AP - 63

ANNUAL MONITORING REPORT

YEAR(S): 2011

2011
ANNUAL MONITORING REPORT

34 JUNCTION SOUTH STATION

LEA COUNTY, NEW MEXICO
NW ¼ SW ¼ SECTION 2, TOWNSHIP 17 SOUTH, RANGE 36 EAST
PLAINS SRS NUMBER: 2005-00138
NMOCD Reference AP-063

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 AP-63	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 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 or about August 8, 2006, project management responsibilities were assumed by NOVA, having previously been managed by Basin Environmental Service Technologies, LLC, (Basin). 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. However, historic data tables as well as 2011 laboratory analytical reports are provided on the enclosed data disk. A 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 is NW¼, SW¼, Section 2, Township 17 South, Range 36 East. The site is located on property owned by the State of New Mexico. The site latitude is 32° 51' 42.4" North and the site longitude is 103° 19' 54.4" West. Please reference Figure 1 for a Site Location Map. On June 10, 2005, Basin responded to a pipeline release on behalf of Plains. The release occurred as a result of the mechanical malfunction of an air eliminator check valve at an operational secondary metering station. Emergency response activities included the repair of the affected check valve and excavation of the hydrocarbon impacted soil. Approximately 15 barrels of crude oil were released from the pipeline and 0.5 barrels were recovered, resulting in a net loss of 14.5 barrels. The visibly stained surface area covers an area approximately 20 feet long by 20 feet wide. Excavation activities during the initial response activities covered an area within the fenced station approximately 20 feet long by 20 feet wide and one to four feet below ground surface (bgs). Approximately 100 cubic yards (cy) of excavated soil was placed on a polyethylene liner for future remedial activities. Please reference Appendix B for The Release Notification and Corrective Action (Form C-141).

Currently, there are 17 monitor wells and one recovery well (RW-1) on site. An automated PSH recovery system is present and consists of pneumatic total fluids pumps installed in monitor wells MW-3, MW-4, MW-8 through MW-11 and recovery well RW-1. In late April 2011, a grass fire destroyed elements of the automated treatment system including the upper casing of monitor well MW-3. Manual PSH recovery continued until the system was rebuilt in November 2011. Recovered PSH is temporarily stored in a frac tank and periodically re-injected into the Plains Pipeline transportation system.

A *Stage 1 and Stage 2 Abatement Plan* was submitted to the NMOCD in October 2006. The NMOCD has accepted the Abatement Plan as administratively complete and approved the public notice on October 25, 2011.

FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was detected in seven monitor wells (MW-3, MW-4, MW-5, MW-8 through MW-11) and in recovery well RW-1 during the 2011 reporting period. An automated PSH recovery system, consisting of pneumatic total fluids pumps installed in monitor wells MW-3, MW-4, MW-8 through MW-11 and recovery well RW-1, was operational only during the 1st and 4th quarters of the reporting period. A grass fire in late April destroyed elements of the recovery system and was rebuilt by November 2011. The average thickness of PSH in monitor and recovery wells containing PSH during 2011 was 2.78 feet, with a maximum thickness of 8.96 feet occurring in monitor well MW-4 on May 3, 2011. Approximately 180 gallons (approximately 4.3 barrels) of PSH was recovered from the site during the 2011 reporting period. Approximately 2,974 gallons (approximately 70.8 barrels) of PSH have been recovered since the project inception. Measurable thicknesses of PSH are recorded in Table 1 and Figures 3A through 3D.

Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following sampling schedule.

NMOCD APPROVED SAMPLING SCHEDULE					
Location	**Schedule**	**Location**	**Schedule**	**Location**	**Schedule**
MW-1	Quarterly	MW-7	Quarterly	MW-13	Quarterly
MW-2	Quarterly	MW-8	Quarterly	MW-14	Quarterly
MW-3	Quarterly	MW-9	Quarterly	MW-15	Quarterly
MW-4	Quarterly	MW-10	Quarterly	MW-16	Quarterly
MW-5	Quarterly	MW-11	Quarterly	MW-17	Quarterly
MW-6	Quarterly	MW-12	Quarterly	RW-1	Quarterly

The site monitor wells were gauged and sampled on March 1, May 3, August 16, and November 28, 2011. During each sampling event, sampled monitor wells were purged of approximately three well volumes of water or until the wells were dry using a PVC bailer or electrical 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 of 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 0.0135 feet/foot to the east as measured between monitor wells MW-2 and MW-4. This is consistent with data presented from earlier in the year. The corrected groundwater elevation has ranged between 3,786.94 and 3,789.69 feet above mean sea level, in monitor wells MW-4 on November 28, 2011 and MW-7 on March 1, 2011, respectively.

LABORATORY RESULTS

Monitor wells MW-3, MW-4, MW-5, MW-8, MW-9, MW-10 and MW-11 and recovery well RW-1 contained PSH during all four quarters of the reporting period and were not sampled in 2011.

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 during the 2011 calendar year on monitor wells MW-13, MW-15, MW-16 and MW-17. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC standards were 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 BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last 22 consecutive quarters. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last 22 consecutive quarters. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-3 is monitored on a quarterly schedule. Monitor well MW-3 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.12 feet, 0.86 feet and 7.29 feet were reported during the 1st, 3rd and 4th quarters of 2011, respectively. Monitor well MW-3 was not gauged during the 2nd quarter due to a grass fire that destroyed the upper well casing. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-4 is monitored on a quarterly schedule. Monitor well MW-4 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.56 feet, 8.96 feet, 6.90 feet and 0.70 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-5 is sampled on a quarterly schedule. Monitor well MW-5 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.16 feet, 3.27 feet, 1.04 feet and 1.69 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-6 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last 22 consecutive quarters. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-7 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last 22 consecutive quarters. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-8 is monitored on a quarterly schedule. Monitor well MW-8 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.74 feet, 3.53 feet, 6.78 feet and 0.84 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-9 is monitored on a quarterly schedule. Monitor well MW-9 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.97 feet, 5.08 feet, 6.51 feet and 2.36 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-10 is monitored on a quarterly schedule. Monitor well MW-10 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. Monitor well MW-10 was not gauged during the 1st quarter of 2011 due to difficulties in removing the total fluid pump from the well. PSH thicknesses of 5.16 feet, 6.23 feet and 5.00 feet were reported during the 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-11 is sampled on a quarterly schedule. Monitor well MW-11 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.58 feet, 0.38 feet, 6.13 feet and 0.32 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-12 is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 0.217 mg/L during the 4th quarter to 2.390 mg/L during the 2nd quarter of 2011. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene and ethyl-benzene concentrations were below the MDL and the NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.010 mg/L during the 1st, 3rd and 4th quarters to 0.0695 mg/L during the 2nd quarter of 2011. Xylene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-13 is sampled on a quarterly schedule. Analytical results indicate benzene concentrations ranged from 3.520 mg/L during the 4th quarter to 9.230 mg/L during the 2nd quarter of 2011. Benzene concentrations were above NMOCD regulatory standards during all four quarters of the reporting period. Toluene concentrations ranged from <0.050 mg/L during the 2nd, 3rd and 4th quarters to 0.3430 mg/L during the 1st quarter of 2011. Toluene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Ethyl-benzene concentrations ranged from <0.050 mg/L during the 2nd, 3rd and 4th quarters to 0.4340 mg/L during the 1st quarter of 2011. Ethyl-benzene concentrations were below NMOCD regulatory standards during all four quarters of the reporting period. Xylene concentrations ranged from <0.050 mg/L during the 2nd, 3rd and 4th quarters to 1.140 mg/L during the 1st quarter of 2011. Xylene concentrations were above NMOCD regulatory standards during the 1st quarter of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above MDLs for naphthalene (0.000439 mg/L), 1-methylnaphthalene (0.00197 mg/L), fluorine (0.000362 mg/L), phenanthrene (0.000397 mg/L) and dibenzofuran (0.000314 mg/L), which are below WQCC standards.

Monitor well MW-14 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last 14 consecutive quarters. PAH analysis was not required during the 4th quarter sampling event.

Monitor well MW-15 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last six consecutive quarters. PAH analysis during the 4th quarter sampling event indicated elevated concentration above MDL for naphthalene (0.000354 mg/L), which is below WQCC standards.

Monitor well MW-16 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last six consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Monitor well MW-17 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were below MDL and the NMOCD regulatory standards during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below regulatory standards for the last six consecutive quarters. PAH analysis during the 4th quarter sampling event indicated no elevated concentrations were detected above the respective MDLs.

Recovery well RW-1 is monitored on a quarterly schedule. Recovery well RW-1 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 1.64 feet, 4.35 feet, 7.43 feet and 1.47 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2011, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

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

SUMMARY

This report presents the results of monitoring activities for the 2011 annual monitoring period. Currently, there are 17 monitor wells and one recovery well (RW-1) on site. An automated recovery system was operational only during the 1st and 4th quarters of the 2011 due to a grass fire which destroyed elements of the system and one monitor well. The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of 0.0135 feet/foot to the east.

Seven monitor wells and one recovery well (MW-3 through MW-5, MW-8 through MW-11 and RW-1) contained measurable thicknesses of PSH during the reporting period. The average thickness of PSH in monitor and recovery wells exhibiting PSH during 2011 was 2.78 feet. Approximately 180 gallons (approximately 4.3 barrels) of PSH was recovered from the site during the 2011 reporting period. Approximately 2,974 gallons (approximately 70.8 barrels) of PSH have been recovered since the project inception.

Review of laboratory analytical results of the groundwater samples obtained during the 2011 monitoring period indicates the BTEX constituent concentrations are below applicable NMOCD standards in eight of the seventeen monitor wells. Monitor wells MW-3 through MW-5, MW-8 through MW-11 and recovery well RW-1 consistently exhibited measurable thicknesses of PSH during gauging events. Dissolved phase and phase separated hydrocarbon impact appears to be limited to monitor wells MW-12 and MW-13. Review of PAH analysis indicates a decreasing trend in constituent concentrations in monitor wells MW-13, MW-15, MW-16 and MW-17.

