 |
| 4-Bromofluorobenzene (4-BFB) | [2] | 0.0652 | mg/L | 1 | 0.100 | 65 | 78.6 - 122.8 |

**Sample: 256893 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 77507 | Date Analyzed: | 2011-02-09 | Analyzed By: | ME |
| Prep Batch: | 66485 | Sample Preparation: | 2011-02-09 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | **0.0188** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.100 | mg/L | 1 | 0.100 | 100 | 75.4 - 119.4 |
| 4-Bromofluorobenzene (4-BFB) | [3] | 0.0649 | mg/L | 1 | 0.100 | 65 | 78.6 - 122.8 |

**Sample: 256894 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 77507 | Date Analyzed: | 2011-02-09 | Analyzed By: | ME |
| Prep Batch: | 66485 | Sample Preparation: | 2011-02-09 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

[2]Surrogate out due to peak interference.
[3]Surrogate out due to peak interference.

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.103 | mg/L | 1 | 0.100 | 103 | 75.4 - 119.4 |
| 4-Bromofluorobenzene (4-BFB) | [4] | 0.0689 | mg/L | 1 | 0.100 | 69 | 78.6 - 122.8 |

**Method Blank (1)** QC Batch: 77507

QC Batch: 77507 | Date Analyzed: 2011-02-09 | Analyzed By: ME
Prep Batch: 66485 | QC Preparation: 2011-02-09 | Prepared By: ME

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000400 | mg/L | 0.001 |
| Toluene | | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | <0.000300 | mg/L | 0.001 |
| Xylene | | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0978 | mg/L | 1 | 0.100 | 98 | 70.8 - 117.4 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0921 | mg/L | 1 | 0.100 | 92 | 79 - 113.4 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 77507 | Date Analyzed: 2011-02-09 | Analyzed By: ME
Prep Batch: 66485 | QC Preparation: 2011-02-09 | Prepared By: ME

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.104 | mg/L | 1 | 0.100 | <0.000400 | 104 | 76.8 - 110.3 |
| Toluene | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 81 - 108.2 |
| Ethylbenzene | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 78.8 - 111 |
| Xylene | 0.309 | mg/L | 1 | 0.300 | <0.000333 | 103 | 80.3 - 111.4 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.103 | mg/L | 1 | 0.100 | <0.000400 | 103 | 76.8 - 110.3 | 1 | 20 |
| Toluene | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 81 - 108.2 | 0 | 20 |
| Ethylbenzene | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 78.8 - 111 | 1 | 20 |
| Xylene | 0.310 | mg/L | 1 | 0.300 | <0.000333 | 103 | 80.3 - 111.4 | 0 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[4]Surrogate out due to peak interference.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.108 | 0.101 | mg/L | 1 | 0.100 | 108 | 101 | 66.6 - 114.5 |
| 4-Bromofluorobenzene (4-BFB) | 0.104 | 0.0964 | mg/L | 1 | 0.100 | 104 | 96 | 77.1 - 114.4 |

**Standard (CCV-1)**

QC Batch: 77507 Date Analyzed: 2011-02-09 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.111 | 111 | 80 - 120 | 2011-02-09 |
| Toluene | | mg/L | 0.100 | 0.118 | 118 | 80 - 120 | 2011-02-09 |
| Ethylbenzene | | mg/L | 0.100 | 0.103 | 103 | 80 - 120 | 2011-02-09 |
| Xylene | | mg/L | 0.300 | 0.322 | 107 | 80 - 120 | 2011-02-09 |

**Standard (CCV-2)**

QC Batch: 77507 Date Analyzed: 2011-02-09 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0958 | 96 | 80 - 120 | 2011-02-09 |
| Toluene | | mg/L | 0.100 | 0.0942 | 94 | 80 - 120 | 2011-02-09 |
| Ethylbenzene | | mg/L | 0.100 | 0.0934 | 93 | 80 - 120 | 2011-02-09 |
| Xylene | | mg/L | 0.300 | 0.270 | 90 | 80 - 120 | 2011-02-09 |

LAB Order ID # 11020904

Page 1 of 1

# TraceAnalysis, Inc.

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**Company Name:** XTO

**Phone #:** 432-620-7720

**Address:** (Street, City, Zip) 5107 Commerce Midland TX 79703

**Fax #:** 432-520-7721

**Contact Person:** Ron R.

**E-mail:**

**Invoice to:** (If different from above)

**Project #:** TWU-Monument #17

**Project Name:** Monument #17

**Project Location (including state):** New Mexico

**Sampler Signature:**

## ANALYSIS REQUEST

(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25689 | MW-1 | 3 | VOA | X | | | | X | | | | X | | 2-7 | 15:00 |
| 891 | MW-2 | | | | | | | | | | | | | | 17:00 |
| 892 | MW-3 | | | | | | | | | | | | | | 16:00 |
| 893 | MW-7 | | | | | | | | | | | | | | 14:00 |
| 894 | MW-9 | | | | | | | | | | | | | | 13:00 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| ANALYSIS REQUEST | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25689 | | X | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| | XTO | 2-8-11 | 8:00 | | Trace | 2-9-11 | 8:10 | INST ___ OBS -0.4 °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ___ OBS ___ °C COR ___ °C |

**LAB USE ONLY**

Intact (Y) N

Headspace Y (N) NA

Log-In-Review

**REMARKS:**

* All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

## Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
**NCTRCA** WFWB38444Y0909

## NELAP Certifications

**Lubbock:** T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: May 19, 2011

Work Order: 11051701

Project Location: Monument, Lea Co., NM
Project Name: TNM Monument #17
Project Number: Monument #17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 266652 | MW-4 | water | 2011-05-16 | 11:30 | 2011-05-17 |
| 266653 | MW-9 | water | 2011-05-16 | 12:00 | 2011-05-17 |
| 266654 | MW-7 | water | 2011-05-16 | 12:30 | 2011-05-17 |
| 266655 | MW-1 | water | 2011-05-16 | 13:00 | 2011-05-17 |
| 266656 | MW-2 | water | 2011-05-16 | 13:30 | 2011-05-17 |
| 266657 | MW-3 | water | 2011-05-16 | 14:00 | 2011-05-17 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project TNM Monument #17 were received by TraceAnalysis, Inc. on 2011-05-17 and assigned to work order 11051701. Samples for work order 11051701 were received intact without headspace and at a temperature of 2.3 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 69070 | 2011-05-18 at 13:00 | 81380 | 2011-05-18 at 14:48 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11051701 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 266652 - MW-4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81380 | Date Analyzed: | 2011-05-18 | Analyzed By: | ME |
| Prep Batch: | 69070 | Sample Preparation: | 2011-05-18 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0857 | mg/L | 1 | 0.100 | 86 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 51.1 - 128 |

**Sample: 266653 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81380 | Date Analyzed: | 2011-05-18 | Analyzed By: | ME |
| Prep Batch: | 69070 | Sample Preparation: | 2011-05-18 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0874 | mg/L | 1 | 0.100 | 87 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 51.1 - 128 |

**Sample: 266654 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81380 | Date Analyzed: | 2011-05-18 | Analyzed By: | ME |
| Prep Batch: | 69070 | Sample Preparation: | 2011-05-18 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0879 | mg/L | 1 | 0.100 | 88 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.100 | mg/L | 1 | 0.100 | 100 | 51.1 - 128 |

**Sample: 266655 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81380 | Date Analyzed: | 2011-05-18 | Analyzed By: | ME |
| Prep Batch: | 69070 | Sample Preparation: | 2011-05-18 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0861 | mg/L | 1 | 0.100 | 86 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0985 | mg/L | 1 | 0.100 | 98 | 51.1 - 128 |

**Sample: 266656 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 81380 | Date Analyzed: | 2011-05-18 | Analyzed By: | ME |
| Prep Batch: | 69070 | Sample Preparation: | 2011-05-18 | Prepared By: | ME |

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0861 | mg/L | 1 | 0.100 | 86 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0987 | mg/L | 1 | 0.100 | 99 | 51.1 - 128 |

**Sample: 266657 - MW-3**

Laboratory: Midland
Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5030B
QC Batch: 81380 | Date Analyzed: 2011-05-18 | Analyzed By: ME
Prep Batch: 69070 | Sample Preparation: 2011-05-18 | Prepared By: ME

| Parameter | Flag | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|
| Benzene | | **0.0100** | mg/L | 1 | 0.00100 |
| Toluene | | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0852 | mg/L | 1 | 0.100 | 85 | 67.8 - 129 |
| 4-Bromofluorobenzene (4-BFB) | | 0.0986 | mg/L | 1 | 0.100 | 99 | 51.1 - 128 |

**Method Blank (1)** QC Batch: 81380

QC Batch: 81380 | Date Analyzed: 2011-05-18 | Analyzed By: ME
Prep Batch: 69070 | QC Preparation: 2011-05-18 | Prepared By: AG

| Parameter | Flag | MDL Result | Units | RL |
|---|---|---|---|---|
| Benzene | | <0.000400 | mg/L | 0.001 |
| Toluene | | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | <0.000300 | mg/L | 0.001 |
| Xylene | | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | 0.0909 | mg/L | 1 | 0.100 | 91 | 70.2 - 118 |
| 4-Bromofluorobenzene (4-BFB) | | 0.101 | mg/L | 1 | 0.100 | 101 | 47.3 - 116 |

**Laboratory Control Spike (LCS-1)**

QC Batch: 81380 | Date Analyzed: 2011-05-18 | Analyzed By: ME
Prep Batch: 69070 | QC Preparation: 2011-05-18 | Prepared By: AG

| Param | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 0.0974 | mg/L | 1 | 0.100 | <0.000400 | 97 | 76.8 - 110 |
| Toluene | 0.109 | mg/L | 1 | 0.100 | <0.000300 | 109 | 81 - 118 |
| Ethylbenzene | 0.0955 | mg/L | 1 | 0.100 | <0.000300 | 96 | 78.8 - 118 |
| Xylene | 0.284 | mg/L | 1 | 0.300 | <0.000333 | 95 | 80.3 - 119 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.103 | mg/L | 1 | 0.100 | <0.000400 | 103 | 76.8 - 110 | 6 | 20 |
| Toluene | 0.115 | mg/L | 1 | 0.100 | <0.000300 | 115 | 81 - 118 | 5 | 20 |
| Ethylbenzene | 0.100 | mg/L | 1 | 0.100 | <0.000300 | 100 | 78.8 - 118 | 5 | 20 |
| Xylene | 0.299 | mg/L | 1 | 0.300 | <0.000333 | 100 | 80.3 - 119 | 5 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0856 | 0.0878 | mg/L | 1 | 0.100 | 86 | 88 | 66.6 - 114 |
| 4-Bromofluorobenzene (4-BFB) | 0.101 | 0.100 | mg/L | 1 | 0.100 | 101 | 100 | 68.2 - 124 |

**Matrix Spike (MS-1)** Spiked Sample: 266403

QC Batch: 81380 | Date Analyzed: 2011-05-18 | Analyzed By: ME
Prep Batch: 69070 | QC Preparation: 2011-05-18 | Prepared By: AG

| Param | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|
| Benzene | 4.87 | mg/L | 20 | 2.00 | 3.1334 | 87 | 77.9 - 114 |
| Toluene | 2.16 | mg/L | 20 | 2.00 | <0.00600 | 108 | 78.3 - 111 |
| Ethylbenzene | 2.03 | mg/L | 20 | 2.00 | 0.2547 | 89 | 75.3 - 110 |
| Xylene | 5.59 | mg/L | 20 | 6.00 | <0.00666 | 93 | 75.7 - 109 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 4.88 | mg/L | 20 | 2.00 | 3.1334 | 87 | 77.9 - 114 | 0 | 20 |
| Toluene | 2.12 | mg/L | 20 | 2.00 | <0.00600 | 106 | 78.3 - 111 | 2 | 20 |
| Ethylbenzene | 1.99 | mg/L | 20 | 2.00 | 0.2547 | 87 | 75.3 - 110 | 2 | 20 |
| Xylene | 5.52 | mg/L | 20 | 6.00 | <0.00666 | 92 | 75.7 - 109 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 1.53 | 1.49 | mg/L | 20 | 2 | 76 | 74 | 68.3 - 107 |
| 4-Bromofluorobenzene (4-BFB) | 2.09 | 2.02 | mg/L | 20 | 2 | 104 | 101 | 60.1 - 135 |

**Standard (CCV-1)**

QC Batch: 81380 Date Analyzed: 2011-05-18 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0951 | 95 | 80 - 120 | 2011-05-18 |
| Toluene | | mg/L | 0.100 | 0.109 | 109 | 80 - 120 | 2011-05-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0917 | 92 | 80 - 120 | 2011-05-18 |
| Xylene | | mg/L | 0.300 | 0.274 | 91 | 80 - 120 | 2011-05-18 |

**Standard (CCV-2)**

QC Batch: 81380 Date Analyzed: 2011-05-18 Analyzed By: ME

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Benzene | | mg/L | 0.100 | 0.0985 | 98 | 80 - 120 | 2011-05-18 |
| Toluene | | mg/L | 0.100 | 0.111 | 111 | 80 - 120 | 2011-05-18 |
| Ethylbenzene | | mg/L | 0.100 | 0.0953 | 95 | 80 - 120 | 2011-05-18 |
| Xylene | | mg/L | 0.300 | 0.284 | 95 | 80 - 120 | 2011-05-18 |

LAB Order ID # 1105170l

Page 1 of 1

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

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BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

**Company Name:** MWA
**Phone #:** 432-520-7720
**Address:** (Street, City, Zip) 2057 Commerce Midland TX
**Fax #:** 432-520-7701
**Contact Person:** Ron R.
**E-mail:**
**Invoice to:** (If different from above)
**Project #:** TWM-Monument #17
**Project Name:** Monument #17
**Project Location (including state):** New Mexico
**Sampler Signature:**

**ANALYSIS REQUEST**
**(Circle or Specify Method No.)**

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 266652 | mw-4 | 3 | VOA | X | | | | X | | | | X | | 5-16 | 11:30 | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 653 | mw-9 | | | | | | | | | | | | | | 12:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 654 | mw-7 | | | | | | | | | | | | | | 12:30 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 655 | mw-1 | | | | | | | | | | | | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 656 | mw-2 | | | | | | | | | | | | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 657 | mw-3 | | | | | | | | | | | | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| | MWA | 5-17 | 8:25 | | TA | 5/17/11 | 8:25 | INST ____ OBS 2.3 °C COR 2.3 °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ____ OBS ____ °C COR ____ °C |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | INST ____ OBS ____ °C COR ____ °C |

**LAB USE ONLY**
Intact (Y) N
Headspace Y N NA
Log-in-Review

**REMARKS:**
all tests - Midland

- Dry Weight Basis Required
- TRRP Report Required
- Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: August 11, 2011

Work Order: 11080901

Project Location: New Mexico
Project Name: Monument #17
Project Number: TNM Monument #17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 274084 | MW-9 | water | 2011-08-08 | 14:00 | 2011-08-09 |
| 274085 | MW-7 | water | 2011-08-08 | 14:45 | 2011-08-09 |
| 274086 | MW-1 | water | 2011-08-08 | 15:30 | 2011-08-09 |
| 274087 | MW-2 | water | 2011-08-08 | 16:15 | 2011-08-09 |
| 274088 | MW-3 | water | 2011-08-08 | 17:00 | 2011-08-09 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Monument #17 were received by TraceAnalysis, Inc. on 2011-08-09 and assigned to work order 11080901. Samples for work order 11080901 were received intact without headspace and at a temperature of 3.1 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 71159 | 2011-08-10 at 09:08 | 83787 | 2011-08-10 at 09:08 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11080901 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 274084 - MW-9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 83787 | Date Analyzed: | 2011-08-10 | Analyzed By: | ME |
| Prep Batch: | 71159 | Sample Preparation: | 2011-08-10 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.112 | mg/L | 1 | 0.100 | 112 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.106 | mg/L | 1 | 0.100 | 106 | 67.5 - 140.8 |

**Sample: 274085 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 83787 | Date Analyzed: | 2011-08-10 | Analyzed By: | ME |
| Prep Batch: | 71159 | Sample Preparation: | 2011-08-10 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.116 | mg/L | 1 | 0.100 | 116 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.109 | mg/L | 1 | 0.100 | 109 | 67.5 - 140.8 |

**Sample: 274086 - MW-1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 83787 | Date Analyzed: | 2011-08-10 | Analyzed By: | ME |
| Prep Batch: | 71159 | Sample Preparation: | 2011-08-10 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0145** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | | 1 | **0.00690** | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.110 | mg/L | 1 | 0.100 | 110 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.102 | mg/L | 1 | 0.100 | 102 | 67.5 - 140.8 |

**Sample: 274087 - MW-2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 83787 | Date Analyzed: | 2011-08-10 | Analyzed By: | ME |
| Prep Batch: | 71159 | Sample Preparation: | 2011-08-10 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0428** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.101 | mg/L | 1 | 0.100 | 101 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0961 | mg/L | 1 | 0.100 | 96 | 67.5 - 140.8 |

**Sample: 274088 - MW-3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 83787 | Date Analyzed: | 2011-08-10 | Analyzed By: | ME |
| Prep Batch: | 71159 | Sample Preparation: | 2011-08-10 | Prepared By: | ME |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Benzene | | 1 | **0.0103** | mg/L | 1 | 0.00100 |
| Toluene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.113 | mg/L | 1 | 0.100 | 113 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.104 | mg/L | 1 | 0.100 | 104 | 67.5 - 140.8 |