A *Stage 1 and Stage 2 Abatement Plan* was submitted to the NMOCD in October 2006. The NMOCD has accepted the Abatement Plan as administratively complete and approved the public notice on October 25, 2011.

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-1 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to an annual schedule. This up-gradient monitor well was installed during the 4th quarter 2005 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last 22 consecutive quarters.

- Monitor well MW-2 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to an annual schedule. This up-gradient monitor well was installed during the 4th quarter 2005 and the analytical results indicate BTEX constituent

concentrations have been below NMOCD regulatory standards for the last 22 consecutive quarters.

- Monitor well MW-6 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to an annual schedule. This cross-gradient monitor well was installed during the 3rd quarter 2006 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last 22 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 3rd quarter 2006 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last 22 consecutive quarters.

- Monitor well MW-17 is currently sampled on a quarterly schedule. Plains proposes to modify the schedule to an annual schedule. This down-gradient monitor well was installed during the 2nd quarter 2010 and the analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory standards for the last 6 consecutive quarters.

Groundwater monitoring and groundwater sampling will continue in 2012. The onsite automated recovery system will continue to operate and may be modified, as conditions require. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2013.

Based on the results of the PAH analysis over the past several years, further PAH analysis will be conducted on the monitor/recovery wells which currently exhibit PSH thicknesses, as the PSH plume decreases, these wells will be sampled as necessary.

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
Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

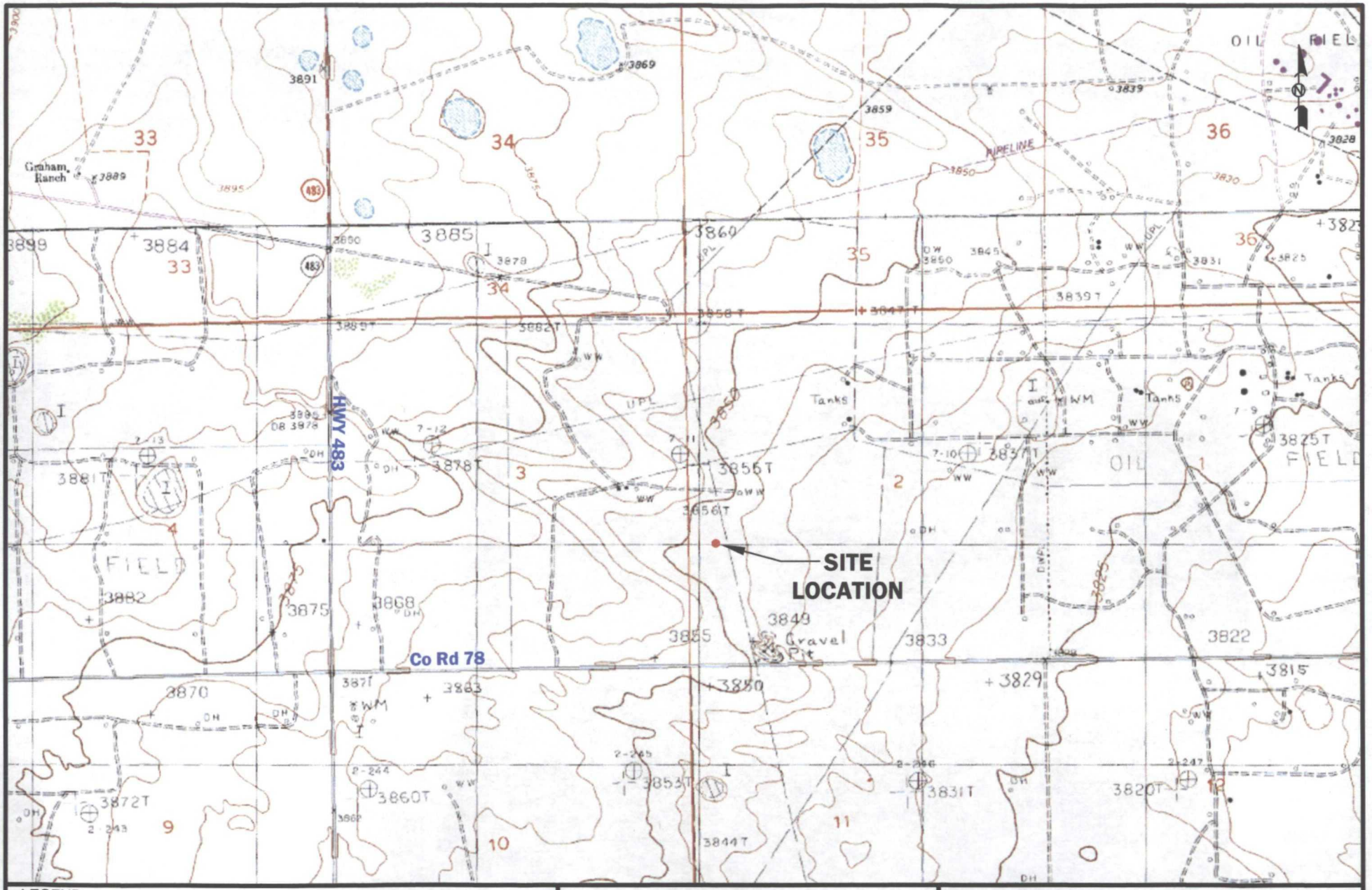
Copy 2:
Geoffrey R. Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Copy 3:
Jason Henry
Plains Marketing, L.P.
2530 State Highway 214
Denver City, TX 79323
jhenry@paalp.com

Copy 4:
Jeff Dann
Plains Marketing, L.P.
333 Clay Street
Suite 1600
Houston, TX 77002
jpdann@paalp.com

Copy 5:
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-0456

Figure 1
Site Location Map
34 Junction South Station
Plains Marketing, L.P.
Lea County, NM

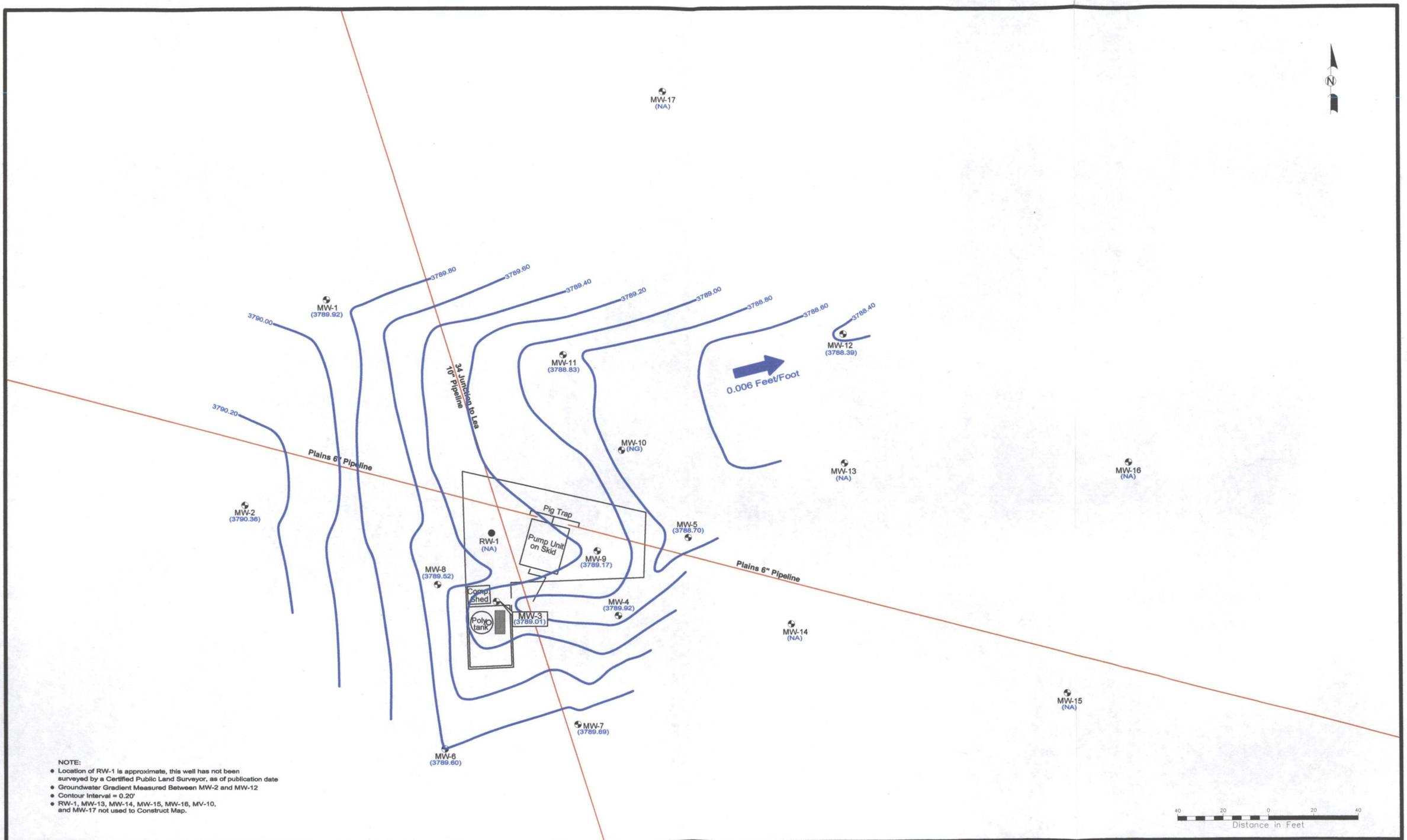
NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

January 27, 2011	Scale: 1" = 2000'	CAD By: TA	Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 51' 42.4" W 103° 19' 54.4"



NOTE:
- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-12
- Contour Interval = 0.20'
- RW-1, MW-13, MW-14, MW-15, MW-16, MV-10, and MW-17 not used to Construct Map.

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- (3791.69) Grounwater Elevation (Feet)
- Grounwater Elevation Contour Line
- (NA) Not Available
- (NG) Not Gaged
- Groundwater Direction and Magnitude (0.006 Feet/Foot)

NMOCD Reference No. 1R-0456

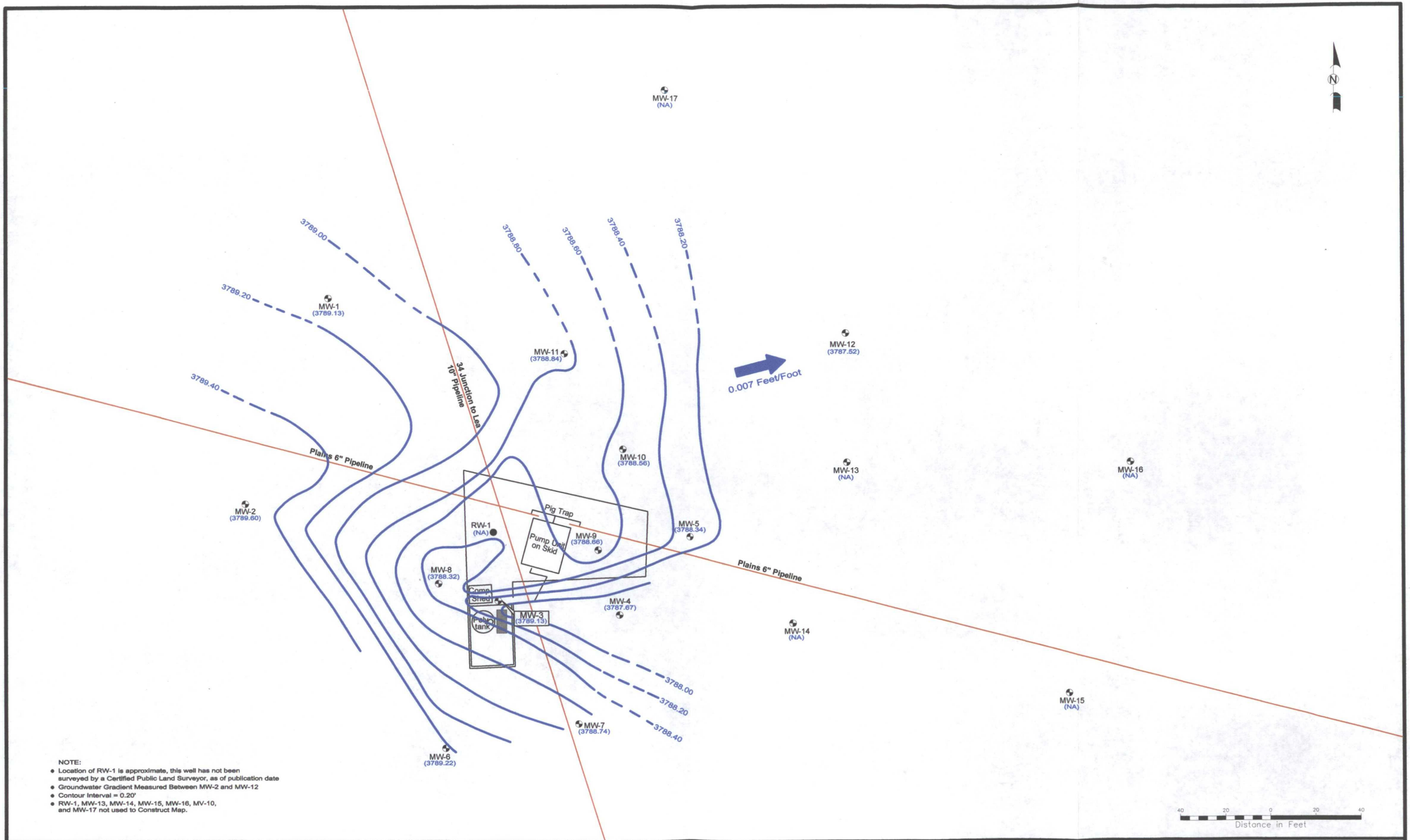
Figure 2A

Inferred Groundwater Gradient Map
(3/1/11)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

April 19, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"



NOTE:
- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-12
- Contour Interval = 0.20'
- RW-1, MW-13, MW-14, MW-15, MW-16, MV-10, and MW-17 not used to Construct Map.

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- (3791.69) Grounwater Elevation (Feet)
- Grounwater Elevation Contour Line
- (NA) Not Available
- (NG) Not Gaged
- Groundwater Direction and Magnitude (0.006 Feet/Foot)

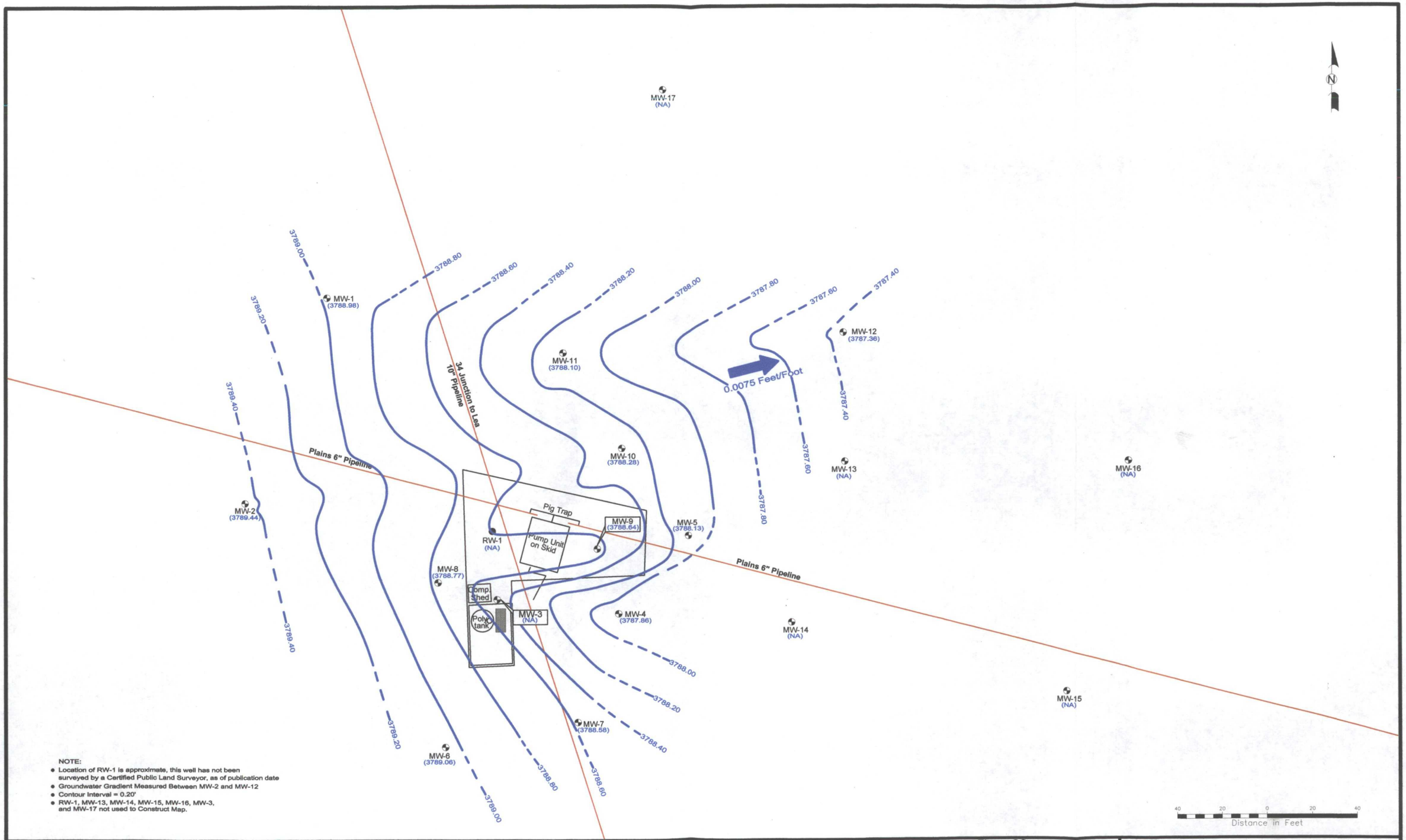
NMOCD Reference No. 1R-0456

Figure 2B
Inferred Groundwater Gradient Map
(5/3/11)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

June 1, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"



NOTE:
- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-12
- Contour Interval = 0.20'
- RW-1, MW-13, MW-14, MW-15, MW-16, MW-3, and MW-17 not used to Construct Map.