# Method Blanks

**Method Blank (1)** QC Batch: 83787

QC Batch: 83787 | Date Analyzed: 2011-08-10 | Analyzed By: ME
Prep Batch: 71159 | QC Preparation: 2011-08-10 | Prepared By: ME

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.105 | mg/L | 1 | 0.100 | 105 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0966 | mg/L | 1 | 0.100 | 97 | 45.9 - 126.4 |

# Laboratory Control Spikes

**Laboratory Control Spike (LCS-1)**

QC Batch: 83787 | Date Analyzed: 2011-08-10 | Analyzed By: ME
Prep Batch: 71159 | QC Preparation: 2011-08-10 | Prepared By: ME

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0901 | mg/L | 1 | 0.100 | <0.000400 | 90 | 88 - 116.8 |
| Toluene | | 1 | 0.100 | mg/L | 1 | 0.100 | <0.000300 | 100 | 90.9 - 122.2 |
| Ethylbenzene | | 1 | 0.0983 | mg/L | 1 | 0.100 | <0.000300 | 98 | 72.7 - 120.2 |
| Xylene | | 1 | 0.294 | mg/L | 1 | 0.300 | <0.000333 | 98 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0939 | mg/L | 1 | 0.100 | <0.000400 | 94 | 88 - 116.8 | 4 | 20 |
| Toluene | | 1 | 0.104 | mg/L | 1 | 0.100 | <0.000300 | 104 | 90.9 - 122.2 | 4 | 20 |
| Ethylbenzene | | 1 | 0.103 | mg/L | 1 | 0.100 | <0.000300 | 103 | 72.7 - 120.2 | 5 | 20 |
| Xylene | | 1 | 0.309 | mg/L | 1 | 0.300 | <0.000333 | 103 | 72.1 - 121.5 | 5 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.106 | 0.112 | mg/L | 1 | 0.100 | 106 | 112 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.103 | 0.110 | mg/L | 1 | 0.100 | 103 | 110 | 56.4 - 127.9 |

**Matrix Spike (MS-1)** Spiked Sample: 274004

QC Batch: 83787 | Date Analyzed: 2011-08-10 | Analyzed By: ME
Prep Batch: 71159 | QC Preparation: 2011-08-10 | Prepared By: ME

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 13.8 | mg/L | 50 | 5.00 | 9.4222 | 88 | 66.9 - 128.2 |
| Toluene | | 1 | 4.84 | mg/L | 50 | 5.00 | <0.0150 | 97 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 6.05 | mg/L | 50 | 5.00 | 1.4675 | 92 | 62.7 - 117.9 |
| Xylene | | 1 | 14.3 | mg/L | 50 | 15.0 | 0.9728 | 89 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 13.8 | mg/L | 50 | 5.00 | 9.4222 | 88 | 66.9 - 128.2 | 0 | 20 |
| Toluene | | 1 | 4.96 | mg/L | 50 | 5.00 | <0.0150 | 99 | 81.6 - 122.9 | 2 | 20 |
| Ethylbenzene | | 1 | 6.17 | mg/L | 50 | 5.00 | 1.4675 | 94 | 62.7 - 117.9 | 2 | 20 |
| Xylene | | 1 | 14.8 | mg/L | 50 | 15.0 | 0.9728 | 92 | 62.9 - 118.2 | 3 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 5.24 | 5.23 | mg/L | 50 | 5 | 105 | 105 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 5.36 | 5.35 | mg/L | 50 | 5 | 107 | 107 | 52.2 - 135.8 |

# Calibration Standards

**Standard (CCV-2)**

QC Batch: 83787 | Date Analyzed: 2011-08-10 | Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0967 | 97 | 80 - 120 | 2011-08-10 |
| Toluene | | 1 | mg/L | 0.100 | 0.106 | 106 | 80 - 120 | 2011-08-10 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.105 | 105 | 80 - 120 | 2011-08-10 |
| Xylene | | 1 | mg/L | 0.300 | 0.313 | 104 | 80 - 120 | 2011-08-10 |

**Standard (CCV-3)**

QC Batch: 83787 | Date Analyzed: 2011-08-10 | Analyzed By: ME

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0964 | 96 | 80 - 120 | 2011-08-10 |
| Toluene | | 1 | mg/L | 0.100 | 0.106 | 106 | 80 - 120 | 2011-08-10 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.104 | 104 | 80 - 120 | 2011-08-10 |
| Xylene | | 1 | mg/L | 0.300 | 0.311 | 104 | 80 - 120 | 2011-08-10 |

# Appendix

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-10-TX | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 1108901

Page 1 of 1

# TraceAnalysis, Inc.

email: lab@traceanalysis.com


6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750


Company Name: Lova

Phone #: 432-520-7720

Address: (Street, City, Zip) 2057 Commerce Midland TX 79703

Fax #: 432-520-7701

Contact Person: Ron R.

E-mail:

Invoice to: (If different from above)

Project #: TVM-Monument #17

Project Name: Mon #17

Project Location (including state): New Mexico

Sampler Signature:

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 084 | mw-9 | 3 | VOA | X | | | | X | | | | X | | 8-8 | 14:00 |
| 085 | mw-7 | | | | | | | | | | | | | | 14:45 |
| 086 | mw-1 | | | | | | | | | | | | | | 15:30 |
| 087 | mw-2 | | | | | | | | | | | | | | 16:15 |
| 088 | mw-3 | | | | | | | | | | | | | | 17:00 |

| MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | | | Turn Around Time If different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: |
|---|---|---|---|---|---|---|---|
| | Lova | 8-9-11 | 7:00am | | | 8/9/11 | 0800 |
| | | 8/9/11 | 0854 | | T/A | 8/9/11 | 8:55 |
| | | | | | | | |

INST ____ °C
OBS 3.1 °C
COR ____ °C

LAB USE ONLY
Intact (Y) N
Headspace Y (N) NA
Log-in-Review

REMARKS: All tests Midland

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
5015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: November 15, 2011

Work Order: 11111404

Project Location: New Mexico
Project Name: Monument #17
Project Number: TNM Monument #17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 282278 | MW 5 | water | 2011-11-11 | 12:30 | 2011-11-14 |
| 282279 | MW 8 | water | 2011-11-11 | 12:30 | 2011-11-14 |
| 282280 | MW 4 | water | 2011-11-11 | 12:40 | 2011-11-14 |
| 282281 | MW 9 | water | 2011-11-11 | 12:35 | 2011-11-14 |
| 282282 | MW 7 | water | 2011-11-11 | 12:45 | 2011-11-14 |
| 282283 | MW 3 | water | 2011-11-11 | 12:50 | 2011-11-14 |
| 282284 | MW 1 | water | 2011-11-11 | 12:55 | 2011-11-14 |
| 282285 | MW 2 | water | 2011-11-11 | 13:00 | 2011-11-14 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Monument #17 were received by TraceAnalysis, Inc. on 2011-11-14 and assigned to work order 11111404. Samples for work order 11111404 were received intact without headspace and at a temperature of 6.0 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| BTEX | S 8021B | 73378 | 2011-11-14 at 13:50 | 86423 | 2011-11-14 at 14:26 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11111404 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 282278 - MW 5**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0939 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0830 | mg/L | 1 | 0.100 | 83 | 67.5 - 140.8 |

**Sample: 282279 - MW 8**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0933 | mg/L | 1 | 0.100 | 93 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0813 | mg/L | 1 | 0.100 | 81 | 67.5 - 140.8 |

**Sample: 282280 - MW 4**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0923 | mg/L | 1 | 0.100 | 92 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0802 | mg/L | 1 | 0.100 | 80 | 67.5 - 140.8 |

**Sample: 282281 - MW 9**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0934 | mg/L | 1 | 0.100 | 93 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0790 | mg/L | 1 | 0.100 | 79 | 67.5 - 140.8 |

**Sample: 282282 - MW 7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0909 | mg/L | 1 | 0.100 | 91 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0843 | mg/L | 1 | 0.100 | 84 | 67.5 - 140.8 |

**Sample: 282283 - MW 3**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.0166** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0933 | mg/L | 1 | 0.100 | 93 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0809 | mg/L | 1 | 0.100 | 81 | 67.5 - 140.8 |

**Sample: 282284 - MW 1**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.00320** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0934 | mg/L | 1 | 0.100 | 93 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0804 | mg/L | 1 | 0.100 | 80 | 67.5 - 140.8 |

**Sample: 282285 - MW 2**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Midland | | | | |
| Analysis: | BTEX | Analytical Method: | S 8021B | Prep Method: | S 5030B |
| QC Batch: | 86423 | Date Analyzed: | 2011-11-14 | Analyzed By: | AG |
| Prep Batch: | 73378 | Sample Preparation: | 2011-11-14 | Prepared By: | AG |

| Parameter | | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|---|
| Benzene | | | 1 | **0.0318** | mg/L | 1 | 0.00100 |
| Toluene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Ethylbenzene | U | U | 1 | <0.00100 | mg/L | 1 | 0.00100 |
| Xylene | | | 1 | **0.00220** | mg/L | 1 | 0.00100 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0939 | mg/L | 1 | 0.100 | 94 | 79.1 - 127.2 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0777 | mg/L | 1 | 0.100 | 78 | 67.5 - 140.8 |

# Method Blanks

**Method Blank (1)** QC Batch: 86423

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG
Prep Batch: 73378 | QC Preparation: 2011-11-14 | Prepared By: AG

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Benzene | | 1 | <0.000400 | mg/L | 0.001 |
| Toluene | | 1 | <0.000300 | mg/L | 0.001 |
| Ethylbenzene | | 1 | <0.000300 | mg/L | 0.001 |
| Xylene | | 1 | <0.000333 | mg/L | 0.001 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | | | 0.0930 | mg/L | 1 | 0.100 | 93 | 61.1 - 118.4 |
| 4-Bromofluorobenzene (4-BFB) | | | 0.0815 | mg/L | 1 | 0.100 | 82 | 45.9 - 126.4 |

# Laboratory Control Spikes

**Laboratory Control Spike (LCS-1)**

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG
Prep Batch: 73378 | QC Preparation: 2011-11-14 | Prepared By: AG

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0953 | mg/L | 1 | 0.100 | <0.000400 | 95 | 76.8 - 120.3 |
| Toluene | | 1 | 0.0912 | mg/L | 1 | 0.100 | <0.000300 | 91 | 80.9 - 122.2 |
| Ethylbenzene | | 1 | 0.0886 | mg/L | 1 | 0.100 | <0.000300 | 89 | 72.7 - 120.2 |
| Xylene | | 1 | 0.266 | mg/L | 1 | 0.300 | <0.000333 | 89 | 72.1 - 121.5 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.0994 | mg/L | 1 | 0.100 | <0.000400 | 99 | 76.8 - 120.3 | 4 | 20 |
| Toluene | | 1 | 0.0945 | mg/L | 1 | 0.100 | <0.000300 | 94 | 80.9 - 122.2 | 4 | 20 |
| Ethylbenzene | | 1 | 0.0923 | mg/L | 1 | 0.100 | <0.000300 | 92 | 72.7 - 120.2 | 4 | 20 |
| Xylene | | 1 | 0.277 | mg/L | 1 | 0.300 | <0.000333 | 92 | 72.1 - 121.5 | 4 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0921 | 0.0929 | mg/L | 1 | 0.100 | 92 | 93 | 61.9 - 119.2 |
| 4-Bromofluorobenzene (4-BFB) | 0.0935 | 0.0940 | mg/L | 1 | 0.100 | 94 | 94 | 56.4 - 127.9 |

**Matrix Spike (MS-1)** Spiked Sample: 282285

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG
Prep Batch: 73378 | QC Preparation: 2011-11-14 | Prepared By: AG

| Param | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.135 | mg/L | 1 | 0.100 | 0.0318 | 103 | 66.9 - 128.2 |
| Toluene | | 1 | 0.0986 | mg/L | 1 | 0.100 | <0.000300 | 99 | 81.6 - 122.9 |
| Ethylbenzene | | 1 | 0.0953 | mg/L | 1 | 0.100 | <0.000300 | 95 | 62.7 - 117.9 |
| Xylene | | 1 | 0.284 | mg/L | 1 | 0.300 | 0.0022 | 94 | 62.9 - 118.2 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | 0.131 | mg/L | 1 | 0.100 | 0.0318 | 99 | 66.9 - 128.2 | 3 | 20 |
| Toluene | | 1 | 0.0989 | mg/L | 1 | 0.100 | <0.000300 | 99 | 81.6 - 122.9 | 0 | 20 |
| Ethylbenzene | | 1 | 0.0963 | mg/L | 1 | 0.100 | <0.000300 | 96 | 62.7 - 117.9 | 1 | 20 |
| Xylene | | 1 | 0.287 | mg/L | 1 | 0.300 | 0.0022 | 95 | 62.9 - 118.2 | 1 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Trifluorotoluene (TFT) | 0.0973 | 0.0932 | mg/L | 1 | 0.1 | 97 | 93 | 58.6 - 119.7 |
| 4-Bromofluorobenzene (4-BFB) | 0.0907 | 0.0908 | mg/L | 1 | 0.1 | 91 | 91 | 52.2 - 135.8 |

# Calibration Standards

**Standard (CCV-1)**

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0942 | 94 | 80 - 120 | 2011-11-14 |
| Toluene | | 1 | mg/L | 0.100 | 0.0874 | 87 | 80 - 120 | 2011-11-14 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0832 | 83 | 80 - 120 | 2011-11-14 |
| Xylene | | 1 | mg/L | 0.300 | 0.250 | 83 | 80 - 120 | 2011-11-14 |

**Standard (CCV-2)**

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.0990 | 99 | 80 - 120 | 2011-11-14 |
| Toluene | | 1 | mg/L | 0.100 | 0.0937 | 94 | 80 - 120 | 2011-11-14 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0890 | 89 | 80 - 120 | 2011-11-14 |
| Xylene | | 1 | mg/L | 0.300 | 0.267 | 89 | 80 - 120 | 2011-11-14 |

**Standard (CCV-3)**

QC Batch: 86423 | Date Analyzed: 2011-11-14 | Analyzed By: AG

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Benzene | | 1 | mg/L | 0.100 | 0.101 | 101 | 80 - 120 | 2011-11-14 |
| Toluene | | 1 | mg/L | 0.100 | 0.0944 | 94 | 80 - 120 | 2011-11-14 |
| Ethylbenzene | | 1 | mg/L | 0.100 | 0.0899 | 90 | 80 - 120 | 2011-11-14 |
| Xylene | | 1 | mg/L | 0.300 | 0.269 | 90 | 80 - 120 | 2011-11-14 |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704392-10-TX | Midland |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11111404

Page 1 of 1

# TraceAnalysis, Inc.

email: lab@traceanalysis.com


6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
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5002 Basin Street, Suite A1
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BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750


**Company Name:** NOVA Safety & Environmental
**Phone #:** 432-520-7720
**Address:** (Street, City, Zip) 2057 Commerce, Midland, TX, 79703
**Fax #:**
**Contact Person:** ~~Brythe Lee~~ Ron
**E-mail:**
**Invoice to:** (If different from above)
**Project #:**
**Project Name:** TNM - Monument 17
**Project Location (including state):** Monument, NM
**Sampler Signature:**

**ANALYSIS REQUEST**
**(Circle or Specify Method No.)**

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME | MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, S04, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | | | | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 282278 | MW5 | 3 | Voa | X | | | | X | | | | X | | 11/11 | 1230 | | X | | | | | | | | | | | | | | | | | | | | | |
| 279 | MW8 | " | " | " | | | | " | | | | " | | " | 1230 | | " | | | | | | | | | | | | | | | | | | | | | |
| 280 | MW4 | " | " | " | | | | " | | | | " | | " | 1240 | | " | | | | | | | | | | | | | | | | | | | | | |
| 281 | MW9 | " | " | " | | | | " | | | | " | | " | 1235 | | " | | | | | | | | | | | | | | | | | | | | | |
| 282 | MW7 | " | " | " | | | | " | | | | " | | " | 1245 | | " | | | | | | | | | | | | | | | | | | | | | |
| 283 | MW3 | " | " | " | | | | " | | | | " | | " | 1250 | | " | | | | | | | | | | | | | | | | | | | | | |
| 284 | MW1 | " | " | " | | | | " | | | | " | | " | 1255 | | " | | | | | | | | | | | | | | | | | | | | | |
| 285 | MW2 | " | " | " | | | | " | | | | " | | " | 1300 | | " | | | | | | | | | | | | | | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: |
|---|---|---|---|---|---|---|---|
| ~~Brythe Lee~~ Brythe Lee | NOVA | 11/11 | 1530 | | T/A | 11/14/11 | 16:00 |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: |
| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: |

INST ____ OBS 6.0 °C COR ____ °C
INST ____ OBS ____ °C COR ____ °C
INST ____ OBS ____ °C COR ____ °C

**LAB USE ONLY**
Intact Y N
Headspace Y/N/NA 0
Log-In-Review KB

**REMARKS:** ALL tests Midland

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Lamar

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
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6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

# Certifications

**WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025**

# Analytical and Quality Control Report

Ron Rounsaville
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: January 5, 2012

Work Order: 11122008

Project Location: New Mexico
Project Name: Monument #17
Project Number: TNM Monument #17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|---|---|---|---|---|---|
| 284924 | MW-7 | water | 2011-12-16 | 17:15 | 2011-12-19 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

# Report Contents

# Case Narrative

Samples for project Monument #17 were received by TraceAnalysis, Inc. on 2011-12-19 and assigned to work order 11122008. Samples for work order 11122008 were received intact at a temperature of 10.8 C.