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- (3791.69) Grounwater Elevation (Feet)
- Grounwater Elevation Contour Line
- (NA) Not Available
- (NG) Not Gaged
- 0.008 Feet/Foot Groundwater Direction and Magnitude

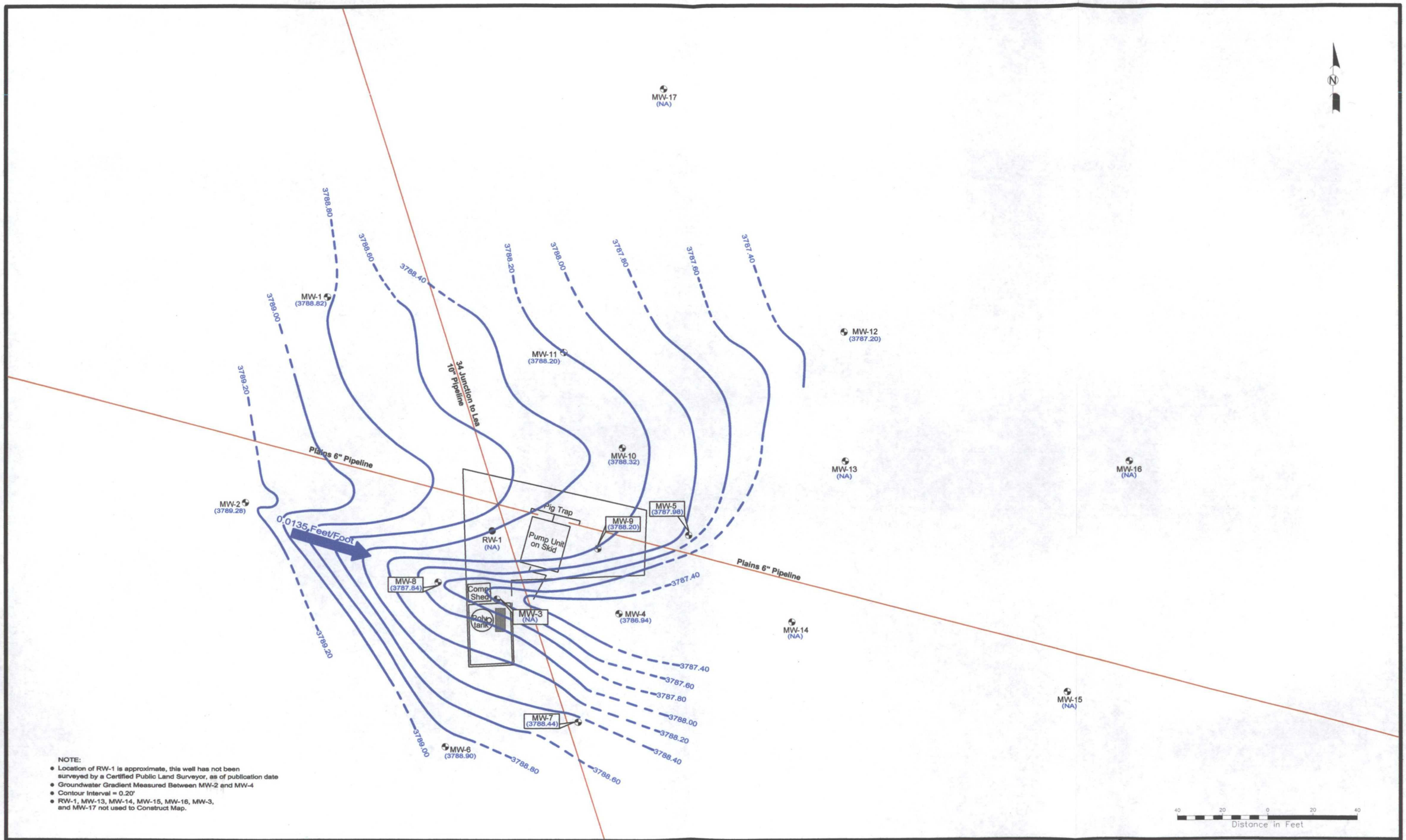
NMOCD Reference No. 1R-0456

Figure 2C
Inferred Groundwater Gradient Map
(8/16/2011)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

August 31, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"



NOTE:
- Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date
- Groundwater Gradient Measured Between MW-2 and MW-4
- Contour Interval = 0.20'
- RW-1, MW-13, MW-14, MW-15, MW-16, MW-3, and MW-17 not used to Construct Map.

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- (3791.69) Grounwater Elevation (Feet)
- Grounwater Elevation Contour Line
- (NA) Not Available
- (NG) Not Gaged
- 0.008 Feet/Foot Groundwater Direction and Magnitude

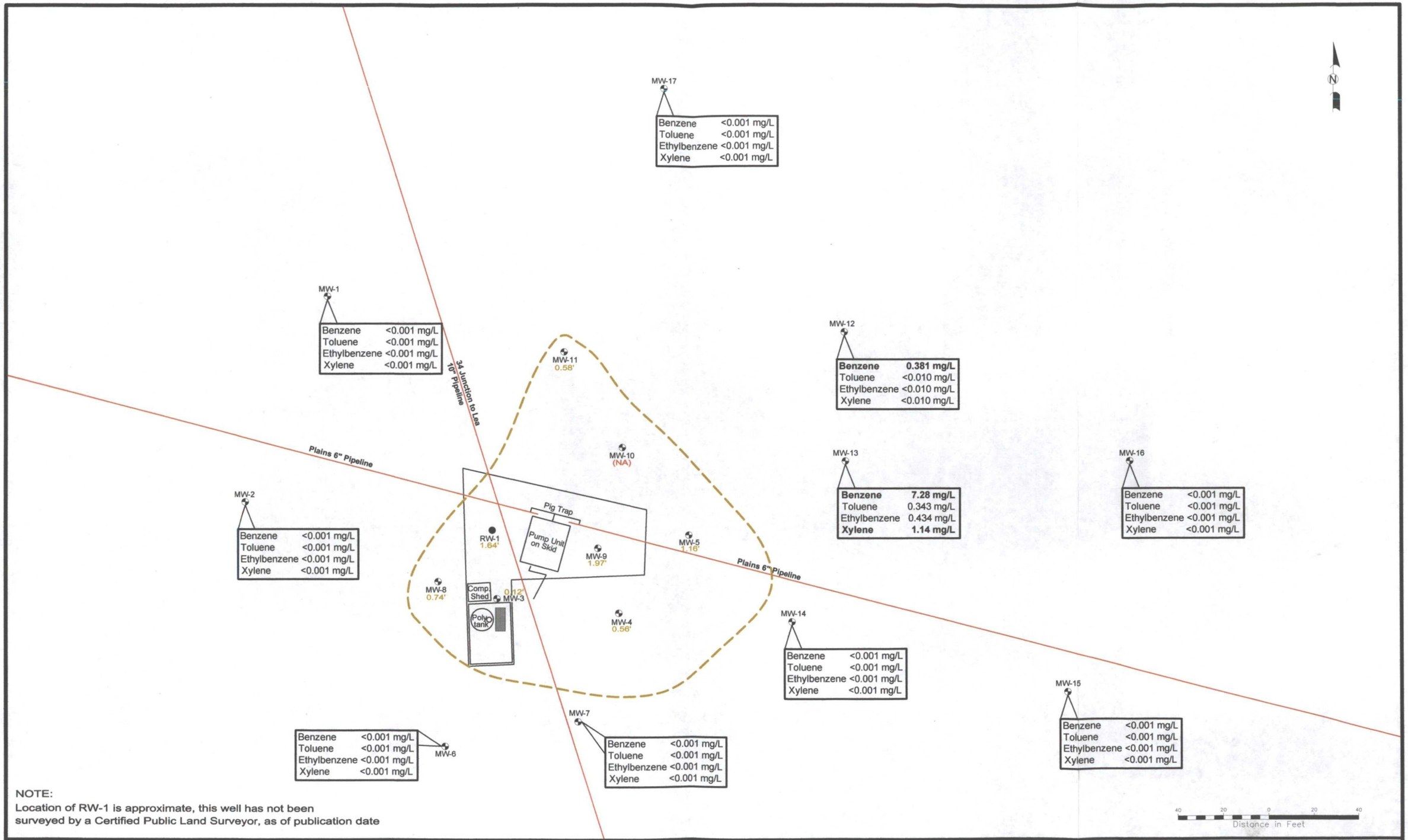
NMOCD Reference No. 1R-0456

Figure 2D
Inferred Groundwater Gradient Map
(11/28/2011)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

December 7, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51.42" Long. W 103° 19' 54.4"



NOTE:
Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- 0.18' PSH Thickness (in feet)
- <0.001 Constituent Concentration (mg/L)
- (NA) PSH Thickness Data Unavailable
- Inferred PSH Extent
- (NS) Not Sampled

NMOCD Reference No. 1R-0456

Figure 3A
Inferred PSH and Dissolved Phase Extent Map (3/1/11)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

April 18, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"

N

MW-17

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-1

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

34 Junction to Lea 10" Pipeline

MW-11
0.38'

MW-12

Benzene	**2.39 mg/L**
Toluene	<0.010 mg/L
Ethylbenzene	<0.010 mg/L
Xylene	0.0695 mg/L

Plains 6" Pipeline

MW-10
5.16'

MW-13

Benzene	**9.23 mg/L**
Toluene	<0.050 mg/L
Ethylbenzene	<0.050 mg/L
Xylene	<0.050 mg/L

MW-16

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-2

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

Pig Trap

Pump Unit on Skid

RW-1
4.35'

MW-5
3.27'

MW-9
5.08'

Plains 6" Pipeline

MW-8
3.53'

Comp. Shed

(NA)
MW-3

Poly tank

MW-4
8.96'

MW-14

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-15

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-7

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

Benzene	<0.001 mg/L
Toluene	<0.001 mg/L
Ethylbenzene	<0.001 mg/L
Xylene	<0.001 mg/L

MW-6

NOTE:
Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

40 20 0 20 40
Distance in Feet

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- 0.18' PSH Thickness (in feet)
- <0.001 Constituent Concentration (mg/L)
- (NA) PSH Thickness Data Unavailable
- Inferred PSH Extent
- (NS) Not Sampled

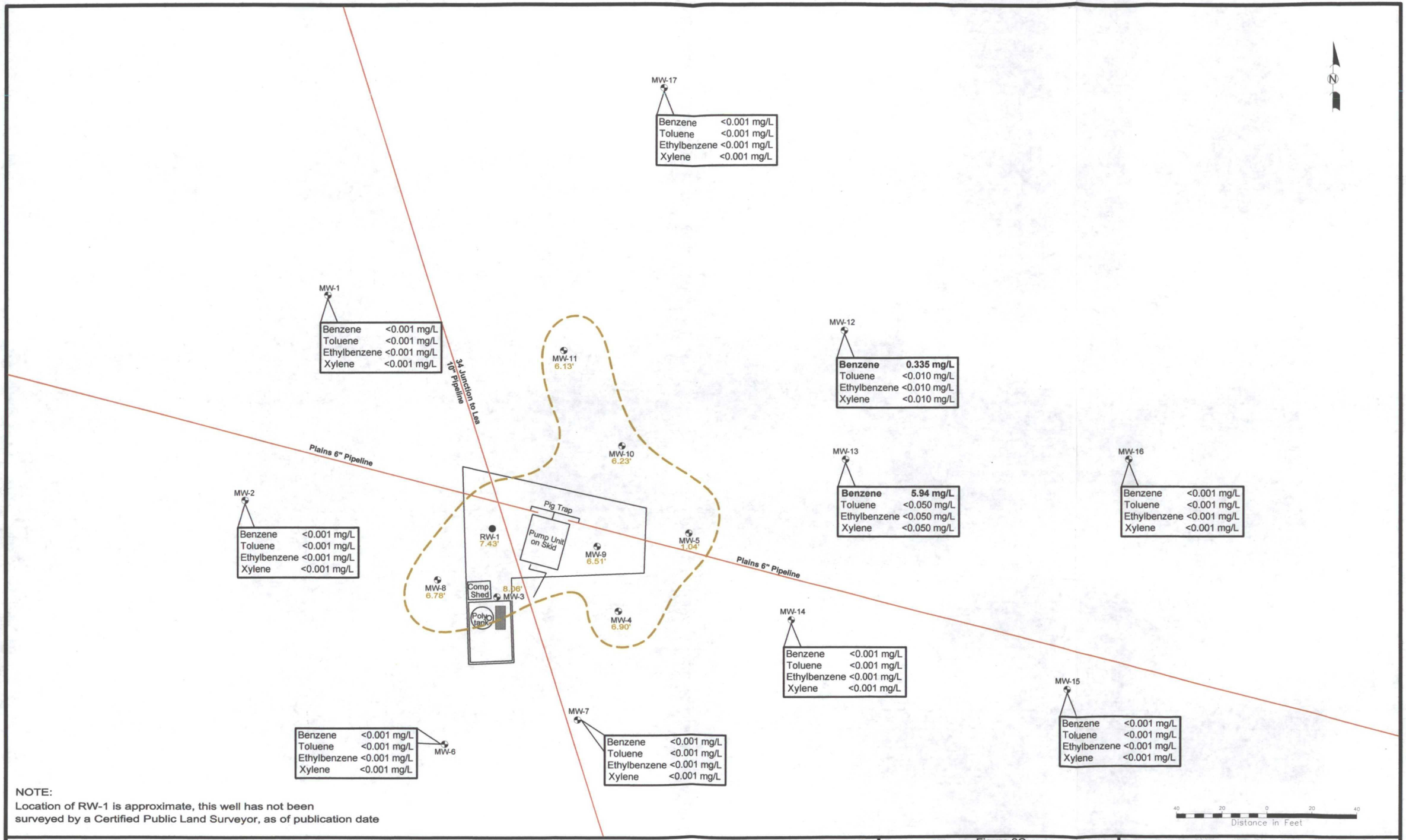
NMOCD Reference No. 1R-0456

Figure 3B
Inferred PSH and Dissolved Phase Extent Map (5/3/11)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

June 1, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"



NOTE:
Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- 0.18' PSH Thickness (in feet)
- <0.001 Constituent Concentration (mg/L)
- (NA) PSH Thickness Data Unavailable
- Inferred PSH Extent
- (NS) Not Sampled

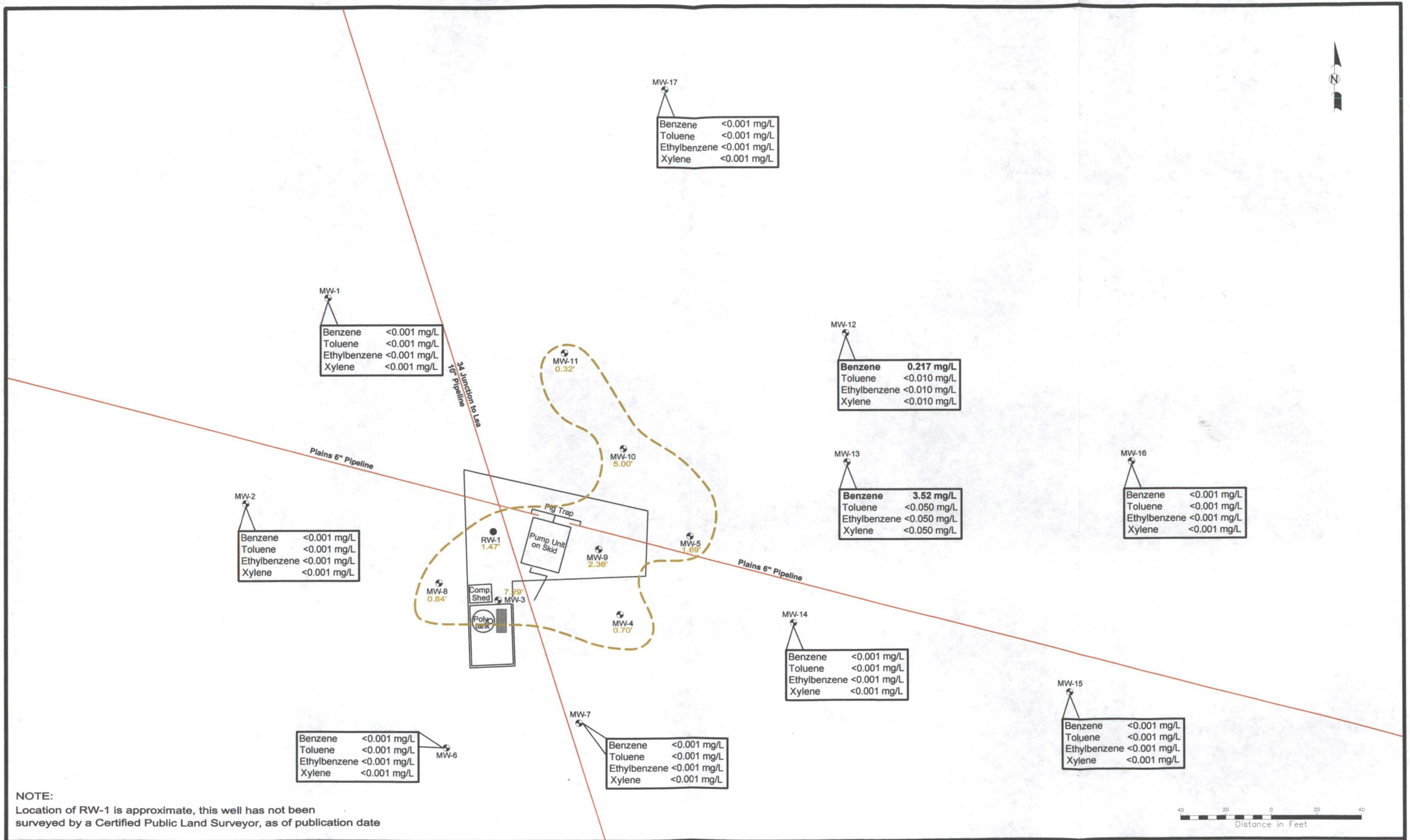
NMOCD Reference No. 1R-0456

Figure 3C
Inferred PSH and Dissolved Phase Extent Map (8/16/2011)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

August 31, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51' 42.4" Long. W 103° 19' 54.4"



NOTE:
Location of RW-1 is approximate, this well has not been surveyed by a Certified Public Land Surveyor, as of publication date

LEGEND:

- Monitor Well Location
- Recovery Well Location
- Pipeline
- 0.18' PSH Thickness (in feet)
- <0.001 Constituent Concentration (mg/L)
- (NA) PSH Thickness Data Unavailable
- Inferred PSH Extent
- (NS) Not Sampled

NMOCD Reference No. 1R-0456

Figure 3D
Inferred PSH and Dissolved Phase Extent Map (11/28/2011)
Plains Marketing, L.P.
34 Junction South Station
Lea County, NM

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

December 7, 2011	Scale: 1" = 40'	CAD By: TA	Checked By: RKR

Lat. N 32° 32' 51.42" Long. W 103° 19' 54.4"