Samples were analyzed for the following tests using their respective methods.

| Test | Method | Prep Batch | Prep Date | QC Batch | Analysis Date |
|---|---|---|---|---|---|
| PAH | S 8270D | 74399 | 2012-12-22 at 15:00 | 87624 | 2012-01-05 at 11:26 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 11122008 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 284924 - MW-7**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Lubbock | | | | |
| Analysis: | PAH | Analytical Method: | S 8270D | Prep Method: | S 3510C |
| QC Batch: | 87624 | Date Analyzed: | 2012-01-05 | Analyzed By: | MN |
| Prep Batch: | 74399 | Sample Preparation: | 2012-12-22 | Prepared By: | MN |

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL |
|---|---|---|---|---|---|---|
| Naphthalene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 2-Methylnaphthalene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| 1-Methylnaphthalene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthylene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Acenaphthene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzofuran | | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluorene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Anthracene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Phenanthrene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Fluoranthene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Pyrene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)anthracene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Chrysene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(b)fluoranthene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(k)fluoranthene | QR,U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(a)pyrene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Indeno(1,2,3-cd)pyrene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Dibenzo(a,h)anthracene | U | 1 | <0.000183 | mg/L | 0.913 | 0.000200 |
| Benzo(g,h,i)perylene | U | | <0.000183 | mg/L | 0.913 | 0.000200 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0302 | mg/L | 0.913 | 0.0800 | 38 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0306 | mg/L | 0.913 | 0.0800 | 38 | 10 - 99 |
| Terphenyl-d14 | | | 0.0324 | mg/L | 0.913 | 0.0800 | 40 | 22.6 - 115 |

# Method Blanks

**Method Blank (1)** QC Batch: 87624

QC Batch: 87624 | Date Analyzed: 2012-01-05 | Analyzed By: MN
Prep Batch: 74399 | QC Preparation: 2012-12-22 | Prepared By: MN

| Parameter | Flag | Cert | MDL Result | Units | RL |
|---|---|---|---|---|---|
| Naphthalene | | 1 | <0.0000904 | mg/L | 0.0002 |
| 2-Methylnaphthalene | | 1 | <0.000184 | mg/L | 0.0002 |
| 1-Methylnaphthalene | | | <0.000120 | mg/L | 0.0002 |
| Acenaphthylene | | 1 | <0.000101 | mg/L | 0.0002 |
| Acenaphthene | | 1 | <0.000122 | mg/L | 0.0002 |
| Dibenzofuran | | 1 | <0.000119 | mg/L | 0.0002 |
| Fluorene | | 1 | <0.000198 | mg/L | 0.0002 |
| Anthracene | | 1 | <0.000190 | mg/L | 0.0002 |
| Phenanthrene | | | <0.000190 | mg/L | 0.0002 |
| Fluoranthene | | | <0.000122 | mg/L | 0.0002 |
| Pyrene | | 1 | <0.000142 | mg/L | 0.0002 |
| Benzo(a)anthracene | | | <0.000138 | mg/L | 0.0002 |
| Chrysene | | 1 | <0.000155 | mg/L | 0.0002 |
| Benzo(b)fluoranthene | | | <0.000179 | mg/L | 0.0002 |
| Benzo(k)fluoranthene | | 1 | <0.000185 | mg/L | 0.0002 |
| Benzo(a)pyrene | | 1 | <0.000169 | mg/L | 0.0002 |
| Indeno(1,2,3-cd)pyrene | | 1 | <0.000139 | mg/L | 0.0002 |
| Dibenzo(a,h)anthracene | | 1 | <0.000107 | mg/L | 0.0002 |
| Benzo(g,h,i)perylene | | | <0.000143 | mg/L | 0.0002 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 0.0369 | mg/L | 1 | 0.0800 | 46 | 10 - 117 |
| 2-Fluorobiphenyl | | | 0.0323 | mg/L | 1 | 0.0800 | 40 | 10 - 99 |
| Terphenyl-d14 | | | 0.0357 | mg/L | 1 | 0.0800 | 45 | 22.6 - 115 |

# Laboratory Control Spikes

**Laboratory Control Spike (LCS-1)**

QC Batch: 87624 | Date Analyzed: 2012-01-05 | Analyzed By: MN
Prep Batch: 74399 | QC Preparation: 2012-12-22 | Prepared By: MN

| Param | F | C | LCS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0281 | mg/L | 1 | 0.0800 | <0.0000904 | 35 | 10 - 89.9 |
| 2-Methylnaphthalene | | 1 | 0.0325 | mg/L | 1 | 0.0800 | <0.000184 | 41 | 13.8 - 98.4 |
| 1-Methylnaphthalene | | | 0.0312 | mg/L | 1 | 0.0800 | <0.000120 | 39 | 13.1 - 103 |
| Acenaphthylene | | 1 | 0.0370 | mg/L | 1 | 0.0800 | <0.000101 | 46 | 20 - 104 |
| Acenaphthene | | 1 | 0.0357 | mg/L | 1 | 0.0800 | <0.000122 | 45 | 21.6 - 94.6 |
| Dibenzofuran | | 1 | 0.0392 | mg/L | 1 | 0.0800 | <0.000119 | 49 | 22.9 - 74.9 |
| Fluorene | | 1 | 0.0396 | mg/L | 1 | 0.0800 | <0.000198 | 50 | 30.8 - 109 |
| Anthracene | | 1 | 0.0426 | mg/L | 1 | 0.0800 | <0.000190 | 53 | 37.6 - 96.4 |
| Phenanthrene | | | 0.0430 | mg/L | 1 | 0.0800 | <0.000190 | 54 | 42.4 - 99.8 |
| Fluoranthene | | | 0.0469 | mg/L | 1 | 0.0800 | <0.000122 | 59 | 48 - 118 |
| Pyrene | | 1 | 0.0457 | mg/L | 1 | 0.0800 | <0.000142 | 57 | 45.3 - 109 |
| Benzo(a)anthracene | | | 0.0548 | mg/L | 1 | 0.0800 | <0.000138 | 68 | 48 - 113 |
| Chrysene | | 1 | 0.0619 | mg/L | 1 | 0.0800 | <0.000155 | 77 | 35.2 - 175 |
| Benzo(b)fluoranthene | | | 0.0384 | mg/L | 1 | 0.0800 | <0.000179 | 48 | 16.6 - 106 |
| Benzo(k)fluoranthene | | 1 | 0.0367 | mg/L | 1 | 0.0800 | <0.000185 | 46 | 36.8 - 99.4 |
| Benzo(a)pyrene | | 1 | 0.0384 | mg/L | 1 | 0.0800 | <0.000169 | 48 | 32.3 - 99.7 |
| Indeno(1,2,3-cd)pyrene | | 1 | 0.0420 | mg/L | 1 | 0.0800 | <0.000139 | 52 | 34.1 - 106 |
| Dibenzo(a,h)anthracene | | 1 | 0.0559 | mg/L | 1 | 0.0800 | <0.000107 | 70 | 47.1 - 103 |
| Benzo(g,h,i)perylene | | | 0.0407 | mg/L | 1 | 0.0800 | <0.000143 | 51 | 21.9 - 112 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | 0.0317 | mg/L | 1 | 0.0800 | <0.0000904 | 40 | 10 - 89.9 | 12 | 20 |
| 2-Methylnaphthalene | | 1 | 0.0374 | mg/L | 1 | 0.0800 | <0.000184 | 47 | 13.8 - 98.4 | 14 | 20 |
| 1-Methylnaphthalene | | | 0.0358 | mg/L | 1 | 0.0800 | <0.000120 | 45 | 13.1 - 103 | 14 | 20 |
| Acenaphthylene | | 1 | 0.0410 | mg/L | 1 | 0.0800 | <0.000101 | 51 | 20 - 104 | 10 | 20 |
| Acenaphthene | | 1 | 0.0398 | mg/L | 1 | 0.0800 | <0.000122 | 50 | 21.6 - 94.6 | 11 | 20 |
| Dibenzofuran | | 1 | 0.0434 | mg/L | 1 | 0.0800 | <0.000119 | 54 | 22.9 - 74.9 | 10 | 20 |
| Fluorene | | 1 | 0.0426 | mg/L | 1 | 0.0800 | <0.000198 | 53 | 30.8 - 109 | 7 | 20 |
| Anthracene | | 1 | 0.0475 | mg/L | 1 | 0.0800 | <0.000190 | 59 | 37.6 - 96.4 | 11 | 20 |
| Phenanthrene | | | 0.0484 | mg/L | 1 | 0.0800 | <0.000190 | 60 | 42.4 - 99.8 | 12 | 20 |
| Fluoranthene | | | 0.0516 | mg/L | 1 | 0.0800 | <0.000122 | 64 | 48 - 118 | 10 | 20 |
| Pyrene | | 1 | 0.0488 | mg/L | 1 | 0.0800 | <0.000142 | 61 | 45.3 - 109 | 7 | 20 |

*continued ...*

*control spikes continued ...*

| Param | F | C | LCSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | | | 0.0608 | mg/L | 1 | 0.0800 | <0.000138 | 76 | 48 - 113 | 10 | 20 |
| Chrysene | | 1 | 0.0687 | mg/L | 1 | 0.0800 | <0.000155 | 86 | 35.2 - 175 | 10 | 20 |
| Benzo(b)fluoranthene | | | 0.0390 | mg/L | 1 | 0.0800 | <0.000179 | 49 | 16.6 - 106 | 2 | 20 |
| Benzo(k)fluoranthene | Qr | Qr | 1 0.0458 | mg/L | 1 | 0.0800 | <0.000185 | 57 | 36.8 - 99.4 | 22 | 20 |
| Benzo(a)pyrene | | | 1 0.0434 | mg/L | 1 | 0.0800 | <0.000169 | 54 | 32.3 - 99.7 | 12 | 20 |
| Indeno(1,2,3-cd)pyrene | | | 1 0.0470 | mg/L | 1 | 0.0800 | <0.000139 | 59 | 34.1 - 106 | 11 | 20 |
| Dibenzo(a,h)anthracene | | | 1 0.0627 | mg/L | 1 | 0.0800 | <0.000107 | 78 | 47.1 - 103 | 12 | 20 |
| Benzo(g,h,i)perylene | | | 0.0454 | mg/L | 1 | 0.0800 | <0.000143 | 57 | 21.9 - 112 | 11 | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0.0368 | 0.0403 | mg/L | 1 | 0.0800 | 46 | 50 | 10 - 117 |
| 2-Fluorobiphenyl | 0.0358 | 0.0402 | mg/L | 1 | 0.0800 | 45 | 50 | 10 - 99 |
| Terphenyl-d14 | 0.0525 | 0.0562 | mg/L | 1 | 0.0800 | 66 | 70 | 22.6 - 115 |

# Calibration Standards

**Standard (CCV-2)**

QC Batch: 87624 | Date Analyzed: 2012-01-05 | Analyzed By: MN

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | mg/L | 60.0 | 55.0 | 92 | 80 - 120 | 2012-01-05 |
| 2-Methylnaphthalene | | 1 | mg/L | 60.0 | 55.2 | 92 | 80 - 120 | 2012-01-05 |
| 1-Methylnaphthalene | | | mg/L | 60.0 | 56.0 | 93 | 80 - 120 | 2012-01-05 |
| Acenaphthylene | | 1 | mg/L | 60.0 | 55.0 | 92 | 80 - 120 | 2012-01-05 |
| Acenaphthene | | 1 | mg/L | 60.0 | 55.4 | 92 | 80 - 120 | 2012-01-05 |
| Dibenzofuran | | 1 | mg/L | 60.0 | 53.6 | 89 | 80 - 120 | 2012-01-05 |
| Fluorene | | 1 | mg/L | 60.0 | 51.1 | 85 | 80 - 120 | 2012-01-05 |
| Anthracene | | 1 | mg/L | 60.0 | 53.2 | 89 | 80 - 120 | 2012-01-05 |
| Phenanthrene | | | mg/L | 60.0 | 53.7 | 90 | 80 - 120 | 2012-01-05 |
| Fluoranthene | | | mg/L | 60.0 | 60.8 | 101 | 80 - 120 | 2012-01-05 |
| Pyrene | | 1 | mg/L | 60.0 | 51.8 | 86 | 80 - 120 | 2012-01-05 |
| Benzo(a)anthracene | | | mg/L | 60.0 | 58.8 | 98 | 80 - 120 | 2012-01-05 |
| Chrysene | | 1 | mg/L | 60.0 | 55.0 | 92 | 80 - 120 | 2012-01-05 |
| Benzo(b)fluoranthene | | | mg/L | 60.0 | 49.6 | 83 | 80 - 120 | 2012-01-05 |
| Benzo(k)fluoranthene | | 1 | mg/L | 60.0 | 51.8 | 86 | 80 - 120 | 2012-01-05 |
| Benzo(a)pyrene | | 1 | mg/L | 60.0 | 52.8 | 88 | 80 - 120 | 2012-01-05 |
| Indeno(1,2,3-cd)pyrene | | 1 | mg/L | 60.0 | 52.9 | 88 | 80 - 120 | 2012-01-05 |
| Dibenzo(a,h)anthracene | | 1 | mg/L | 60.0 | 53.1 | 88 | 80 - 120 | 2012-01-05 |
| Benzo(g,h,i)perylene | | | mg/L | 60.0 | 53.0 | 88 | 80 - 120 | 2012-01-05 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 55.7 | mg/L | 1 | 60.0 | 93 | - |
| 2-Fluorobiphenyl | | | 57.9 | mg/L | 1 | 60.0 | 96 | - |
| Terphenyl-d14 | | | 52.4 | mg/L | 1 | 60.0 | 87 | - |

**Standard (CCV-3)**

QC Batch: 87624 | Date Analyzed: 2012-01-05 | Analyzed By: MN

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| Naphthalene | | 1 | mg/L | 60.0 | 55.9 | 93 | 80 - 120 | 2012-01-05 |

*continued ...*

*standard continued ...*

| Param | Flag | Cert | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | | 1 | mg/L | 60.0 | 55.4 | 92 | 80 - 120 | 2012-01-05 |
| 1-Methylnaphthalene | | | mg/L | 60.0 | 55.7 | 93 | 80 - 120 | 2012-01-05 |
| Acenaphthylene | | 1 | mg/L | 60.0 | 55.5 | 92 | 80 - 120 | 2012-01-05 |
| Acenaphthene | | 1 | mg/L | 60.0 | 56.2 | 94 | 80 - 120 | 2012-01-05 |
| Dibenzofuran | | 1 | mg/L | 60.0 | 54.2 | 90 | 80 - 120 | 2012-01-05 |
| Fluorene | | 1 | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2012-01-05 |
| Anthracene | | 1 | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2012-01-05 |
| Phenanthrene | | | mg/L | 60.0 | 54.0 | 90 | 80 - 120 | 2012-01-05 |
| Fluoranthene | | | mg/L | 60.0 | 59.4 | 99 | 80 - 120 | 2012-01-05 |
| Pyrene | | 1 | mg/L | 60.0 | 55.2 | 92 | 80 - 120 | 2012-01-05 |
| Benzo(a)anthracene | | | mg/L | 60.0 | 58.8 | 98 | 80 - 120 | 2012-01-05 |
| Chrysene | | 1 | mg/L | 60.0 | 56.0 | 93 | 80 - 120 | 2012-01-05 |
| Benzo(b)fluoranthene | | | mg/L | 60.0 | 48.6 | 81 | 80 - 120 | 2012-01-05 |
| Benzo(k)fluoranthene | | 1 | mg/L | 60.0 | 52.6 | 88 | 80 - 120 | 2012-01-05 |
| Benzo(a)pyrene | | 1 | mg/L | 60.0 | 50.7 | 84 | 80 - 120 | 2012-01-05 |
| Indeno(1,2,3-cd)pyrene | | 1 | mg/L | 60.0 | 53.3 | 89 | 80 - 120 | 2012-01-05 |
| Dibenzo(a,h)anthracene | | 1 | mg/L | 60.0 | 53.8 | 90 | 80 - 120 | 2012-01-05 |
| Benzo(g,h,i)perylene | | | mg/L | 60.0 | 52.7 | 88 | 80 - 120 | 2012-01-05 |

| Surrogate | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | | | 55.8 | mg/L | 1 | 60.0 | 93 | - |
| 2-Fluorobiphenyl | | | 57.5 | mg/L | 1 | 60.0 | 96 | - |
| Terphenyl-d14 | | | 55.7 | mg/L | 1 | 60.0 | 93 | - |

# Appendix

## Report Definitions

| Name | Definition |
|---|---|
| MDL | Method Detection Limit |
| MQL | Minimum Quantitation Limit |
| SDL | Sample Detection Limit |

## Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|---|---|---|
| - | NCTRCA | WFWB384444Y0909 | TraceAnalysis |
| - | DBE | VN 20657 | TraceAnalysis |
| - | HUB | 1752439743100-86536 | TraceAnalysis |
| - | WBE | 237019 | TraceAnalysis |
| 1 | NELAP | T104704219-11-5 | Lubbock |