Tables

TABLE 1

GROUNDWATER ELEVATION DATA - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	*03/01/11*	3,850.68	-	60.76	0.00	3,789.92
MW - 1	*05/03/11*	3,850.68	-	61.55	0.00	3,789.13
MW - 1	*08/16/11*	3,850.68	-	61.70	0.00	3,788.98
MW - 1	*11/28/11*	3,850.68	-	61.86	0.00	3,788.82
MW - 2	*03/01/11*	3,850.67	-	60.31	0.00	3,790.36
MW - 2	*05/03/11*	3,850.67	-	61.07	0.00	3,789.60
MW - 2	*08/16/11*	3,850.67	-	61.23	0.00	3,789.44
MW - 2	*11/28/11*	3,850.67	-	61.39	0.00	3,789.28
MW - 3	*03/01/11*	3,850.43	61.40	61.52	0.12	3,789.01
MW - 3	*05/03/11*	3,850.43	**Well Casing Damaged by Fire**			
MW - 3	*08/16/11*		60.34	68.40	8.06	
MW - 3	09/06/11		61.01	68.50	7.49	
MW - 3	09/08/11		61.58	65.75	4.17	
MW - 3	09/13/11		61.66	65.08	3.42	
MW - 3	10/11/11		61.05	68.05	7.00	
MW - 3	10/21/11		61.34	67.10	5.76	
MW - 3	*11/28/11*		61.12	68.41	7.29	
MW - 4	*03/01/11*	3,850.26	61.26	61.82	0.56	3,788.92
MW - 4	*05/03/11*	3,850.26	61.25	70.21	8.96	3,787.67
MW - 4	*08/16/11*	3,850.26	61.37	68.27	6.90	3,787.86
MW - 4	10/21/11	3,850.26	61.54	68.87	7.33	3,787.62
MW - 4	*11/28/11*	3,850.26	63.22	63.92	0.70	3,786.94
MW - 5	01/13/11	3,849.77	61.17	62.11	0.94	3,788.46
MW - 5	01/25/11	3,849.77	61.07	62.96	1.89	3,788.42
MW - 5	*03/01/11*	3,849.77	60.90	62.06	1.16	3,788.70
MW - 5	*05/03/11*	3,849.77	60.94	64.21	3.27	3,788.34
MW - 5	05/18/11	3,849.77	60.85	61.45	0.60	3,788.83
MW - 5	05/25/11	3,849.77	61.31	62.62	1.31	3,788.26
MW - 5	05/31/11	3,849.77	61.05	62.15	1.10	3,788.56
MW - 5	06/08/11	3,849.77	61.25	62.30	1.05	3,788.36
MW - 5	06/16/11	3,849.77	61.32	62.35	1.03	3,788.30
MW - 5	06/22/11	3,849.77	61.30	62.34	1.04	3,788.31
MW - 5	06/30/11	3,849.77	61.40	62.48	1.08	3,788.21
MW - 5	07/06/11	3,849.77	61.46	62.59	1.13	3,788.14
MW - 5	07/13/11	3,849.77	61.38	62.63	1.25	3,788.20
MW - 5	07/15/11	3,849.77	61.52	62.11	0.59	3,788.16
MW - 5	07//19/11	3,849.77	61.55	61.98	0.43	3,788.16
MW - 5	07/21/11	3,849.77	61.60	61.89	0.29	3,788.13
MW - 5	07/26/11	3,849.77	61.58	61.75	0.17	3,788.16
MW - 5	07/28/11	3,849.77	61.55	62.03	0.48	3,788.15
MW - 5	08/02/11	3,849.77	61.57	61.98	0.41	3,788.14
MW - 5	08/12/11	3,849.77	61.91	61.97	0.06	3,787.85
MW - 5	*08/16/11*	3,849.77	61.48	62.52	1.04	3,788.13
MW - 5	08/19/11	3,849.77	61.45	62.02	0.57	3,788.23
MW - 5	08/23/11	3,849.77	61.43	67.90	6.47	3,787.37
MW - 5	08/30/11	3,849.77	61.50	62.45	0.95	3,788.13
MW - 5	09/01/11	3,849.77	61.61	62.12	0.51	3,788.08
MW - 5	09/06/11	3,849.77	61.63	62.11	0.48	3,788.07

TABLE 1

GROUNDWATER ELEVATION DATA - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	09/08/11	3,849.77	61.64	62.00	0.36	3,788.08
MW - 5	09/13/11	3,849.77	61.63	62.06	0.43	3,788.08
MW - 5	09/22/11	3,849.77	61.61	62.22	0.61	3,788.07
MW - 5	10/11/11	3,849.77	61.61	62.38	0.77	3,788.04
MW - 5	10/21/11	3,849.77	61.65	62.38	0.73	3,788.01
MW - 5	*11/28/11*	3,849.77	61.54	63.23	1.69	3,787.98
MW - 6	*03/01/11*	3,851.10	-	61.50	0.00	3,789.60
MW - 6	*05/03/11*	3,851.10	-	61.88	0.00	3,789.22
MW - 6	*08/16/11*	3,851.10	-	62.04	0.00	3,789.06
MW - 6	*11/28/11*	3,851.10	-	62.20	0.00	3,788.90
MW - 7	*03/01/11*	3,847.03	-	57.34	0.00	3,789.69
MW - 7	*05/03/11*	3,847.03	-	58.29	0.00	3,788.74
MW - 7	*08/16/11*	3,847.03	-	58.45	0.00	3,788.58
MW - 7	*11/28/11*	3,847.03	-	58.59	0.00	3,788.44
MW - 8	*03/01/11*	3,851.00	61.37	62.11	0.74	3,789.52
MW - 8	*05/03/11*	3,851.00	62.15	65.68	3.53	3,788.32
MW - 8	*08/16/11*	3,851.00	61.21	67.99	6.78	3,788.77
MW - 8	10/21/11	3,851.00	61.18	66.71	5.53	3,788.99
MW - 8	*11/28/11*	3,851.00	63.03	63.87	0.84	3,787.84
MW - 9	*03/01/11*	3,851.04	61.57	63.54	1.97	3,789.17
MW - 9	*05/03/11*	3,851.04	61.62	66.70	5.08	3,788.66
MW - 9	*08/16/11*	3,851.04	61.42	67.93	6.51	3,788.64
MW - 9	10/21/11	3,851.04	61.47	68.01	6.54	3,788.59
MW - 9	*11/28/11*	3,851.04	62.49	64.85	2.36	3,788.20
MW - 10	*03/01/11*	3,851.07	NA	NA		
MW - 10	*05/03/11*	3,851.07	61.74	66.90	5.16	3,788.56
MW - 10	*08/16/11*	3,851.07	61.86	68.09	6.23	3,788.28
MW - 10	10/21/11	3,851.07	61.70	65.41	3.71	3,788.81
MW - 10	*11/28/11*	3,851.07	62.00	67.00	5.00	3,788.32
MW - 11	*03/01/11*	3,850.96	62.04	62.62	0.58	3,788.83
MW - 11	*05/03/11*	3,850.96	62.06	62.44	0.38	3,788.84
MW - 11	*08/16/11*	3,850.96	61.94	68.07	6.13	3,788.10
MW - 11	10/21/11	3,850.96	61.80	66.95	5.15	3,788.39
MW - 11	*11/28/11*	3,850.96	62.71	63.03	0.32	3,788.20
MW - 12	01/25/11	3,850.45	-	62.83	0.00	3,787.62
MW - 12	*03/01/11*	3,850.45	-	62.06	0.00	3,788.39
MW - 12	*05/03/11*	3,850.45	-	62.93	0.00	3,787.52
MW - 12	05/18/11	3,850.45	-	62.95	0.00	3,787.50
MW - 12	05/25/11	3,850.45	-	62.98	0.00	3,787.47
MW - 12	05/31/11	3,850.45	-	62.96	0.00	3,787.49
MW - 12	06/08/11	3,850.45	-	62.99	0.00	3,787.46
MW - 12	06/16/11	3,850.45	-	62.94	0.00	3,787.51
MW - 12	06/22/11	3,850.45	-	62.88	0.00	3,787.57
MW - 12	06/30/11	3,850.45	-	62.94	0.00	3,787.51
MW - 12	07/06/11	3,850.45	-	62.96	0.00	3,787.49

TABLE 1

GROUNDWATER ELEVATION DATA - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 12	07/13/11	3,850.45	-	62.97	0.00	3,787.48
MW - 12	07/15/11	3,850.45	-	63.05	0.00	3,787.40
MW - 12	07/19/11	3,850.45	-	63.04	0.00	3,787.41
MW - 12	07/21/11	3,850.45	-	63.06	0.00	3,787.39
MW - 12	07/26/11	3,850.45	-	63.03	0.00	3,787.42
MW - 12	07/28/11	3,850.45	-	62.98	0.00	3,787.47
MW - 12	08/02/11	3,850.45	-	63.04	0.00	3,787.41
MW - 12	08/12/11	3,850.45	-	63.00	0.00	3,787.45
MW - 12	*08/16/11*	3,850.45	-	63.09	0.00	3,787.36
MW - 12	08/19/11	3,850.45	-	63.11	0.00	3,787.34
MW - 12	08/23/11	3,850.45	-	63.14	0.00	3,787.31
MW - 12	08/30/11	3,850.45	-	63.05	0.00	3,787.40
MW - 12	09/01/11	3,850.45	-	63.16	0.00	3,787.29
MW - 12	09/06/11	3,850.45	-	63.14	0.00	3,787.31
MW - 12	09/08/11	3,850.45	-	63.13	0.00	3,787.32
MW - 12	09/13/11	3,850.45	-	63.15	0.00	3,787.30
MW - 12	09/22/11	3,850.45	-	63.15	0.00	3,787.30
MW - 12	10/11/11	3,850.45	-	63.18	0.00	3,787.27
MW - 12	10/21/11	3,850.45	-	63.19	0.00	3,787.26
MW - 12	*11/28/11*	3,850.45	-	63.25	0.00	3,787.20
MW - 13	01/25/11		-	62.82		
MW - 13	*03/01/11*		-	62.11		
MW - 13	*05/03/11*		-	62.90		
MW - 13	05/18/11		-	62.98		
MW - 13	05/25/11		-	62.93		
MW - 13	05/31/11		-	62.95		
MW - 13	06/08/11		-	62.97		
MW - 13	06/16/11		-	62.99		
MW - 13	06/22/11		-	62.98		
MW - 13	06/30/11		-	62.98		
MW - 13	07/06/11		-	62.98		
MW - 13	07/13/11		-	63.02		
MW - 13	07/15/11		-	63.04		
MW - 13	07/19/11		-	62.99		
MW - 13	07/21/11		-	63.06		
MW - 13	07/26/11		-	63.05		
MW - 13	07/28/11		-	63.00		
MW - 13	08/02/11		-	63.03		
MW - 13	08/12/11		-	63.07		
MW - 13	*08/16/11*		-	63.07		
MW - 13	08/19/11		-	63.10		
MW - 13	08/23/11		-	63.14		
MW - 13	08/30/11		-	63.08		
MW - 13	09/01/11		-	63.13		
MW - 13	09/06/11		-	63.13		
MW - 13	09/08/11		-	63.10		
MW - 13	09/13/11		-	63.14		
MW - 13	09/22/11		-	63.13		
MW - 13	10/11/11		-	63.14		
MW - 13	10/21/11		-	63.19		
MW - 13	*11/28/11*		-	63.25		

TABLE 1

GROUNDWATER ELEVATION DATA - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	*03/01/11*		-	61.92		
MW - 14	*05/03/11*		-	62.76		
MW - 14	*08/16/11*		-	62.91		
MW - 14	*11/28/11*		-	63.07		
MW - 15	01/25/11		-	62.96		
MW - 15	*03/01/11*		-	62.85		
MW - 15	*05/03/11*		-	63.29		
MW - 15	*08/16/11*		-	63.43		
MW - 15	*11/28/11*		-	63.62		
MW - 16	*03/01/11*		-	62.53		
MW - 16	*05/03/11*		-	62.92		
MW - 16	*08/16/11*		-	63.08		
MW - 16	*11/28/11*		-	63.26		
MW - 17	*03/01/11*		-	62.44		
MW - 17	*05/03/11*		-	62.77		
MW - 17	*08/16/11*		-	62.91		
MW - 17	*11/28/11*		-	63.06		
RW - 1	*03/01/11*	-	60.70	62.34	1.64	
RW - 1	*05/03/11*	-	61.01	65.36	4.35	
RW - 1	*08/16/11*	-	60.79	68.22	7.43	
RW - 1	10/21/11	-	60.58	63.61	3.03	
RW - 1	*11/28/11*	-	62.23	63.70	1.47	

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

TABLE 2

CONCENTRATIONS OF BENZENE IN GROUNDWATER - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW - 1	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 1	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 1	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 1	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 2	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 2	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 2	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 2	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 3	03/01/11	Not sampled Due to PSH in Well				
MW - 3	05/03/11	Not sampled Due to PSH in Well				
MW - 3	08/16/11	Not sampled Due to PSH in Well				
MW - 3	11/28/11	Not sampled Due to PSH in Well				
MW - 4	03/01/11	Not sampled Due to PSH in Well				
MW - 4	05/03/11	Not sampled Due to PSH in Well				
MW - 4	08/16/11	Not sampled Due to PSH in Well				
MW - 4	11/28/11	Not sampled Due to PSH in Well				
MW - 5	03/01/11	Not sampled Due to PSH in Well				
MW - 5	05/03/11	Not sampled Due to PSH in Well				
MW - 5	08/16/11	Not sampled Due to PSH in Well				
MW - 5	11/28/11	Not sampled Due to PSH in Well				
MW - 6	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 6	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 6	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 6	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 7	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 7	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 7	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 7	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 8	03/01/11	Not sampled Due to PSH in Well				
MW - 8	05/03/11	Not sampled Due to PSH in Well				
MW - 8	08/16/11	Not sampled Due to PSH in Well				
MW - 8	11/28/11	Not sampled Due to PSH in Well				
MW - 9	03/01/11	Not sampled Due to PSH in Well				
MW - 9	05/03/11	Not sampled Due to PSH in Well				
MW - 9	08/16/11	Not sampled Due to PSH in Well				
MW - 9	11/28/11	Not sampled Due to PSH in Well				
MW - 10	03/01/11	Not sampled Due to PSH in Well				
MW - 10	05/03/11	Not sampled Due to PSH in Well				
MW - 10	08/16/11	Not sampled Due to PSH in Well				
MW - 10	11/28/11	Not sampled Due to PSH in Well				
MW - 11	03/01/11	Not sampled Due to PSH in Well				
MW - 11	05/03/11	Not sampled Due to PSH in Well				
MW - 11	08/16/11	Not sampled Due to PSH in Well				
MW - 11	11/28/11	Not sampled Due to PSH in Well				

TABLE 2

CONCENTRATIONS OF BENZENE IN GROUNDWATER - 2011

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO. 1R-0456

SAMPLE LOCATION	SAMPLE DATE	Methods: EPA SW 846-8021, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW - 12	03/01/11	**0.3810**	<0.010	<0.010	<0.010	
MW - 12	05/03/11	**2.3900**	<0.010	<0.010	0.0695	
MW - 12	08/16/11	**0.3350**	<0.010	<0.010	<0.010	
MW - 12	11/28/11	**0.2170**	<0.010	<0.010	<0.010	
MW - 13	03/01/11	**7.280**	0.3430	0.4340	**1.140**	
MW - 13	05/03/11	**9.230**	<0.050	<0.050	<0.050	
MW - 13	08/16/11	**5.940**	<0.050	<0.050	<0.050	
MW - 13	11/28/11	**3.520**	<0.050	<0.050	<0.050	
MW - 14	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 14	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 14	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 14	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 15	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 15	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 15	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 15	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	11/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 17	03/01/11	<0.001	<0.001	<0.001	<0.001	
MW - 17	05/03/11	<0.001	<0.001	<0.001	<0.001	
MW - 17	08/16/11	<0.001	<0.001	<0.001	<0.001	
MW - 17	11/28/11	<0.001	<0.001	<0.001	<0.001	
RW - 1	03/01/11	Not sampled Due to PSH in Well				
RW - 1	05/03/11	Not sampled Due to PSH in Well				
RW - 1	08/16/11	Not sampled Due to PSH in Well				
RW - 1	11/28/11	Not sampled Due to PSH in Well				

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

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0456

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	11/11/08	<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
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		
MW - 2	11/11/08	<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
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		
MW - 3	11/11/08	Not sampled Due to Insufficient Water Volume																		
	11/24/09	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	**0.149**	<0.000926	**0.163**	<0.000926	**0.613**	**1.36**	**1.82**	0.0446
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 4	11/11/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	**0.0136**	<0.000184	**0.0149**	<0.000184	**0.0853**	**0.177**	**0.222**	<0.000184
	11/24/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	**0.0111**	<0.000184	**0.0108**	<0.000184	**0.0497**	**0.0881**	**0.112**	0.00327
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 5	11/11/08	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.000526	<0.000183	0.00042	<0.000183	0.00143	0.00401	0.0032	0.000337
	11/24/09	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188	<0.000188
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 6	11/11/08	<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
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		
MW - 7	11/11/08	<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
	11/24/09	<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
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0456
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	11/11/08	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	**0.0332**	<0.000922	**0.0301**	<0.000922	**0.124**	**0.270**	**0.334**	<0.000922
	11/24/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	**0.0706**	<0.000917	**0.0768**	<0.000917	**0.273**	**0.637**	**0.824**	<0.000917
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 9	11/11/08	Not sampled Due to Insufficient Water Volume																		
	11/24/09	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	**0.0785**	<0.00184	<0.00184	**0.515**	<0.00184	**0.546**	<0.00184	**2.02**	**4.59**	**6.18**	0.141
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 10	11/11/08	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	**0.0618**	<0.000962	**0.0709**	<0.000962	**0.308**	**0.773**	**0.987**	0.0194
	11/24/09	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	<0.000962	**0.0294**	<0.000962	<0.000962	**0.193**	<0.000962	**0.200**	<0.000962	**0.815**	**1.91**	**2.51**	0.0562
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 11	11/11/08	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192	<0.000192
	11/24/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	**0.102**	<0.000917	**0.107**	<0.000917	**0.303**	**0.797**	**1.04**	0.0276
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		
MW - 12	11/11/08	<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
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		
MW - 13	11/11/08	<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
	11/24/09	<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	0.000713	<0.000184	**0.0232**	**0.0163**	**0.0180**	<0.000184
	11/19/10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000569	<0.000184	0.000609	<0.000184	0.00669	0.00638	<0.000184	0.000356
	12/16/11	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000362	<0.000184	0.000397	<0.000184	0.000439	0.00197	<0.000184	0.000314

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
34 JUNCTION SOUTH STATION
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0456

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 - 14	11/11/08	<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
	11/24/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled as part of Quarterly Monitoring Event.																		
MW - 15	05/21/10	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	0.000354	<0.000186	<0.000186	<0.000186
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186	<0.000186
MW-16	05/21/10	<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	0.000236	<0.000184	<0.000184	<0.000184
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	<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
MW-17	05/21/10	<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	0.000192	<0.000185	<0.000185	<0.000185
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194	<0.000194
RW - 1	11/11/08	Not sampled Due to Insufficient Water Volume																		
	11/24/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	**0.0270**	<0.000922	<0.000922	**0.171**	<0.000922	**0.176**	<0.000922	**0.678**	**1.53**	**2.02**	0.0485
	11/19/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/16/11	Not Sampled due to the presence of PSH.																		

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

Appendices

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 Marketing, LP	Contact Camille Reynolds
Address 5805 East Hwy. 80, Midland, TX 79706	Telephone No. 505-441-0965
Facility Name 34 Junction South Station	Facility Type Meter Facility

Surface Owner State Land Office	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	2	17S	36E					Lea

Latitude 32° 51'42.4" **Longitude** 103° 19'54.4"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 15 barrels	Volume Recovered .5 barrels
Source of Release Malfunction of check valve on air eliminator	Date and Hour of Occurrence 6-10-05 @ 07:00	Date and Hour of Discovery 6-10-05 @ 07:45
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheely	
By Whom? Camille Reynolds	Date and Hour 6-10-05 @ 13:31	
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.* Mechanical malfunction of check valve on air eliminator resulted in release. Isolated air eliminator off of metering system. The station produces approximately 100 barrels of sweet crude oil per day. The pressure on the line is <10 psi and the gravity on the sweet crude is 42.5, the H2S content is <10 ppm.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was 1,620 square feet.