## Standard Flags

| F | Description |
|---|---|
| B | Analyte detected in the corresponding method blank above the method detection limit |
| H | Analyzed out of hold time |
| J | Estimated concentration |
| Jb | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je | Estimated concentration exceeding calibration range. |
| Qc | Calibration check outside of laboratory limits. |
| Qr | RPD outside of laboratory limits |
| Qs | Spike recovery outside of laboratory limits. |
| Qsr | Surrogate recovery outside of laboratory limits. |
| U | The analyte is not detected above the SDL |

## Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 11122008

Page 1 of 1

# TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
**Lubbock, Texas 79424**
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
**Midland, Texas 79703**
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
**El Paso, Texas 79922**
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
**Carrollton, Texas 75006**
Tel (972) 242-7750

**Company Name:** Nova — **Phone #:** (432) 520-7720

**Address:** (Street, City, Zip) 2057 Commerce Midland TX 79703 — **Fax #:**

**Contact Person:** Ron Rounsaville — **E-mail:**

**Invoice to:** (If different from above)

**Project #:** — **Project Name:** Monument 17

**Project Location (including state):** New Mexico — **Sampler Signature:** Ryan Hask

## ANALYSIS REQUEST (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX: WATER | SOIL | AIR | SLUDGE | PRESERVATIVE METHOD: HCl | $HNO_3$ | $H_2SO_4$ | NaOH | ICE | NONE | SAMPLING: DATE | TIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38424 | MW 7 | 1 | PAH | X | | | | | | | | X | | 12-14 | 1715 |

| MTBE 8021 / 602 / 8260 / 624 | BTEX 8021 / 602 / 8260 / 624 | TPH 418.1 / TX1005 / TX1005 Ext(C35) | TPH 8015 GRO / DRO / TVHC | PAH 8270 / 625 | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7 | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | TCLP Pesticides | RCI | GC/MS Vol. 8260 / 624 | GC/MS Semi. Vol. 8270 / 625 | PCB's 8082 / 608 | Pesticides 8081 / 608 | BOD, TSS, pH | Moisture Content | Cl, Fl, SO4, NO3, NO2, Alkalinity | Na, Ca, Mg, K, TDS, EC | Turn Around Time if different from standard | Hold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | X | | | | | | | | |

| Relinquished by: | Company: | Date: | Time: | Received by: | Company: | Date: | Time: | |
|---|---|---|---|---|---|---|---|---|
| Ryan Hasker | Nova | 12-14-11 | 8:32 AM | | TA | 12/19/11 | 8:33 | INST 10.8 °C |
| | | | | | | | | OBS °C |
| | | | | | | | | COR °C |
| | TA | 12/19/11 | 9:09 | | | | | INST °C |
| | | | | | | | | OBS °C |
| | | | | | | | | COR °C |
| | | | | Brenda Ward | Trac Lubbock | 12/20/11 | 9:20 | INST IR °C |
| | | | | | | | | OBS 3.1 °C |
| | | | | | | | | COR 3.2 °C |

**LAB USE ONLY**
Intact Y / N
Headspace Y / N / NA
Log-in-Review

**REMARKS:**
All tests Lubbock

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carrizo 25 ZN174141

ORIGINAL COPY

# Historical Data Tables

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 1 | 01/17/00 | 3,607.16 | - | 19.95 | 0.00 | 3,587.21 |
| MW - 1 | 04/10/00 | 3,607.16 | - | 20.08 | 0.00 | 3,587.08 |
| MW - 1 | 08/31/00 | 3,607.16 | - | 19.71 | 0.00 | 3,587.45 |
| MW - 1 | 12/18/00 | 3,607.16 | - | 19.89 | 0.00 | 3,587.27 |
| MW - 1 | 03/13/01 | 3,607.16 | - | 19.88 | 0.00 | 3,587.28 |
| MW - 1 | 05/30/01 | 3,607.16 | - | 19.88 | 0.00 | 3,587.28 |
| MW - 1 | 09/12/01 | 3,607.16 | - | 20.05 | 0.00 | 3,587.11 |
| MW - 1 | 11/17/01 | 3,607.16 | - | 20.03 | 0.00 | 3,587.13 |
| MW - 1 | 02/12/02 | 3,607.16 | - | 20.10 | 0.00 | 3,587.06 |
| MW - 1 | 05/15/02 | 3,607.16 | - | 20.02 | 0.00 | 3,587.14 |
| MW - 1 | 09/12/02 | 3,607.16 | - | 20.09 | 0.00 | 3,587.07 |
| MW - 1 | 11/18/02 | 3,607.16 | - | 19.91 | 0.00 | 3,587.25 |
| MW - 1 | 02/17/03 | 3,607.16 | - | 19.98 | 0.00 | 3,587.18 |
| MW - 1 | 05/19/03 | 3,607.16 | - | 20.17 | 0.00 | 3,586.99 |
| MW - 1 | 08/25/03 | 3,607.16 | - | 20.32 | 0.00 | 3,586.84 |
| MW - 1 | 11/21/03 | 3,607.16 | - | 20.35 | 0.00 | 3,586.81 |
| MW - 1 | 02/23/04 | 3,607.16 | - | 20.32 | 0.00 | 3,586.84 |
| MW - 1 | 05/13/04 | 3,607.16 | - | 19.33 | 0.00 | 3,587.83 |
| MW - 1 | 08/26/04 | 3,607.16 | - | 19.87 | 0.00 | 3,587.29 |
| MW - 1 | 12/13/04 | 3,607.16 | - | 17.85 | 0.00 | 3,589.31 |
| MW - 1 | *03/14/05* | 3,607.16 | - | 18.84 | 0.00 | 3,588.32 |
| MW - 1 | *06/24/05* | 3,607.16 | - | 19.21 | 0.00 | 3,587.95 |
| MW - 1 | *09/08/05* | 3,607.16 | - | 19.19 | 0.00 | 3,587.97 |
| MW - 1 | *12/01/05* | 3,607.16 | - | 19.38 | 0.00 | 3,587.78 |
| MW - 1 | *03/07/06* | 3,607.16 | - | 19.52 | 0.00 | 3,587.64 |
| MW - 1 | *06/06/06* | 3,607.16 | - | 19.64 | 0.00 | 3,587.52 |
| MW - 1 | 07/19/06 | 3,607.16 | - | 19.59 | 0.00 | 3,587.57 |
| MW - 1 | 07/27/06 | 3,607.16 | - | 19.63 | 0.00 | 3,587.53 |
| MW - 1 | 08/09/06 | 3,607.16 | - | 20.62 | 0.00 | 3,586.54 |
| MW - 1 | 08/18/06 | 3,607.16 | - | 19.14 | 0.00 | 3,588.02 |
| MW - 1 | *09/12/06* | 3,607.16 | - | 17.98 | 0.00 | 3,589.18 |
| MW - 1 | 10/31/06 | 3,607.16 | sheen | 18.35 | 0.00 | 3,588.81 |
| MW - 1 | 11/15/06 | 3,607.16 | sheen | 18.30 | 0.00 | 3,588.86 |
| MW - 1 | *12/13/06* | 3,607.16 | - | 18.52 | 0.00 | 3,588.64 |
| MW - 1 | *03/16/07* | 3,607.16 | - | 19.24 | 0.00 | 3,587.92 |
| MW - 1 | *05/16/07* | 3,607.16 | - | 19.31 | 0.00 | 3,587.85 |
| MW - 1 | *08/20/07* | 3,607.16 | - | 19.44 | 0.00 | 3,587.72 |
| MW - 1 | *11/27/07* | 3,607.16 | - | 19.51 | 0.00 | 3,587.65 |
| MW - 1 | *02/22/08* | 3,607.16 | - | 19.57 | 0.00 | 3,587.59 |
| MW - 1 | *05/30/08* | 3,607.16 | - | 19.71 | 0.00 | 3,587.45 |
| MW - 1 | *08/22/08* | 3,607.16 | - | 19.74 | 0.00 | 3,587.42 |
| MW - 1 | *11/13/08* | 3,607.16 | - | 19.53 | 0.00 | 3,587.63 |
| MW - 1 | *02/12/09* | 3,607.16 | - | 19.64 | 0.00 | 3,587.52 |
| MW - 1 | *05/14/09* | 3,607.16 | - | 19.13 | 0.00 | 3,588.03 |
| MW - 1 | *08/06/09* | 3,607.16 | - | 19.58 | 0.00 | 3,587.58 |
| MW - 1 | *11/05/09* | 3,607.16 | - | 19.66 | 0.00 | 3,587.50 |
| MW - 1 | 01/12/10 | 3,607.16 | - | 19.64 | 0.00 | 3,587.52 |
| MW - 1 | *02/05/10* | 3,607.16 | - | 19.71 | 0.00 | 3,587.45 |
| MW - 1 | *05/03/10* | 3,607.16 | - | 19.67 | 0.00 | 3,587.49 |
| MW - 1 | *08/09/10* | 3,607.16 | - | 18.99 | 0.00 | 3,588.17 |
| MW - 1 | *11/08/10* | 3,607.16 | - | 19.00 | 0.00 | 3,588.16 |
| MW - 1 | *02/07/11* | 3,607.16 | - | 19.02 | 0.00 | 3,588.14 |
| MW - 1 | *05/16/11* | 3,607.16 | - | 19.05 | 0.00 | 3,588.11 |
| MW - 1 | 05/19/11 | 3,607.16 | - | 19.65 | 0.00 | 3,587.51 |
| MW - 1 | 05/27/11 | 3,607.16 | - | 19.71 | 0.00 | 3,587.45 |
| MW - 1 | 06/10/11 | 3,607.16 | - | 19.68 | 0.00 | 3,587.48 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 1 | 06/24/11 | 3,607.16 | - | 19.65 | 0.00 | 3,587.51 |
| MW - 1 | 07/01/11 | 3,607.16 | - | 19.66 | 0.00 | 3,587.50 |
| MW - 1 | *08/08/11* | 3,607.16 | - | 19.07 | 0.00 | 3,588.09 |
| MW - 1 | *11/11/11* | 3,607.16 | - | 19.79 | 0.00 | 3,587.37 |
| | | | | | | |
| MW - 2 | 01/17/00 | 3,607.08 | - | 19.82 | 0.00 | 3,587.26 |
| MW - 2 | 04/10/00 | 3,607.08 | - | 19.94 | 0.00 | 3,587.14 |
| MW - 2 | 08/31/00 | 3,607.08 | - | 19.57 | 0.00 | 3,587.51 |
| MW - 2 | 12/18/00 | 3,607.08 | - | 19.77 | 0.00 | 3,587.31 |
| MW - 2 | 03/13/01 | 3,607.08 | - | 19.75 | 0.00 | 3,587.33 |
| MW - 2 | 05/30/01 | 3,607.08 | - | 19.75 | 0.00 | 3,587.33 |
| MW - 2 | 09/12/01 | 3,607.08 | - | 19.92 | 0.00 | 3,587.16 |
| MW - 2 | 11/17/01 | 3,607.08 | - | 19.88 | 0.00 | 3,587.20 |
| MW - 2 | 02/12/02 | 3,607.08 | - | 19.96 | 0.00 | 3,587.12 |
| MW - 2 | 05/15/02 | 3,607.08 | - | 19.88 | 0.00 | 3,587.20 |
| MW - 2 | 09/12/02 | 3,607.08 | - | 19.93 | 0.00 | 3,587.15 |
| MW - 2 | 11/18/02 | 3,607.08 | - | 19.77 | 0.00 | 3,587.31 |
| MW - 2 | 02/17/03 | 3,607.08 | - | 19.83 | 0.00 | 3,587.25 |
| MW - 2 | 05/19/03 | 3,607.08 | - | 20.03 | 0.00 | 3,587.05 |
| MW - 2 | 08/25/03 | 3,607.08 | - | 20.19 | 0.00 | 3,586.89 |
| MW - 2 | 11/21/03 | 3,607.08 | - | 20.20 | 0.00 | 3,586.88 |
| MW - 2 | 02/23/04 | 3,607.08 | - | 20.18 | 0.00 | 3,586.90 |
| MW - 2 | 05/13/04 | 3,607.08 | - | 19.15 | 0.00 | 3,587.93 |
| MW - 2 | 08/26/04 | 3,607.08 | - | 19.72 | 0.00 | 3,587.36 |
| MW - 2 | 12/13/04 | 3,607.08 | - | 17.44 | 0.00 | 3,589.64 |
| MW - 2 | *03/14/05* | 3,607.08 | - | 18.61 | 0.00 | 3,588.47 |
| MW - 2 | *06/24/05* | 3,607.08 | - | 19.02 | 0.00 | 3,588.06 |
| MW - 2 | *09/08/05* | 3,607.08 | - | 19.02 | 0.00 | 3,588.06 |
| MW - 2 | *12/01/05* | 3,607.08 | - | 19.20 | 0.00 | 3,587.88 |
| MW - 2 | *03/07/06* | 3,607.08 | - | 19.36 | 0.00 | 3,587.72 |
| MW - 2 | *06/06/06* | 3,607.08 | - | 19.49 | 0.00 | 3,587.59 |
| MW - 2 | *09/12/06* | 3,607.08 | - | 17.65 | 0.00 | 3,589.43 |
| MW - 2 | *12/13/06* | 3,607.08 | - | 18.50 | 0.00 | 3,588.58 |
| MW - 2 | *03/16/07* | 3,607.08 | - | 19.06 | 0.00 | 3,588.02 |
| MW - 2 | *05/16/07* | 3,607.08 | - | 19.17 | 0.00 | 3,587.91 |
| MW - 2 | *08/20/07* | 3,607.08 | - | 19.27 | 0.00 | 3,587.81 |
| MW - 2 | *11/27/07* | 3,607.08 | - | 19.34 | 0.00 | 3,587.74 |
| MW - 2 | *02/22/08* | 3,607.08 | - | 19.43 | 0.00 | 3,587.65 |
| MW - 2 | *05/30/08* | 3,607.08 | - | 19.55 | 0.00 | 3,587.53 |
| MW - 2 | *08/22/08* | 3,607.08 | - | 19.58 | 0.00 | 3,587.50 |
| MW - 2 | *11/13/08* | 3,607.08 | - | 19.38 | 0.00 | 3,587.70 |
| MW - 2 | *02/12/09* | 3,607.08 | - | 19.51 | 0.00 | 3,587.57 |
| MW - 2 | *05/14/09* | 3,607.08 | - | 19.95 | 0.00 | 3,587.13 |
| MW - 2 | *08/06/09* | 3,607.08 | - | 19.43 | 0.00 | 3,587.65 |
| MW - 2 | *11/05/09* | 3,607.08 | - | 19.50 | 0.00 | 3,587.58 |
| MW - 2 | 01/12/10 | 3,607.08 | - | 19.51 | 0.00 | 3,587.57 |
| MW - 2 | *02/05/10* | 3,607.08 | - | 19.56 | 0.00 | 3,587.52 |
| MW - 2 | *05/03/10* | 3,607.08 | - | 19.50 | 0.00 | 3,587.58 |
| MW - 2 | *08/09/10* | 3,607.08 | - | 18.72 | 0.00 | 3,588.36 |
| MW - 2 | *11/08/10* | 3,607.08 | - | 18.73 | 0.00 | 3,588.35 |
| MW - 2 | *02/07/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |
| MW - 2 | *05/16/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |
| MW - 2 | 05/19/11 | 3,607.08 | - | 19.48 | 0.00 | 3,587.60 |
| MW - 2 | 05/27/11 | 3,607.08 | - | 19.53 | 0.00 | 3,587.55 |
| MW - 2 | 06/10/11 | 3,607.08 | - | 19.54 | 0.00 | 3,587.54 |
| MW - 2 | 06/24/11 | 3,607.08 | - | 19.55 | 0.00 | 3,587.53 |
| MW - 2 | 07/01/11 | 3,607.08 | - | 19.61 | 0.00 | 3,587.47 |
| MW - 2 | 07/12/11 | 3,607.08 | - | 19.64 | 0.00 | 3,587.44 |
| MW - 2 | 08/04/11 | 3,607.08 | - | 19.71 | 0.00 | 3,587.37 |
| MW - 2 | *08/08/11* | 3,607.08 | - | 18.76 | 0.00 | 3,588.32 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 2 | *11/11/11* | 3,607.08 | - | 19.65 | 0.00 | 3,587.51 |