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: Camille Reynolds

Printed Name: Camille Reynolds

Title: Remediation Coordinator

E-mail Address: cjreynolds@paalp.com

Date: 6-13-05 Phone:505-441-0965

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* 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
5015 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

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

Report Date: March 14, 2011

Work Order: 11030211

Project Location: New Mexico
Project Name: 34 Junction South
Project Number: 2005-00138
SRS #: 2005-00138

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
259240	MW-15	water	2011-03-01	10:45	2011-03-02
259241	MW-16	water	2011-03-01	11:30	2011-03-02
259242	MW-17	water	2011-03-01	12:15	2011-03-02
259243	MW-7	water	2011-03-01	13:00	2011-03-02
259244	MW-14	water	2011-03-01	13:45	2011-03-02
259245	MW-1	water	2011-03-01	14:30	2011-03-02
259246	MW-6	water	2011-03-01	15:15	2011-03-02
259247	MW-2	water	2011-03-01	16:00	2011-03-02
259248	MW-12	water	2011-03-01	16:45	2011-03-02
259249	MW-13	water	2011-03-01	17:30	2011-03-02

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 10 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 34 Junction South were received by TraceAnalysis, Inc. on 2011-03-02 and assigned to work order 11030211. Samples for work order 11030211 were received intact without headspace and at a temperature of 2.2 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	67105	2011-03-07 at 08:25	79086	2011-03-07 at 08:25

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 11030211 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: 259240 - MW-15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.102	mg/L	1	0.100	102	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0856	mg/L	1	0.100	86	51.1 - 128

Sample: 259241 - MW-16

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.104	mg/L	1	0.100	104	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0889	mg/L	1	0.100	89	51.1 - 128

Sample: 259242 - MW-17

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.100	mg/L	1	0.100	100	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0866	mg/L	1	0.100	87	51.1 - 128

Sample: 259243 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.100	mg/L	1	0.100	100	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0873	mg/L	1	0.100	87	51.1 - 128

Sample: 259244 - MW-14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.101	mg/L	1	0.100	101	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0871	mg/L	1	0.100	87	51.1 - 128

Sample: 259245 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.103	mg/L	1	0.100	103	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0894	mg/L	1	0.100	89	51.1 - 128

Sample: 259246 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.104	mg/L	1	0.100	104	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0891	mg/L	1	0.100	89	51.1 - 128

Sample: 259247 - MW-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	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)		0.101	mg/L	1	0.100	101	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0865	mg/L	1	0.100	86	51.1 - 128

Sample: 259248 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.381**	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene		<0.0100	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.963	mg/L	10	1.00	96	67.8 - 126
4-Bromofluorobenzene (4-BFB)		0.899	mg/L	10	1.00	90	51.1 - 128

Sample: 259249 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	79086	Date Analyzed:	2011-03-07	Analyzed By:	ME
Prep Batch:	67105	Sample Preparation:	2011-03-07	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**7.28**	mg/L	50	0.00100
Toluene		**0.343**	mg/L	50	0.00100
Ethylbenzene		**0.434**	mg/L	50	0.00100
Xylene		**1.14**	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.39	mg/L	50	5.00	88	67.8 - 126
4-Bromofluorobenzene (4-BFB)		3.97	mg/L	50	5.00	79	51.1 - 128

Method Blank (1) QC Batch: 79086

QC Batch: 79086 | Date Analyzed: 2011-03-07 | Analyzed By: ME
Prep Batch: 67105 | QC Preparation: 2011-03-07 | 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)		0.0825	mg/L	1	0.100	82	70.2 - 118
4-Bromofluorobenzene (4-BFB)		0.0826	mg/L	1	0.100	83	47.3 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 79086 | Date Analyzed: 2011-03-07 | Analyzed By: ME
Prep Batch: 67105 | QC Preparation: 2011-03-07 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0964	mg/L	1	0.100	<0.000400	96	82.9 - 108
Toluene	0.0962	mg/L	1	0.100	<0.000300	96	82.7 - 107
Ethylbenzene	0.0936	mg/L	1	0.100	<0.000300	94	78.8 - 106
Xylene	0.282	mg/L	1	0.300	<0.000333	94	79.3 - 106

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	0.0984	mg/L	1	0.100	<0.000400	98	82.9 - 108	2	20
Toluene	0.0972	mg/L	1	0.100	<0.000300	97	82.7 - 107	1	20
Ethylbenzene	0.0952	mg/L	1	0.100	<0.000300	95	78.8 - 106	2	20
Xylene	0.287	mg/L	1	0.300	<0.000333	96	79.3 - 106	2	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)	0.0948	0.0812	mg/L	1	0.100	95	81	67.3 - 113
4-Bromofluorobenzene (4-BFB)	0.0979	0.0857	mg/L	1	0.100	98	86	68.2 - 124

Matrix Spike (MS-1) Spiked Sample: 259361

QC Batch: 79086 | Date Analyzed: 2011-03-07 | Analyzed By: ME
Prep Batch: 67105 | QC Preparation: 2011-03-07 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0819	mg/L	1	0.100	<0.000400	82	77.9 - 114
Toluene	0.0827	mg/L	1	0.100	<0.000300	83	78.3 - 111
Ethylbenzene	0.0832	mg/L	1	0.100	<0.000300	83	75.3 - 110
Xylene	0.250	mg/L	1	0.300	<0.000333	83	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	0.0841	mg/L	1	0.100	<0.000400	84	77.9 - 114	3	20
Toluene	0.0847	mg/L	1	0.100	<0.000300	85	78.3 - 111	2	20
Ethylbenzene	0.0849	mg/L	1	0.100	<0.000300	85	75.3 - 110	2	20
Xylene	0.253	mg/L	1	0.300	<0.000333	84	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)	0.0909	0.0934	mg/L	1	0.1	91	93	68.3 - 107
4-Bromofluorobenzene (4-BFB)	0.0862	0.0904	mg/L	1	0.1	86	90	60.1 - 135

Standard (CCV-1)

QC Batch: 79086 | Date Analyzed: 2011-03-07 | 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	0.0934	93	80 - 120	2011-03-07
Toluene		mg/L	0.100	0.0928	93	80 - 120	2011-03-07
Ethylbenzene		mg/L	0.100	0.0882	88	80 - 120	2011-03-07
Xylene		mg/L	0.300	0.273	91	80 - 120	2011-03-07

Standard (CCV-2)

QC Batch: 79086 Date Analyzed: 2011-03-07 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	0.0935	94	80 - 120	2011-03-07
Toluene		mg/L	0.100	0.0921	92	80 - 120	2011-03-07
Ethylbenzene		mg/L	0.100	0.0911	91	80 - 120	2011-03-07
Xylene		mg/L	0.300	0.269	90	80 - 120	2011-03-07

Standard (CCV-3)

QC Batch: 79086 Date Analyzed: 2011-03-07 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	0.0978	98	80 - 120	2011-03-07
Toluene		mg/L	0.100	0.0965	96	80 - 120	2011-03-07
Ethylbenzene		mg/L	0.100	0.0938	94	80 - 120	2011-03-07
Xylene		mg/L	0.300	0.281	94	80 - 120	2011-03-07

Standard (CCV-4)

QC Batch: 79086 Date Analyzed: 2011-03-07 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	0.0931	93	80 - 120	2011-03-07
Toluene		mg/L	0.100	0.0917	92	80 - 120	2011-03-07
Ethylbenzene		mg/L	0.100	0.0897	90	80 - 120	2011-03-07
Xylene		mg/L	0.300	0.267	89	80 - 120	2011-03-07

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

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: May 6, 2011

Work Order: 11050406

Project Location: SW of Lovington, NM
Project Name: 34 Junction South
Project Number: 34 Junction South
SRS #: 2005-00138

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
265428	MW 15	water	2011-05-03	12:28	2011-05-04
265429	MW 16	water	2011-05-03	12:38	2011-05-04
265430	MW 17	water	2011-05-03	12:47	2011-05-04
265431	MW 7	water	2011-05-03	13:03	2011-05-04
265432	MW 14	water	2011-05-03	13:10	2011-05-04
265433	MW 1	water	2011-05-03	13:25	2011-05-04
265434	MW 6	water	2011-05-03	13:30	2011-05-04
265435	MW 2	water	2011-05-03	13:37	2011-05-04
265436	MW 12	water	2011-05-03	13:49	2011-05-04
265437	MW 13	water	2011-05-03	13:58	2011-05-04

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 34 Junction South were received by TraceAnalysis, Inc. on 2011-05-04 and assigned to work order 11050406. Samples for work order 11050406 were received intact at a temperature of 7.9 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	68754	2011-05-05 at 08:42	81000	2011-05-05 at 08:42

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 11050406 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.

Sample was received on ice.

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: 265428 - MW 15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.102	mg/L	1	0.100	102	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.100	mg/L	1	0.100	100	51.1 - 128

Sample: 265429 - MW 16

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0982	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0947	mg/L	1	0.100	95	51.1 - 128

Sample: 265430 - MW 17

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0883	mg/L	1	0.100	88	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0860	mg/L	1	0.100	86	51.1 - 128

Sample: 265431 - MW 7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0906	mg/L	1	0.100	91	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0893	mg/L	1	0.100	89	51.1 - 128

Sample: 265432 - MW 14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.101	mg/L	1	0.100	101	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0963	mg/L	1	0.100	96	51.1 - 128

Sample: 265433 - MW 1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0984	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0935	mg/L	1	0.100	94	51.1 - 128

Sample: 265434 - MW 6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0985	mg/L	1	0.100	98	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0950	mg/L	1	0.100	95	51.1 - 128

Sample: 265435 - MW 2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.0876	mg/L	1	0.100	88	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.0839	mg/L	1	0.100	84	51.1 - 128

Sample: 265436 - MW 12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**2.39**	mg/L	10	0.00100
Toluene		1	<0.0100	mg/L	10	0.00100
Ethylbenzene		1	<0.0100	mg/L	10	0.00100
Xylene		1	**0.0695**	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	0.926	mg/L	10	1.00	93	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	0.905	mg/L	10	1.00	90	51.1 - 128

Sample: 265437 - MW 13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	81000	Date Analyzed:	2011-05-05	Analyzed By:	ME
Prep Batch:	68754	Sample Preparation:	2011-05-05	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**9.23**	mg/L	50	0.00100
Toluene		1	<0.0500	mg/L	50	0.00100
Ethylbenzene		1	<0.0500	mg/L	50	0.00100
Xylene		1