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 3 | 01/17/00 | 3,608.43 | - | 20.92 | 0.00 | 3,587.51 |
| MW - 3 | 04/10/00 | 3,608.43 | - | 21.06 | 0.00 | 3,587.37 |
| MW - 3 | 08/31/00 | 3,608.43 | - | 20.64 | 0.00 | 3,587.79 |
| MW - 3 | 12/18/00 | 3,608.43 | - | 20.86 | 0.00 | 3,587.57 |
| MW - 3 | 03/13/01 | 3,608.43 | - | 20.85 | 0.00 | 3,587.58 |
| MW - 3 | 05/30/01 | 3,608.43 | - | 20.93 | 0.00 | 3,587.50 |
| MW - 3 | 09/12/01 | 3,608.43 | - | 21.04 | 0.00 | 3,587.39 |
| MW - 3 | 11/17/01 | 3,608.43 | - | 21.02 | 0.00 | 3,587.41 |
| MW - 3 | 02/12/02 | 3,608.43 | - | 21.09 | 0.00 | 3,587.34 |
| MW - 3 | 05/15/02 | 3,608.43 | - | 21.04 | 0.00 | 3,587.39 |
| MW - 3 | 09/12/02 | 3,608.43 | - | 21.07 | 0.00 | 3,587.36 |
| MW - 3 | 11/18/02 | 3,608.43 | - | 20.89 | 0.00 | 3,587.54 |
| MW - 3 | 02/17/03 | 3,608.43 | - | 21.02 | 0.00 | 3,587.41 |
| MW - 3 | 05/19/03 | 3,608.43 | - | 21.17 | 0.00 | 3,587.26 |
| MW - 3 | 08/25/03 | 3,608.43 | - | 21.27 | 0.00 | 3,587.16 |
| MW - 3 | 11/21/03 | 3,608.43 | - | 21.33 | 0.00 | 3,587.10 |
| MW - 3 | 02/23/04 | 3,608.43 | - | 21.34 | 0.00 | 3,587.09 |
| MW - 3 | 05/13/04 | 3,608.43 | - | 20.20 | 0.00 | 3,588.23 |
| MW - 3 | 08/26/04 | 3,608.43 | - | 20.87 | 0.00 | 3,587.56 |
| MW - 3 | 12/13/04 | 3,608.43 | - | 18.08 | 0.00 | 3,590.35 |
| MW - 3 | *03/14/05* | 3,608.43 | - | 19.41 | 0.00 | 3,589.02 |
| MW - 3 | *06/24/05* | 3,608.43 | - | 19.99 | 0.00 | 3,588.44 |
| MW - 3 | *09/08/05* | 3,608.43 | - | 19.97 | 0.00 | 3,588.46 |
| MW - 3 | *12/01/05* | 3,608.43 | - | 20.22 | 0.00 | 3,588.21 |
| MW - 3 | *03/07/06* | 3,608.43 | - | 20.42 | 0.00 | 3,588.01 |
| MW - 3 | *06/06/06* | 3,608.43 | - | 20.55 | 0.00 | 3,587.88 |
| MW - 3 | 07/19/06 | 3,608.43 | - | 20.53 | 0.00 | 3,587.90 |
| MW - 3 | 07/27/06 | 3,608.43 | - | 20.56 | 0.00 | 3,587.87 |
| MW - 3 | 08/09/06 | 3,608.43 | - | 20.50 | 0.00 | 3,587.93 |
| MW - 3 | 08/18/06 | 3,608.43 | - | 19.98 | 0.00 | 3,588.45 |
| MW - 3 | *09/12/06* | 3,608.43 | - | 18.46 | 0.00 | 3,589.97 |
| MW - 3 | 10/31/06 | 3,608.43 | sheen | 18.83 | 0.00 | 3,589.60 |
| MW - 3 | 11/15/06 | 3,608.43 | sheen | 18.78 | 0.00 | 3,589.65 |
| MW - 3 | *12/13/06* | 3,608.43 | - | 19.37 | 0.00 | 3,589.06 |
| MW - 3 | *03/16/07* | 3,608.43 | - | 20.03 | 0.00 | 3,588.40 |
| MW - 3 | *05/16/07* | 3,608.43 | - | 20.16 | 0.00 | 3,588.27 |
| MW - 3 | *08/20/07* | 3,608.43 | - | 20.31 | 0.00 | 3,588.12 |
| MW - 3 | *11/27/07* | 3,608.43 | - | 20.36 | 0.00 | 3,588.07 |
| MW - 3 | *02/22/08* | 3,608.43 | - | 20.53 | 0.00 | 3,587.90 |
| MW - 3 | *05/30/08* | 3,608.43 | - | 20.63 | 0.00 | 3,587.80 |
| MW - 3 | *08/22/08* | 3,608.43 | - | 20.65 | 0.00 | 3,587.78 |
| MW - 3 | *11/13/08* | 3,608.43 | - | 20.43 | 0.00 | 3,588.00 |
| MW - 3 | *02/12/09* | 3,608.43 | - | 20.58 | 0.00 | 3,587.85 |
| MW - 3 | *05/14/09* | 3,608.43 | - | 20.65 | 0.00 | 3,587.78 |
| MW - 3 | *08/06/09* | 3,608.43 | - | 20.48 | 0.00 | 3,587.95 |
| MW - 3 | *11/05/09* | 3,608.43 | - | 20.58 | 0.00 | 3,587.85 |
| MW - 3 | 01/12/09 | 3,608.43 | - | 20.57 | 0.00 | 3,587.86 |
| MW - 3 | *02/05/10* | 3,608.43 | - | 20.64 | 0.00 | 3,587.79 |
| MW - 3 | *05/03/10* | 3,608.43 | - | 20.58 | 0.00 | 3,587.85 |
| MW - 3 | *08/09/10* | 3,608.43 | - | 19.58 | 0.00 | 3,588.85 |
| MW - 3 | *11/08/10* | 3,608.43 | - | 19.56 | 0.00 | 3,588.87 |
| MW - 3 | *02/07/11* | 3,608.43 | - | 19.56 | 0.00 | 3,588.87 |
| MW - 3 | *05/16/11* | 3,608.43 | - | 19.56 | 0.00 | 3,588.87 |
| MW - 3 | 05/19/11 | 3,608.43 | - | 20.56 | 0.00 | 3,587.87 |
| MW - 3 | 05/27/11 | 3,608.43 | - | 21.65 | 0.00 | 3,586.78 |
| MW - 3 | 06/10/11 | 3,608.43 | - | 20.60 | 0.00 | 3,587.83 |
| MW - 3 | 06/24/11 | 3,608.43 | - | 20.64 | 0.00 | 3,587.79 |
| MW - 3 | 07/01/11 | 3,608.43 | - | 20.70 | 0.00 | 3,587.73 |

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 3 | 07/12/11 | 3,608.43 | - | 20.78 | 0.00 | 3,587.65 |
| MW - 3 | 08/04/11 | 3,608.43 | - | 20.72 | 0.00 | 3,587.71 |
| MW - 3 | *08/08/11* | 3,608.43 | - | 19.52 | 0.00 | 3,588.91 |
| MW - 3 | *11/11/11* | 3,608.43 | - | 20.77 | 0.00 | 3,586.39 |
| | | | | | | |
| MW - 4 | 01/17/00 | 3,606.12 | - | 19.02 | 0.00 | 3,587.10 |
| MW - 4 | 04/10/00 | 3,606.12 | - | 19.12 | 0.00 | 3,587.00 |
| MW - 4 | 08/31/00 | 3,606.12 | - | 18.80 | 0.00 | 3,587.32 |
| MW - 4 | 12/18/00 | 3,606.12 | - | 18.97 | 0.00 | 3,587.15 |
| MW - 4 | 03/13/01 | 3,606.12 | - | 18.93 | 0.00 | 3,587.19 |
| MW - 4 | 05/30/01 | 3,606.12 | - | 18.94 | 0.00 | 3,587.18 |
| MW - 4 | 09/12/01 | 3,606.12 | - | 19.11 | 0.00 | 3,587.01 |
| MW - 4 | 11/17/01 | 3,606.12 | - | 19.10 | 0.00 | 3,587.02 |
| MW - 4 | 02/12/02 | 3,606.12 | - | 19.13 | 0.00 | 3,586.99 |
| MW - 4 | 05/15/02 | 3,606.12 | - | 19.08 | 0.00 | 3,587.04 |
| MW - 4 | 09/12/02 | 3,606.12 | - | 19.12 | 0.00 | 3,587.00 |
| MW - 4 | 11/18/02 | 3,606.12 | - | 18.98 | 0.00 | 3,587.14 |
| MW - 4 | 02/17/03 | 3,606.12 | - | 19.09 | 0.00 | 3,587.03 |
| MW - 4 | 05/19/03 | 3,606.12 | - | 19.21 | 0.00 | 3,586.91 |
| MW - 4 | 08/25/03 | 3,606.12 | - | 19.37 | 0.00 | 3,586.75 |
| MW - 4 | 11/21/03 | 3,606.12 | - | 19.37 | 0.00 | 3,586.75 |
| MW - 4 | 02/23/04 | 3,606.12 | - | 19.36 | 0.00 | 3,586.76 |
| MW - 4 | 05/13/04 | 3,606.12 | - | 18.48 | 0.00 | 3,587.64 |
| MW - 4 | 08/26/04 | 3,606.12 | - | 18.94 | 0.00 | 3,587.18 |
| MW - 4 | 12/13/04 | 3,606.12 | - | 16.95 | 0.00 | 3,589.17 |
| MW - 4 | *03/14/05* | 3,606.12 | - | 18.00 | 0.00 | 3,588.12 |
| MW - 4 | *06/24/05* | 3,606.12 | - | 18.34 | 0.00 | 3,587.78 |
| MW - 4 | *09/08/05* | 3,606.12 | - | 18.32 | 0.00 | 3,587.80 |
| MW - 4 | *12/01/05* | 3,606.12 | - | 18.47 | 0.00 | 3,587.65 |
| MW - 4 | *03/07/06* | 3,606.12 | - | 18.62 | 0.00 | 3,587.50 |
| MW - 4 | *06/06/06* | 3,606.12 | - | 18.72 | 0.00 | 3,587.40 |
| MW - 4 | *09/12/06* | 3,606.12 | - | 17.08 | 0.00 | 3,589.04 |
| MW - 4 | *12/13/06* | 3,606.12 | - | 17.69 | 0.00 | 3,588.43 |
| MW - 4 | *03/16/07* | 3,606.12 | - | 18.35 | 0.00 | 3,587.77 |
| MW - 4 | *05/16/07* | 3,606.12 | - | 18.42 | 0.00 | 3,587.70 |
| MW - 4 | *08/20/07* | 3,606.12 | - | 18.53 | 0.00 | 3,587.59 |
| MW - 4 | *11/27/07* | 3,606.12 | - | 18.58 | 0.00 | 3,587.54 |
| MW - 4 | *02/22/08* | 3,606.12 | - | 18.68 | 0.00 | 3,587.44 |
| MW - 4 | *05/30/08* | 3,606.12 | - | 18.77 | 0.00 | 3,587.35 |
| MW - 4 | *08/22/08* | 3,606.12 | - | 18.78 | 0.00 | 3,587.34 |
| MW - 4 | *11/13/08* | 3,606.12 | - | 18.61 | 0.00 | 3,587.51 |
| MW - 4 | *02/12/09* | 3,606.12 | - | 18.72 | 0.00 | 3,587.40 |
| MW - 4 | *05/14/09* | 3,606.12 | - | 23.83 | 0.00 | 3,582.29 |
| MW - 4 | *08/06/09* | 3,606.12 | - | 18.64 | 0.00 | 3,587.48 |
| MW - 4 | *11/05/09* | 3,606.12 | - | 18.74 | 0.00 | 3,587.38 |
| MW - 4 | 01/12/10 | 3,606.12 | - | 18.73 | 0.00 | 3,587.39 |
| MW - 4 | *02/05/10* | 3,606.12 | - | 18.79 | 0.00 | 3,587.33 |
| MW - 4 | *05/03/10* | 3,606.12 | - | 18.74 | 0.00 | 3,587.38 |
| MW - 4 | *08/09/10* | 3,606.12 | - | 18.10 | 0.00 | 3,588.02 |
| MW - 4 | *11/08/10* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *02/07/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *05/16/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *08/08/11* | 3,606.12 | - | 18.12 | 0.00 | 3,588.00 |
| MW - 4 | *11/11/11* | 3,606.12 | - | 18.86 | 0.00 | 3,588.30 |
| | | | | | | |
| MW - 5 | 01/17/00 | 3,610.17 | - | 22.55 | 0.00 | 3,587.62 |
| MW - 5 | 04/10/00 | 3,610.17 | - | 22.64 | 0.00 | 3,587.53 |
| MW - 5 | 08/31/00 | 3,610.17 | - | 22.22 | 0.00 | 3,587.95 |
| MW - 5 | 12/18/00 | 3,610.17 | - | 22.44 | 0.00 | 3,587.73 |
| MW - 5 | 03/13/01 | 3,610.17 | - | 22.43 | 0.00 | 3,587.74 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 5 | 05/30/01 | 3,610.17 | - | 22.50 | 0.00 | 3,587.67 |

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 5 | 09/12/01 | 3,610.17 | - | 22.64 | 0.00 | 3,587.53 |
| MW - 5 | 11/17/01 | 3,610.17 | - | 22.63 | 0.00 | 3,587.54 |
| MW - 5 | 02/12/02 | 3,610.17 | - | 22.67 | 0.00 | 3,587.50 |
| MW - 5 | 05/15/02 | 3,610.17 | - | 22.64 | 0.00 | 3,587.53 |
| MW - 5 | 09/12/02 | 3,610.17 | - | 22.67 | 0.00 | 3,587.50 |
| MW - 5 | 11/18/02 | 3,610.17 | - | 22.49 | 0.00 | 3,587.68 |
| MW - 5 | 02/17/03 | 3,610.17 | - | 22.65 | 0.00 | 3,587.52 |
| MW - 5 | 05/19/03 | 3,610.17 | - | 22.77 | 0.00 | 3,587.40 |
| MW - 5 | 08/25/03 | 3,610.17 | - | 22.94 | 0.00 | 3,587.23 |
| MW - 5 | 11/21/03 | 3,610.17 | - | 22.95 | 0.00 | 3,587.22 |
| MW - 5 | 02/23/04 | 3,610.17 | - | 22.94 | 0.00 | 3,587.23 |
| MW - 5 | 05/13/04 | 3,610.17 | - | 21.78 | 0.00 | 3,588.39 |
| MW - 5 | 08/26/04 | 3,610.17 | - | 22.44 | 0.00 | 3,587.73 |
| MW - 5 | 12/13/04 | 3,610.17 | - | 19.33 | 0.00 | 3,590.84 |
| MW - 5 | *03/14/05* | 3,610.17 | - | 20.85 | 0.00 | 3,589.32 |
| MW - 5 | *06/24/05* | 3,610.17 | - | 21.48 | 0.00 | 3,588.69 |
| MW - 5 | *09/08/05* | 3,610.17 | - | 21.47 | 0.00 | 3,588.70 |
| MW - 5 | *12/01/05* | 3,610.17 | - | 21.77 | 0.00 | 3,588.40 |
| MW - 5 | *03/07/06* | 3,610.17 | - | 21.99 | 0.00 | 3,588.18 |
| MW - 5 | *06/06/06* | 3,610.17 | - | 22.15 | 0.00 | 3,588.02 |
| MW - 5 | *09/12/06* | 3,610.17 | - | 19.85 | 0.00 | 3,590.32 |
| MW - 5 | *12/13/06* | 3,610.17 | - | 20.85 | 0.00 | 3,589.32 |
| MW - 5 | *03/16/07* | 3,610.17 | - | 21.59 | 0.00 | 3,588.58 |
| MW - 5 | *05/16/07* | 3,610.17 | - | 21.74 | 0.00 | 3,588.43 |
| MW - 5 | *08/20/07* | 3,610.17 | - | 21.88 | 0.00 | 3,588.29 |
| MW - 5 | *11/27/07* | 3,610.17 | - | 21.98 | 0.00 | 3,588.19 |
| MW - 5 | *02/22/08* | 3,610.17 | - | 21.11 | 0.00 | 3,589.06 |
| MW - 5 | *05/30/08* | 3,610.17 | - | 22.24 | 0.00 | 3,587.93 |
| MW - 5 | *08/22/08* | 3,610.17 | - | 22.29 | 0.00 | 3,587.88 |
| MW - 5 | *11/13/08* | 3,610.17 | - | 22.04 | 0.00 | 3,588.13 |
| MW - 5 | *02/12/09* | 3,610.17 | - | 22.25 | 0.00 | 3,587.92 |
| MW - 5 | *05/14/09* | 3,610.17 | - | 20.55 | 0.00 | 3,589.62 |
| MW - 5 | *08/06/09* | 3,610.17 | - | 22.09 | 0.00 | 3,588.08 |
| MW - 5 | *11/05/09* | 3,610.17 | - | 22.18 | 0.00 | 3,587.99 |
| MW - 5 | 01/12/10 | 3,610.17 | - | 22.19 | 0.00 | 3,587.98 |
| MW - 5 | *02/08/10* | 3,610.17 | - | 22.28 | 0.00 | 3,587.89 |
| MW - 5 | *05/03/10* | 3,610.17 | - | 22.19 | 0.00 | 3,587.98 |
| MW - 5 | *08/09/10* | 3,610.17 | - | 21.05 | 0.00 | 3,589.12 |
| MW - 5 | *11/08/10* | 3,610.17 | - | 21.05 | 0.00 | 3,589.12 |
| MW - 5 | *02/07/11* | 3,610.17 | - | 21.04 | 0.00 | 3,589.13 |
| MW - 5 | *05/16/11* | 3,610.17 | - | 21.06 | 0.00 | 3,589.11 |
| MW - 5 | *08/08/11* | 3,610.17 | - | 21.08 | 0.00 | 3,589.09 |
| MW - 5 | *11/11/11* | 3,610.17 | - | 22.33 | 0.00 | 3,584.83 |
| | | | | | | |
| MW - 6 | 01/17/00 | 3,604.44 | - | 17.63 | 0.00 | 3,586.81 |
| MW - 6 | 04/10/00 | 3,604.44 | - | 17.72 | 0.00 | 3,586.72 |
| MW - 6 | 08/31/00 | 3,604.44 | - | 17.44 | 0.00 | 3,587.00 |
| MW - 6 | 12/18/00 | 3,604.44 | - | 17.58 | 0.00 | 3,586.86 |
| MW - 6 | 03/13/01 | 3,604.44 | - | 17.55 | 0.00 | 3,586.89 |
| MW - 6 | 05/30/01 | 3,604.44 | - | 17.58 | 0.00 | 3,586.86 |
| MW - 6 | 09/12/01 | 3,604.44 | - | 17.70 | 0.00 | 3,586.74 |
| MW - 6 | 11/17/01 | 3,604.44 | - | 17.69 | 0.00 | 3,586.75 |
| MW - 6 | 02/12/02 | 3,604.44 | - | 17.67 | 0.00 | 3,586.77 |
| MW - 6 | 05/15/02 | 3,604.44 | - | 17.68 | 0.00 | 3,586.76 |
| MW - 6 | 09/12/02 | 3,604.44 | - | 17.72 | 0.00 | 3,586.72 |
| MW - 6 | 11/18/02 | 3,604.44 | - | 17.56 | 0.00 | 3,586.88 |
| MW - 6 | 02/17/03 | 3,604.44 | - | 17.66 | 0.00 | 3,586.78 |
| MW - 6 | 05/19/03 | 3,604.44 | - | 17.79 | 0.00 | 3,586.65 |
| MW - 6 | 08/25/03 | 3,604.44 | - | 17.91 | 0.00 | 3,586.53 |
| MW - 6 | 11/21/03 | 3,604.44 | - | 17.94 | 0.00 | 3,586.50 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 6 | 02/23/04 | 3,604.44 | - | 17.93 | 0.00 | 3,586.51 |
| MW - 6 | 05/13/04 | 3,604.44 | - | 17.18 | 0.00 | 3,587.26 |
| MW - 6 | 08/26/04 | 3,604.44 | - | 17.55 | 0.00 | 3,586.89 |
| MW - 6 | 12/13/04 | 3,604.44 | - | 15.87 | 0.00 | 3,588.57 |
| MW - 6 | *03/14/05* | 3,604.44 | - | 16.89 | 0.00 | 3,587.55 |
| MW - 6 | *06/24/05* | 3,604.44 | - | 17.10 | 0.00 | 3,587.34 |
| MW - 6 | *09/08/05* | 3,604.44 | - | 17.19 | 0.00 | 3,587.25 |
| MW - 6 | 09/13/05 | PLUGGED & ABANDONED | | | | |
| | | | | | | |
| MW - 7 | 01/17/00 | 3,607.38 | 20.25 | 20.30 | 0.05 | 3,587.12 |
| MW - 7 | 04/10/00 | 3,607.38 | 20.36 | 20.41 | 0.05 | 3,587.01 |
| MW - 7 | 08/31/00 | 3,607.38 | sheen | 19.99 | 0.00 | 3,587.39 |
| MW - 7 | 09/14/00 | 3,607.38 | sheen | 20.01 | 0.00 | 3,587.37 |
| MW - 7 | 09/20/00 | 3,607.38 | sheen | 20.03 | 0.00 | 3,587.35 |
| MW - 7 | 09/27/00 | 3,607.38 | sheen | 20.04 | 0.00 | 3,587.34 |
| MW - 7 | 10/04/00 | 3,607.38 | sheen | 20.07 | 0.00 | 3,587.31 |
| MW - 7 | 12/18/00 | 3,607.38 | sheen | 20.16 | 0.00 | 3,587.22 |
| MW - 7 | 03/13/01 | 3,607.38 | sheen | 20.20 | 0.00 | 3,587.18 |
| MW - 7 | 05/30/01 | 3,607.38 | sheen | 20.21 | 0.00 | 3,587.17 |
| MW - 7 | 09/12/01 | 3,607.38 | sheen | 20.03 | 0.00 | 3,587.35 |
| MW - 7 | 11/17/01 | 3,607.38 | sheen | 20.27 | 0.00 | 3,587.11 |
| MW - 7 | 02/12/02 | 3,607.38 | sheen | 20.30 | 0.00 | 3,587.08 |
| MW - 7 | 03/18/02 | 3,607.38 | sheen | 20.42 | 0.00 | 3,586.96 |
| MW - 7 | 03/28/02 | 3,607.38 | sheen | 20.33 | 0.00 | 3,587.05 |
| MW - 7 | 04/03/02 | 3,607.38 | sheen | 20.31 | 0.00 | 3,587.07 |
| MW - 7 | 04/12/02 | 3,607.38 | sheen | 20.31 | 0.00 | 3,587.07 |
| MW - 7 | 04/16/02 | 3,607.38 | sheen | 20.32 | 0.00 | 3,587.06 |
| MW - 7 | 05/03/02 | 3,607.38 | sheen | 20.32 | 0.00 | 3,587.06 |
| MW - 7 | 05/10/02 | 3,607.38 | sheen | 20.32 | 0.00 | 3,587.06 |
| MW - 7 | 05/15/02 | 3,607.38 | sheen | 20.35 | 0.00 | 3,587.03 |
| MW - 7 | 05/24/02 | 3,607.38 | sheen | 20.41 | 0.00 | 3,586.97 |
| MW - 7 | 06/10/02 | 3,607.38 | sheen | 20.48 | 0.00 | 3,586.90 |
| MW - 7 | 06/12/02 | 3,607.38 | sheen | 20.37 | 0.00 | 3,587.01 |
| MW - 7 | 06/19/02 | 3,607.38 | sheen | 20.28 | 0.00 | 3,587.10 |
| MW - 7 | 07/03/02 | 3,607.38 | sheen | 20.38 | 0.00 | 3,587.00 |
| MW - 7 | 07/11/02 | 3,607.38 | sheen | 20.37 | 0.00 | 3,587.01 |
| MW - 7 | 07/16/02 | 3,607.38 | sheen | 20.24 | 0.00 | 3,587.14 |
| MW - 7 | 08/21/02 | 3,607.38 | sheen | 20.27 | 0.00 | 3,587.11 |
| MW - 7 | 08/27/02 | 3,607.38 | sheen | 20.30 | 0.00 | 3,587.08 |
| MW - 7 | 09/05/02 | 3,607.38 | sheen | 20.34 | 0.00 | 3,587.04 |
| MW - 7 | 09/12/02 | 3,607.38 | sheen | 20.37 | 0.00 | 3,587.01 |
| MW - 7 | 10/08/02 | 3,607.38 | sheen | 20.43 | 0.00 | 3,586.95 |
| MW - 7 | 10/31/02 | 3,607.38 | sheen | 20.43 | 0.00 | 3,586.95 |
| MW - 7 | 11/06/02 | 3,607.38 | sheen | 20.12 | 0.00 | 3,587.26 |
| MW - 7 | 11/18/02 | 3,607.38 | sheen | 20.22 | 0.00 | 3,587.16 |
| MW - 7 | 01/07/03 | 3,607.38 | sheen | 20.29 | 0.00 | 3,587.09 |
| MW - 7 | 01/10/03 | 3,607.38 | sheen | 20.28 | 0.00 | 3,587.10 |
| MW - 7 | 02/17/03 | 3,607.38 | - | 20.35 | 0.00 | 3,587.03 |
| MW - 7 | 04/02/03 | 3,607.38 | sheen | 20.41 | 0.00 | 3,586.97 |
| MW - 7 | 04/16/03 | 3,607.38 | - | 20.46 | 0.00 | 3,586.92 |
| MW - 7 | 04/16/03 | 3,607.38 | sheen | 20.46 | 0.00 | 3,586.92 |
| MW - 7 | 05/19/03 | 3,607.38 | - | 20.45 | 0.00 | 3,586.93 |
| MW - 7 | 06/10/03 | 3,607.38 | sheen | 22.59 | 0.00 | 3,584.79 |
| MW - 7 | 06/25/03 | 3,607.38 | sheen | 20.66 | 0.00 | 3,586.72 |
| MW - 7 | 07/10/03 | 3,607.38 | sheen | 20.69 | 0.00 | 3,586.69 |
| MW - 7 | 08/05/03 | 3,607.38 | sheen | 20.76 | 0.00 | 3,586.62 |
| MW - 7 | 08/25/03 | 3,607.38 | 20.61 | 20.66 | 0.05 | 3,586.76 |
| MW - 7 | 09/08/03 | 3,607.38 | 20.91 | 20.98 | 0.07 | 3,586.46 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 7 | 09/30/03 | 3,607.38 | 20.65 | 20.77 | 0.12 | 3,586.71 |
| MW - 7 | 11/11/03 | 3,607.38 | 21.04 | 21.06 | 0.02 | 3,586.34 |
| MW - 7 | 11/21/03 | 3,607.38 | 20.74 | 20.76 | 0.02 | 3,586.64 |
| MW - 7 | 12/08/03 | 3,607.38 | sheen | 20.75 | 0.00 | 3,586.63 |
| MW - 7 | 12/31/03 | 3,607.38 | 20.60 | 20.61 | 0.01 | 3,586.78 |
| MW - 7 | 01/13/04 | 3,607.38 | 21.08 | 21.11 | 0.03 | 3,586.30 |
| MW - 7 | 02/18/04 | 3,607.38 | 20.77 | 20.96 | 0.19 | 3,586.58 |
| MW - 7 | 02/23/04 | 3,607.38 | 20.60 | 20.67 | 0.07 | 3,586.77 |
| MW - 7 | 03/11/04 | 3,607.38 | 20.85 | 20.89 | 0.04 | 3,586.52 |
| MW - 7 | 04/09/04 | 3,607.38 | 20.11 | 20.15 | 0.04 | 3,587.26 |
| MW - 7 | 05/03/04 | 3,607.38 | 19.79 | 19.92 | 0.13 | 3,587.57 |
| MW - 7 | 05/13/04 | 3,607.38 | sheen | 19.61 | 0.00 | 3,587.77 |
| MW - 7 | 07/01/04 | 3,607.38 | 19.94 | 19.95 | 0.01 | 3,587.44 |
| MW - 7 | 08/26/04 | 3,607.38 | 20.18 | 20.19 | 0.01 | 3,587.20 |
| MW - 7 | 09/21/04 | 3,607.38 | sheen | 20.25 | 0.00 | 3,587.13 |
| MW - 7 | 09/29/04 | 3,607.38 | sheen | 19.03 | 0.00 | 3,588.35 |
| MW - 7 | 10/05/04 | 3,607.38 | sheen | 18.33 | 0.00 | 3,589.05 |
| MW - 7 | 10/19/04 | 3,607.38 | sheen | 18.66 | 0.00 | 3,588.72 |
| MW - 7 | 10/12/04 | 3,607.38 | sheen | 18.50 | 0.00 | 3,588.88 |
| MW - 7 | 10/25/04 | 3,607.38 | sheen | 18.70 | 0.00 | 3,588.68 |
| MW - 7 | 11/01/04 | 3,607.38 | sheen | 18.80 | 0.00 | 3,588.58 |
| MW - 7 | 11/09/04 | 3,607.38 | sheen | 18.81 | 0.00 | 3,588.57 |
| MW - 7 | 11/16/04 | 3,607.38 | sheen | 18.34 | 0.00 | 3,589.04 |
| MW - 7 | 11/22/04 | 3,607.38 | sheen | 17.78 | 0.00 | 3,589.60 |
| MW - 7 | 11/29/04 | 3,607.38 | sheen | 17.62 | 0.00 | 3,589.76 |
| MW - 7 | 12/07/04 | 3,607.38 | sheen | 17.50 | 0.00 | 3,589.88 |
| MW - 7 | 12/13/04 | 3,607.38 | - | 17.92 | 0.00 | 3,589.46 |
| MW - 7 | 12/20/04 | 3,607.38 | sheen | 17.96 | 0.00 | 3,589.42 |
| MW - 7 | 12/27/04 | 3,607.38 | sheen | 18.10 | 0.00 | 3,589.28 |
| MW - 7 | 01/10/05 | 3,607.38 | sheen | 18.26 | 0.00 | 3,589.12 |
| MW - 7 | 01/17/05 | 3,607.38 | sheen | 18.39 | 0.00 | 3,588.99 |
| MW - 7 | 01/24/05 | 3,607.38 | sheen | 18.48 | 0.00 | 3,588.90 |
| MW - 7 | 01/31/05 | 3,607.38 | sheen | 18.59 | 0.00 | 3,588.79 |
| MW - 7 | 02/07/05 | 3,607.38 | sheen | 18.69 | 0.00 | 3,588.69 |
| MW - 7 | 02/14/05 | 3,607.38 | sheen | 18.81 | 0.00 | 3,588.57 |
| MW - 7 | 02/21/05 | 3,607.38 | sheen | 18.87 | 0.00 | 3,588.51 |
| MW - 7 | 02/28/05 | 3,607.38 | sheen | 18.93 | 0.00 | 3,588.45 |
| MW - 7 | 03/08/05 | 3,607.38 | sheen | 18.86 | 0.00 | 3,588.52 |
| MW - 7 | *03/14/05* | 3,607.38 | sheen | 19.05 | 0.00 | 3,588.33 |
| MW - 7 | 03/16/05 | 3,607.38 | sheen | 18.80 | 0.00 | 3,588.58 |
| MW - 7 | 03/21/05 | 3,607.38 | sheen | 19.11 | 0.00 | 3,588.27 |
| MW - 7 | 03/28/05 | 3,607.38 | sheen | 19.15 | 0.00 | 3,588.23 |
| MW - 7 | 04/04/05 | 3,607.38 | sheen | 19.20 | 0.00 | 3,588.18 |
| MW - 7 | 04/13/05 | 3,607.38 | sheen | 19.23 | 0.00 | 3,588.15 |
| MW - 7 | 04/18/05 | 3,607.38 | sheen | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | 05/23/05 | 3,607.38 | sheen | 19.36 | 0.00 | 3,588.02 |
| MW - 7 | 06/21/05 | 3,607.38 | sheen | 19.45 | 0.00 | 3,587.93 |
| MW - 7 | *06/24/05* | 3,607.38 | - | 19.45 | 0.00 | 3,587.93 |
| MW - 7 | 07/26/05 | 3,607.38 | sheen | 19.51 | 0.00 | 3,587.87 |
| MW - 7 | 08/24/05 | 3,607.38 | sheen | 19.28 | 0.00 | 3,588.10 |
| MW - 7 | *09/08/05* | 3,607.38 | 19.38 | 19.39 | 0.01 | 3,588.00 |
| MW - 7 | 09/26/05 | 3,607.38 | sheen | 19.46 | 0.00 | 3,587.92 |
| MW - 7 | 10/25/05 | 3,607.38 | sheen | 19.54 | 0.00 | 3,587.84 |
| MW - 7 | 11/14/05 | 3,607.38 | sheen | 19.58 | 0.00 | 3,587.80 |
| MW - 7 | *12/01/05* | 3,607.38 | - | 19.60 | 0.00 | 3,587.78 |
| MW - 7 | 12/28/05 | 3,607.38 | sheen | 19.68 | 0.00 | 3,587.70 |
| MW - 7 | 01/18/06 | 3,607.38 | sheen | 19.72 | 0.00 | 3,587.66 |
| MW - 7 | 02/15/06 | 3,607.38 | sheen | 19.75 | 0.00 | 3,587.63 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 7 | *03/07/06* | 3,607.38 | sheen | 19.76 | 0.00 | 3,587.62 |
| MW - 7 | 03/20/06 | 3,607.38 | sheen | 19.80 | 0.00 | 3,587.58 |
| MW - 7 | 04/19/06 | 3,607.38 | sheen | 19.83 | 0.00 | 3,587.55 |
| MW - 7 | 05/25/06 | 3,607.38 | sheen | 19.86 | 0.00 | 3,587.52 |
| MW - 7 | *06/06/06* | 3,607.38 | sheen | 19.98 | 0.00 | 3,587.40 |
| MW - 7 | *09/12/06* | 3,607.38 | - | 18.19 | 0.00 | 3,589.19 |
| MW - 7 | 10/31/06 | 3,607.38 | sheen | 18.38 | 0.00 | 3,589.00 |
| MW - 7 | 11/15/06 | 3,607.38 | sheen | 18.33 | 0.00 | 3,589.05 |
| MW - 7 | *12/13/06* | 3,607.38 | sheen | 18.78 | 0.00 | 3,588.60 |
| MW - 7 | 02/07/07 | 3,607.38 | sheen | 19.29 | 0.00 | 3,588.09 |
| MW - 7 | 03/16/07 | 3,607.38 | sheen | 19.43 | 0.00 | 3,587.95 |
| MW - 7 | *05/16/07* | 3,607.38 | - | 19.55 | 0.00 | 3,587.83 |
| MW - 7 | 05/18/07 | 3,607.38 | - | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | *08/20/07* | 3,607.38 | sheen | 19.65 | 0.00 | 3,587.73 |
| MW - 7 | 10/05/07 | 3,607.38 | sheen | 19.60 | 0.00 | 3,587.78 |
| MW - 7 | 10/18/07 | 3,607.38 | sheen | 19.66 | 0.00 | 3,587.72 |
| MW - 7 | 11/09/07 | 3,607.38 | sheen | 19.68 | 0.00 | 3,587.70 |
| MW - 7 | *11/27/07* | 3,607.38 | sheen | 19.73 | 0.00 | 3,587.65 |
| MW - 7 | 01/11/08 | 3,607.38 | - | 19.76 | 0.00 | 3,587.62 |
| MW - 7 | *02/22/08* | 3,607.38 | - | 19.80 | 0.00 | 3,587.58 |
| MW - 7 | 04/25/08 | 3,607.38 | - | 19.89 | 0.00 | 3,587.49 |
| MW - 7 | 05/30/08 | 3,607.38 | | 19.92 | 0.00 | 3,587.46 |
| MW - 7 | 07/03/08 | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | 08/01/08 | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | 08/19/08 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | *08/22/08* | 3,607.38 | - | 19.95 | 0.00 | 3,587.43 |
| MW - 7 | 09/25/08 | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | 10/01/08 | 3,607.38 | - | 20.00 | 0.00 | 3,587.38 |
| MW - 7 | 10/23/08 | 3,607.38 | - | 19.44 | 0.00 | 3,587.94 |
| MW - 7 | 10/28/08 | 3,607.38 | - | 19.79 | 0.00 | 3,587.59 |
| MW - 7 | 11/06/08 | 3,607.38 | - | 19.80 | 0.00 | 3,587.58 |
| MW - 7 | *11/13/08* | 3,607.38 | - | 19.75 | 0.00 | 3,587.63 |
| MW - 7 | 11/13/08 | 3,607.38 | - | 19.78 | 0.00 | 3,587.60 |
| MW - 7 | 12/16/08 | 3,607.38 | - | 19.82 | 0.00 | 3,587.56 |
| MW - 7 | 01/07/09 | 3,607.38 | - | 19.86 | 0.00 | 3,587.52 |
| MW - 7 | 01/16/09 | 3,607.38 | - | 19.88 | 0.00 | 3,587.50 |
| MW - 7 | 02/09/09 | 3,607.38 | - | 19.90 | 0.00 | 3,587.48 |
| MW - 7 | *02/12/09* | 3,607.38 | | 19.89 | 0.00 | 3,587.49 |
| MW - 7 | 02/26/09 | 3,607.38 | - | 19.90 | 0.00 | 3,587.48 |
| MW - 7 | 03/02/09 | 3,607.38 | - | 19.91 | 0.00 | 3,587.47 |
| MW - 7 | 03/04/09 | 3,607.38 | - | 19.91 | 0.00 | 3,587.47 |
| MW - 7 | 03/09/09 | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | *03/17/09* | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | 03/19/09 | 3,607.38 | - | 19.97 | 0.00 | 3,587.41 |
| MW - 7 | 03/25/09 | 3,607.38 | - | 19.95 | 0.00 | 3,587.43 |
| MW - 7 | 03/27/09 | 3,607.38 | - | 19.99 | 0.00 | 3,587.39 |
| MW - 7 | 03/30/09 | 3,607.38 | - | 20.01 | 0.00 | 3,587.37 |
| MW - 7 | 04/06/09 | 3,607.38 | - | 20.00 | 0.00 | 3,587.38 |
| MW - 7 | 04/08/09 | 3,607.38 | - | 19.92 | 0.00 | 3,587.46 |
| MW - 7 | 04/13/09 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | 04/15/09 | 3,607.38 | - | 19.95 | 0.00 | 3,587.43 |
| MW - 7 | 04/21/09 | 3,607.38 | - | 19.98 | 0.00 | 3,587.40 |
| MW - 7 | 04/27/09 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | *05/14/09* | 3,607.38 | | 19.36 | 0.00 | 3,588.02 |
| MW - 7 | 06/10/09 | 3,607.38 | - | 20.01 | 0.00 | 3,587.37 |
| MW - 7 | 07/01/09 | 3,607.38 | - | 19.87 | 0.00 | 3,587.51 |
| MW - 7 | 07/10/09 | 3,607.38 | - | 19.88 | 0.00 | 3,587.50 |
| MW - 7 | 07/15/09 | 3,607.38 | - | 19.90 | 0.00 | 3,587.48 |

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 7 | 07/21/09 | 3,607.38 | - | 19.91 | 0.00 | 3,587.47 |
| MW - 7 | 07/29/09 | 3,607.38 | - | 20.00 | 0.00 | 3,587.38 |
| MW - 7 | 07/30/09 | 3,607.38 | - | 20.04 | 0.00 | 3,587.34 |
| MW - 7 | *08/06/09* | 3,607.38 | - | 19.83 | 0.00 | 3,587.55 |
| MW - 7 | 08/07/09 | 3,607.38 | - | 20.03 | 0.00 | 3,587.35 |
| MW - 7 | 08/10/09 | 3,607.38 | - | 19.82 | 0.00 | 3,587.56 |
| MW - 7 | 08/17/09 | 3,607.38 | - | 18.84 | 0.00 | 3,588.54 |
| MW - 7 | 08/27/09 | 3,607.38 | - | 19.73 | 0.00 | 3,587.65 |
| MW - 7 | 08/31/09 | 3,607.38 | - | 19.71 | 0.00 | 3,587.67 |
| MW - 7 | 09/11/09 | 3,607.38 | - | 19.78 | 0.00 | 3,587.60 |
| MW - 7 | 09/17/09 | 3,607.38 | - | 19.80 | 0.00 | 3,587.58 |
| MW - 7 | 09/24/09 | 3,607.38 | - | 19.81 | 0.00 | 3,587.57 |
| MW - 7 | 09/29/09 | 3,607.38 | - | 20.04 | 0.00 | 3,587.34 |
| MW - 7 | 09/30/09 | 3,607.38 | - | 19.84 | 0.00 | 3,587.54 |
| MW - 7 | 10/06/09 | 3,607.38 | - | 20.04 | 0.00 | 3,587.34 |
| MW - 7 | 10/20/09 | 3,607.38 | - | 19.87 | 0.00 | 3,587.51 |
| MW - 7 | 10/27/09 | 3,607.38 | - | 19.88 | 0.00 | 3,587.50 |
| MW - 7 | 11/05/09 | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | *11/05/09* | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | 11/20/09 | 3,607.38 | - | 19.95 | 0.00 | 3,587.43 |
| MW - 7 | 12/04/09 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | 12/18/09 | 3,607.38 | | 19.95 | 0.00 | 3,587.43 |
| MW - 7 | 01/12/10 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | *02/05/10* | 3,607.38 | - | 20.01 | 0.00 | 3,587.37 |
| MW - 7 | 03/01/10 | 3,607.38 | | 20.02 | 0.00 | 3,587.36 |
| MW - 7 | 04/15/10 | 3,607.38 | - | 20.06 | 0.00 | 3,587.32 |
| MW - 7 | *05/03/10* | 3,607.38 | - | 19.94 | 0.00 | 3,587.44 |
| MW - 7 | 06/07/10 | 3,607.38 | - | 19.96 | 0.00 | 3,587.42 |
| MW - 7 | 06/25/10 | 3,607.38 | - | 20.06 | 0.00 | 3,587.32 |
| MW - 7 | 07/16/10 | 3,607.38 | - | 19.03 | 0.00 | 3,588.35 |
| MW - 7 | 07/30/10 | 3,607.38 | - | 19.13 | 0.00 | 3,588.25 |
| MW - 7 | *08/09/10* | 3,607.38 | - | 19.17 | 0.00 | 3,588.21 |
| MW - 7 | 08/20/10 | 3,607.38 | - | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | 09/10/10 | 3,607.38 | - | 19.20 | 0.00 | 3,588.18 |
| MW - 7 | 09/24/10 | 3,607.38 | - | 19.26 | 0.00 | 3,588.12 |
| MW - 7 | 10/08/10 | 3,607.38 | - | 19.40 | 0.00 | 3,587.98 |
| MW - 7 | *11/08/10* | 3,607.38 | - | 19.19 | 0.00 | 3,588.19 |
| MW - 7 | 11/19/10 | 3,607.38 | - | 19.53 | 0.00 | 3,587.85 |
| MW - 7 | 12/03/10 | 3,607.38 | - | 19.58 | 0.00 | 3,587.80 |
| MW - 7 | 12/17/10 | 3,607.38 | - | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | *02/07/11* | 3,607.38 | - | 19.23 | 0.00 | 3,588.15 |
| MW - 7 | *05/16/11* | 3,607.38 | - | 19.24 | 0.00 | 3,588.14 |
| MW - 7 | *08/08/11* | 3,607.38 | - | 19.22 | 0.00 | 3,588.16 |
| MW - 7 | *11/11/11* | 3,607.38 | - | 20.05 | 0.00 | 3,587.11 |
| | | | | | | |
| MW - 8 | 01/17/00 | 3,607.99 | - | 20.55 | 0.00 | 3,587.44 |
| MW - 8 | 04/10/00 | 3,607.99 | - | 20.68 | 0.00 | 3,587.31 |
| MW - 8 | 08/31/00 | 3,607.99 | - | 20.26 | 0.00 | 3,587.73 |
| MW - 8 | 12/18/00 | 3,607.99 | - | 20.46 | 0.00 | 3,587.53 |
| MW - 8 | 03/13/01 | 3,607.99 | - | 20.46 | 0.00 | 3,587.53 |
| MW - 8 | 05/30/01 | 3,607.99 | - | 20.46 | 0.00 | 3,587.53 |
| MW - 8 | 09/12/01 | 3,607.99 | - | 20.63 | 0.00 | 3,587.36 |
| MW - 8 | 11/17/01 | 3,607.99 | - | 20.64 | 0.00 | 3,587.35 |
| MW - 8 | 02/12/02 | 3,607.99 | - | 20.68 | 0.00 | 3,587.31 |
| MW - 8 | 05/15/02 | 3,607.99 | - | 20.62 | 0.00 | 3,587.37 |
| MW - 8 | 09/12/02 | 3,607.99 | - | 20.68 | 0.00 | 3,587.31 |
| MW - 8 | 11/18/02 | 3,607.99 | - | 20.51 | 0.00 | 3,587.48 |
| MW - 8 | 02/17/03 | 3,607.99 | - | 20.64 | 0.00 | 3,587.35 |
| MW - 8 | 05/19/03 | 3,607.99 | - | 20.70 | 0.00 | 3,587.29 |

**TABLE 1**

**GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD Reference # 1R-0123**

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 8 | 08/25/03 | 3,607.99 | - | 20.93 | 0.00 | 3,587.06 |
| MW - 8 | 11/21/03 | 3,607.99 | - | 20.93 | 0.00 | 3,587.06 |
| MW - 8 | 02/23/04 | 3,607.99 | - | 20.94 | 0.00 | 3,587.05 |
| MW - 8 | 05/13/04 | 3,607.99 | - | 19.86 | 0.00 | 3,588.13 |
| MW - 8 | 08/26/04 | 3,607.99 | - | 20.48 | 0.00 | 3,587.51 |
| MW - 8 | 12/13/04 | 3,607.99 | - | 17.81 | 0.00 | 3,590.18 |
| MW - 8 | *03/14/05* | 3,607.99 | - | 19.10 | 0.00 | 3,588.89 |
| MW - 8 | *06/24/05* | 3,607.99 | - | 19.62 | 0.00 | 3,588.37 |
| MW - 8 | *09/08/05* | 3,607.99 | - | 19.61 | 0.00 | 3,588.38 |
| MW - 8 | *12/01/05* | 3,607.99 | - | 19.85 | 0.00 | 3,588.14 |
| MW - 8 | *03/07/06* | 3,607.99 | - | 20.04 | 0.00 | 3,587.95 |
| MW - 8 | *06/07/06* | 3,607.99 | - | 20.18 | 0.00 | 3,587.81 |
| MW - 8 | *09/12/06* | 3,607.99 | - | 18.14 | 0.00 | 3,589.85 |
| MW - 8 | *12/13/06* | 3,607.99 | - | 19.06 | 0.00 | 3,588.93 |
| MW - 8 | *03/16/07* | 3,607.99 | - | 19.68 | 0.00 | 3,588.31 |
| MW - 8 | *05/16/07* | 3,607.99 | - | 19.81 | 0.00 | 3,588.18 |
| MW - 8 | *08/20/07* | 3,607.99 | - | 19.94 | 0.00 | 3,588.05 |
| MW - 8 | *11/27/07* | 3,607.99 | - | 20.01 | 0.00 | 3,587.98 |
| MW - 8 | *02/22/08* | 3,607.99 | - | 20.15 | 0.00 | 3,587.84 |
| MW - 8 | *05/30/08* | 3,607.99 | - | 20.24 | 0.00 | 3,587.75 |
| MW - 8 | *08/22/08* | 3,607.99 | - | 20.28 | 0.00 | 3,587.71 |
| MW - 8 | *11/13/08* | 3,607.99 | - | 20.06 | 0.00 | 3,587.93 |
| MW - 8 | *02/12/09* | 3,607.99 | - | 20.21 | 0.00 | 3,587.78 |
| MW - 8 | *05/14/09* | 3,607.99 | - | 20.36 | 0.00 | 3,587.63 |
| MW - 8 | *08/06/09* | 3,607.99 | - | 20.11 | 0.00 | 3,587.88 |
| MW - 8 | *11/05/09* | 3,607.99 | - | 20.21 | 0.00 | 3,587.78 |
| MW - 8 | 01/12/10 | 3,607.99 | - | 20.23 | 0.00 | 3,587.76 |
| MW - 8 | *02/05/10* | 3,607.99 | - | 20.28 | 0.00 | 3,587.71 |
| MW - 8 | *05/03/10* | 3,607.99 | - | 20.21 | 0.00 | 3,587.78 |
| MW - 8 | *08/09/10* | 3,607.99 | - | 19.25 | 0.00 | 3,588.74 |
| MW - 8 | *11/08/10* | 3,607.99 | | 19.24 | 0.00 | 3,588.75 |
| MW - 8 | *02/07/11* | 3,607.99 | - | 19.23 | 0.00 | 3,588.76 |
| MW - 8 | *05/16/11* | 3,607.99 | - | 19.22 | 0.00 | 3,588.77 |
| MW - 8 | *08/08/11* | 3,607.99 | - | 19.20 | 0.00 | 3,588.79 |
| MW - 8 | *11/11/11* | 3,607.99 | - | 20.38 | 0.00 | 3,586.78 |
| | | | | | | |
| MW - 9 | 11/04/04 | 3,606.83 | - | 18.68 | 0.00 | 3,588.15 |
| MW - 9 | 11/10/04 | 3,606.83 | - | 18.70 | 0.00 | 3,588.13 |
| MW - 9 | *03/14/05* | 3,606.83 | - | 18.87 | 0.00 | 3,587.96 |
| MW - 9 | *06/24/05* | 3,606.83 | - | 19.13 | 0.00 | 3,587.70 |
| MW - 9 | *09/08/05* | 3,606.83 | - | 19.13 | 0.00 | 3,587.70 |
| MW - 9 | *12/01/05* | 3,606.83 | - | 19.27 | 0.00 | 3,587.56 |
| MW - 9 | *03/07/06* | 3,606.83 | - | 19.42 | 0.00 | 3,587.41 |
| MW - 9 | *06/07/06* | 3,606.83 | - | 19.54 | 0.00 | 3,587.29 |
| MW - 9 | *09/12/06* | 3,606.83 | - | 18.07 | 0.00 | 3,588.76 |
| MW - 9 | *12/13/06* | 3,606.83 | - | 18.54 | 0.00 | 3,588.29 |
| MW - 9 | *03/16/07* | 3,606.83 | - | 19.14 | 0.00 | 3,587.69 |
| MW - 9 | *05/16/07* | 3,606.83 | - | 19.21 | 0.00 | 3,587.62 |
| MW - 9 | *08/20/07* | 3,606.83 | - | 19.34 | 0.00 | 3,587.49 |
| MW - 9 | *11/27/07* | 3,606.83 | - | 19.39 | 0.00 | 3,587.44 |
| MW - 9 | *02/22/08* | 3,606.83 | - | 19.52 | 0.00 | 3,587.31 |
| MW - 9 | *05/30/08* | 3,606.83 | - | 19.57 | 0.00 | 3,587.26 |
| MW - 9 | *08/22/08* | 3,606.83 | - | 19.61 | 0.00 | 3,587.22 |
| MW - 9 | *11/13/08* | 3,606.83 | - | 19.43 | 0.00 | 3,587.40 |
| MW - 9 | *02/12/09* | 3,606.83 | - | 19.64 | 0.00 | 3,587.19 |
| MW - 9 | *05/14/09* | 3,606.83 | - | 20.74 | 0.00 | 3,586.09 |
| MW - 9 | *08/06/09* | 3,606.83 | - | 19.44 | 0.00 | 3,587.39 |
| MW - 9 | *11/05/09* | 3,606.83 | - | 19.54 | 0.00 | 3,587.29 |
| MW - 9 | 11/05/09 | 3,606.83 | - | 19.54 | 0.00 | 3,587.29 |

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
MONUMENT 17
LEA COUNTY, NEW MEXICO
NMOCD Reference # 1R-0123

| SAMPLE LOCATION | SAMPLE DATE | TOP OF CASING ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | CORRECTED GROUND WATER ELEVATION |
|---|---|---|---|---|---|---|
| MW - 9 | 01/12/10 | 3,606.83 | - | 19.56 | 0.00 | 3,587.27 |
| MW - 9 | *02/05/10* | 3,606.83 | - | 19.59 | 0.00 | 3,587.24 |
| MW - 9 | *05/03/10* | 3,606.83 | - | 19.55 | 0.00 | 3,587.28 |
| MW - 9 | *08/09/10* | 3,606.83 | - | 18.92 | 0.00 | 3,587.91 |
| MW - 9 | *11/08/10* | 3,606.83 | | 18.91 | 0.00 | 3,587.92 |
| MW - 9 | *02/07/11* | 3,606.83 | - | 18.93 | 0.00 | 3,587.90 |
| MW - 9 | *05/16/11* | 3,606.83 | - | 18.91 | 0.00 | 3,587.92 |
| MW - 9 | *08/08/11* | 3,606.83 | - | 18.88 | 0.00 | 3,587.95 |
| MW - 9 | *11/11/11* | 3,606.83 | - | 19.66 | 0.00 | 3,587.17 |

*Elevations based on the North America Vertical Datum of 1929.*

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| NMOCD Regulatory Limit | | 0.0100 | 0.75 | 0.75 | Total XYLENES 0.62 | |
| MW - 1 | 09/10/99 | **0.0900** | 0.006 | 0.0160 | 0.0100 | 0.004 |
| MW - 1 | 01/17/00 | **0.1530** | 0.008 | 0.0440 | 0.0160 | 0.006 |
| MW - 1 | 04/10/00 | **0.0590** | 0.003 | 0.0020 | 0.0030 | 0.002 |
| MW - 1 | 08/31/00 | **0.1320** | 0.002 | <0.001 | 0.0010 | 0.001 |
| MW - 1 | 12/18/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 1 | 03/13/01 | 0.0050 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 1 | 05/30/01 | **0.2010** | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 09/12/01 | **0.1840** | 0.010 | 0.0270 | 0.0210 | 0.008 |
| MW - 1 | 11/17/01 | **0.0440** | 0.001 | <0.001 | 0.0010 | 0.002 |
| MW - 1 | 02/12/02 | **0.0690** | 0.004 | 0.0170 | 0.0150 | 0.005 |
| MW - 1 | 05/15/02 | **0.0950** | 0.005 | 0.0270 | 0.0200 | 0.005 |
| MW - 1 | 09/12/02 | **0.2590** | 0.005 | 0.0170 | 0.0130 | 0.004 |
| MW - 1 | 11/18/02 | **0.0100** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 1 | 02/17/03 | 0.0030 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 1 | 05/19/03 | **0.0600** | 0.002 | 0.0330 | 0.0140 | 0.003 |
| MW - 1 | 08/25/03 | **0.0760** | 0.001 | 0.0280 | 0.0110 | 0.003 |
| MW - 1 | 11/21/03 | **0.1450** | 0.004 | 0.0800 | 0.0250 | 0.006 |
| MW - 1 | 02/23/04 | 0.0079 | <0.001 | 0.0020 | <0.002 | <0.001 |
| MW - 1 | 05/13/04 | **0.0281** | <0.001 | 0.0047 | 0.0026 | <0.001 |
| MW - 1 | 08/26/04 | 0.0088 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 1 | 12/13/04 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 03/14/05 | 0.0059 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 06/24/05 | **0.0413** | <0.001 | 0.0168 | 0.0084 | |
| MW - 1 | 09/08/05 | **0.0709** | <0.001 | 0.0096 | 0.0082 | |
| MW - 1 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 1 | 03/07/06 | **0.0279** | <0.001 | 0.0106 | 0.0066 | |
| MW - 1 | 06/06/06 | **0.0626** | <0.001 | 0.0283 | 0.0157 | |
| MW - 1 | 09/12/06 | **0.0370** | <0.001 | 0.0281 | 0.0126 | |
| MW - 1 | 12/13/06 | 0.0058 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 03/16/07 | **0.0294** | <0.001 | 0.0079 | 0.0034 | |
| MW - 1 | 05/16/07 | **0.0243** | <0.001 | 0.0034 | 0.0027 | |
| MW - 1 | 08/20/07 | **0.0349** | <0.001 | 0.0251 | 0.0105 | |
| MW - 1 | 11/27/07 | 0.0028 | <0.001 | 0.0010 | <0.001 | |
| MW - 1 | 02/22/08 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 1 | 05/30/08 | **0.0301** | <0.001 | 0.0380 | 0.0160 | |
| MW - 1 | 08/22/08 | **0.0431** | <0.001 | 0.0110 | 0.0106 | |
| MW - 1 | 11/13/08 | 0.0034 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 02/12/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 05/14/09 | **0.0105** | <0.001 | 0.0068 | 0.0126 | |
| MW - 1 | 08/06/09 | **0.0073** | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 11/06/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 02/05/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 08/09/10 | 0.0081 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 11/08/10 | 0.0077 | <0.001 | 0.0064 | <0.001 | |
| MW - 1 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0198 | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 1 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 1 | 08/08/11 | **0.0145** | <0.001 | 0.0069 | <0.001 | |
| MW - 1 | 11/11/11 | **0.0032** | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 2 | 09/10/99 | **0.0170** | 0.003 | 0.0010 | <0.001 | <0.001 |
| MW - 2 | 01/17/00 | 0.0020 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 04/10/00 | **0.0110** | 0.004 | 0.0010 | 0.0020 | 0.001 |
| MW - 2 | 08/31/00 | **0.1070** | 0.005 | 0.0060 | <0.001 | <0.001 |
| MW - 2 | 12/18/00 | 0.0030 | <0.001 | <0.001 | <0.001 | <0.002 |
| MW - 2 | 03/13/01 | 0.0060 | <0.001 | <0.001 | <0.001 | <0.002 |
| MW - 2 | 05/30/01 | 0.0050 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 09/12/01 | **0.0330** | 0.003 | 0.0030 | 0.0010 | <0.001 |
| MW - 2 | 11/17/01 | **0.0200** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 02/12/02 | **0.0200** | 0.001 | 0.0020 | 0.0010 | <0.001 |
| MW - 2 | 05/15/02 | **0.0390** | 0.003 | 0.0060 | 0.0020 | <0.001 |
| MW - 2 | 09/12/02 | **0.0460** | 0.001 | 0.0020 | 0.0010 | <0.001 |
| MW - 2 | 11/18/02 | 0.0060 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 02/17/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 05/19/03 | 0.0080 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 08/25/03 | **0.0500** | 0.006 | 0.0100 | 0.0110 | 0.004 |
| MW - 2 | 11/21/03 | **0.1920** | 0.014 | 0.0260 | 0.0110 | 0.003 |
| MW - 2 | 02/23/04 | 0.00463 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 2 | 05/13/04 | 0.0021 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 2 | 08/26/04 | 0.0071 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 2 | 12/13/04 | 0.00670 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 03/14/05 | **0.0180** | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 06/24/05 | 0.00360 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 09/08/05 | 0.00750 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 2 | 03/07/06 | 0.0052 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 06/06/06 | 0.0045 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 09/12/06 | **0.0132** | <0.001 | 0.00130 | <0.001 | |
| MW - 2 | 12/13/06 | 0.0022 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 03/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 05/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 08/20/07 | **0.1430** | <0.001 | <0.001 | 0.0104 | |
| MW - 2 | 11/27/07 | 0.0041 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 02/22/08 | 0.0035 | <0.001 | <0.001 | 0.0011 | |
| MW - 2 | 05/30/08 | **0.0122** | <0.001 | <0.001 | 0.001 | |
| MW - 2 | 08/22/08 | **0.0467** | <0.001 | <0.001 | 0.00220 | |
| MW - 2 | 11/13/08 | **0.0128** | <0.001 | <0.001 | 0.0012 | |
| MW - 2 | 02/12/09 | 0.0037 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 05/14/09 | 0.0090 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 08/06/09 | **0.0162** | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 11/05/09 | 0.0037 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 02/05/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 08/09/10 | 0.0013 | <0.001 | <0.001 | <0.001 | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 2 | 11/08/10 | **0.0156** | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0191 | |
| MW - 2 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 08/08/11 | **0.0428** | <0.001 | <0.001 | <0.001 | |
| MW - 2 | 11/11/11 | **0.0318** | <0.001 | <0.001 | 0.0022 | |
| | | | | | | |
| MW - 3 | 09/10/99 | **0.0320** | 0.003 | 0.0010 | <0.001 | <0.001 |
| MW - 3 | 01/17/00 | 0.0050 | 0.002 | <0.001 | 0.0020 | <0.001 |
| MW - 3 | 04/10/00 | **0.0330** | 0.005 | 0.0030 | 0.0030 | 0.002 |
| MW - 3 | 08/31/00 | **0.0290** | <0.001 | 0.0010 | <0.001 | <0.001 |
| MW - 3 | 12/18/00 | **0.0280** | 0.002 | 0.0010 | <0.001 | <0.001 |
| MW - 3 | 03/13/01 | 0.0040 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 05/30/01 | **0.0960** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 09/12/01 | 0.0080 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 11/17/01 | 0.0050 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 02/12/02 | **0.1370** | 0.011 | 0.0200 | 0.0100 | 0.001 |
| MW - 3 | 05/15/02 | **0.0220** | 0.001 | 0.0020 | <0.001 | <0.001 |
| MW - 3 | 09/12/02 | **0.0190** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 11/18/02 | 0.0080 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 02/17/03 | **0.0150** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 05/19/03 | **0.0140** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 08/25/03 | **0.0530** | <0.001 | 0.0100 | 0.0060 | <0.001 |
| MW - 3 | 11/21/03 | **0.4090** | 0.045 | 0.0910 | 0.0550 | 0.010 |
| MW - 3 | 02/23/04 | **0.0444** | 0.00355 | 0.0112 | 0.00576 | <0.001 |
| MW - 3 | 05/13/04 | **0.0338** | <0.001 | 0.0092 | <0.002 | <0.001 |
| MW - 3 | 08/26/04 | **0.0157** | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 3 | 12/13/04 | **0.0598** | <0.005 | 0.0362 | <0.005 | |
| MW - 3 | 03/14/05 | 0.00530 | <0.001 | 0.00260 | <0.001 | |
| MW - 3 | 06/24/05 | **0.0308** | <0.001 | 0.00400 | <0.001 | |
| MW - 3 | 09/08/05 | **0.0141** | <0.001 | 0.00220 | <0.001 | |
| MW - 3 | 12/01/05 | **0.0275** | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 3 | 03/07/06 | **0.0681** | <0.001 | 0.00260 | 0.00180 | |
| MW - 3 | 06/06/06 | **0.0212** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 09/12/06 | **0.168** | <0.02 | <0.02 | <0.02 | |
| MW - 3 | 12/13/06 | 0.0085 | <0.005 | <0.005 | <0.005 | |
| MW - 3 | 03/16/07 | 0.0078 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 05/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 08/20/07 | **0.0377** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 11/27/07 | 0.0089 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 02/22/08 | **0.0182** | <0.001 | <0.001 | 0.00150 | |
| MW - 3 | 05/30/08 | **0.0329** | <0.001 | 0.002 | 0.00170 | |
| MW - 3 | 08/22/08 | 0.0084 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 11/13/08 | 0.0031 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 02/12/09 | **0.0121** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 05/14/09 | 0.0088 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 08/06/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 02/05/10 | 0.0030 | <0.001 | <0.001 | <0.001 | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 3 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 08/09/10 | **0.0145** | <0.001 | 0.0038 | 0.0041 | |
| MW - 3 | 11/08/10 | **0.0141** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 02/07/11 | **0.0175** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 05/16/11 | **0.0100** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 08/08/11 | **0.0103** | <0.001 | <0.001 | <0.001 | |
| MW - 3 | 11/11/11 | **0.0166** | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 4 | 09/10/99 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 01/17/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 04/10/00 | <0.001 | <0.001 | <0.001 | 0.0010 | <0.001 |
| MW - 4 | 08/31/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 12/18/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 03/13/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 05/30/01 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 09/12/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 11/17/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 02/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 05/15/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 09/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 11/18/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 02/17/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 05/19/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 08/25/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 11/21/03 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 4 | 02/23/04 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 4 | 12/13/04 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 03/14/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 06/24/05 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 09/08/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 4 | 03/07/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 06/06/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 09/12/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 12/13/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 03/16/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 05/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 08/20/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 11/27/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 05/30/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 11/13/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 02/12/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 05/14/09 | <0.001 | <0.001 | 0.0066 | <0.001 | |
| MW - 4 | 08/06/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 11/08/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 4 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 4 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 4 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 5 | 09/10/99 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 01/17/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 04/10/00 | <0.001 | <0.001 | <0.001 | 0.0010 | <0.001 |
| MW - 5 | 08/31/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 12/18/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 03/13/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 05/30/01 | 0.0050 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 09/12/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 11/17/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 02/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 05/15/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 09/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 11/18/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 02/17/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 05/19/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 08/25/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 11/21/03 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 5 | 02/23/04 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 5 | 12/13/04 | 0.00120 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 03/14/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 06/24/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 09/08/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 5 | 03/07/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 06/06/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 09/12/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 12/13/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 03/16/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 05/16/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 08/20/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 11/27/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 11/13/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 02/12/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 05/14/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 08/06/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 11/08/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 5 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 05/16/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 5 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 6 | 09/10/99 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 01/17/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 6 | 04/10/00 | <0.001 | <0.001 | <0.001 | 0.0010 | <0.001 |
| MW - 6 | 08/31/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 12/18/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 03/13/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 05/30/01 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 6 | 09/12/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 11/17/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 02/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 05/15/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 09/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 11/18/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 02/17/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 05/19/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 08/25/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 6 | 11/21/03 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 6 | 02/23/04 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 6 | 12/13/04 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 6 | 03/14/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 6 | 06/24/05 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 6 | 09/08/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 6 | 09/13/05 | Plugged and Abandoned | | | | |
| | | | | | | |
| MW - 7 | 11/18/02 | 0.0010 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 7 | 01/10/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 7 | 02/17/03 | 0.0010 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 7 | 05/19/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 7 | 11/21/03 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 7 | 05/13/04 | **0.0335** | <0.001 | 0.0136 | <0.002 | <0.001 |
| MW - 7 | 08/26/04 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 7 | 12/13/04 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 7 | 03/14/05 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 7 | 06/24/05 | **0.0129** | <0.005 | <0.005 | <0.005 | |
| MW - 7 | 09/08/05 | Not Sampled | | | | |
| MW - 7 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 7 | 03/07/06 | <0.001 | <0.001 | 0.0012 | <0.001 | |
| MW - 7 | 06/06/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 09/12/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 12/13/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 03/16/07 | 0.0016 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 05/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 08/20/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/27/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 02/26/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 05/30/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 08/22/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/13/08 | 0.0013 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 02/12/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 05/14/09 | <0.001 | <0.001 | <0.001 | <0.001 | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 7 | 08/06/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 02/05/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 08/09/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/08/10 | 0.0047 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 02/07/11 | <0.001 | <0.001 | <0.001 | 0.0188 | |
| MW - 7 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 08/08/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 7 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 8 | 09/10/99 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 01/17/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 04/10/00 | <0.001 | <0.001 | 0.0010 | 0.0010 | <0.001 |
| MW - 8 | 08/31/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 12/18/00 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 03/13/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 05/30/01 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 09/12/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 11/17/01 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 02/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 05/15/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 09/12/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 11/18/02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 02/17/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 05/19/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 08/25/03 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 11/21/03 | 0.0050 | <0.001 | 0.0020 | <0.002 | <0.001 |
| MW - 8 | 02/23/04 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 |
| MW - 8 | 12/13/04 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 03/14/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 06/24/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 09/08/05 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 8 | 03/07/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 06/06/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 09/12/06 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 12/13/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 03/16/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 05/16/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 08/20/07 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 11/27/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 11/13/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 02/12/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 05/14/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 08/06/09 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 8 | 11/08/10 | <0.001 | <0.001 | <0.001 | <0.001 | |

**TABLE 2**

**CONCENTRATIONS OF BTEX IN GROUNDWATER**

**PLAINS MARKETING, L.P.**
**MONUMENT 17**
**LEA COUNTY, NEW MEXICO**
**NMOCD REFERENCE NUMBER 1R-0123**

*All Concentrations are reported in mg/L*

| SAMPLE LOCATION | SAMPLE DATE | Methods:SW 846-8021B, 5030 | | | | |
|---|---|---|---|---|---|---|
| | | BENZENE | TOLUENE | ETHYL-BENZENE | m, p - XYLENES | o-XYLENE |
| MW - 8 | 02/07/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 05/16/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 08/08/11 | Not Sampled on Current Sample Schedule | | | | |
| MW - 8 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | | | | | | |
| MW - 9 | 11/10/04 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 03/14/05 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 06/24/05 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 09/08/05 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 12/01/05 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| MW - 9 | 03/07/06 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 06/06/06 | <0.001 | <0.001 | <0.001 | 0.0036 | |
| MW - 9 | 09/12/06 | **0.1300** | 0.035 | 0.0203 | 0.0293 | |
| MW - 9 | 12/13/06 | **0.0121** | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 03/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/16/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 08/20/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 11/27/07 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 02/22/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/30/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 8/22/085 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 11/13/08 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 02/12/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/14/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 08/06/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 11/05/09 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 02/05/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/03/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 08/09/10 | <0.005 | <0.005 | <0.005 | <0.005 | |
| MW - 9 | 11/08/10 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 02/07/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 05/16/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 08/08/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| MW - 9 | 11/11/11 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | | | | | | |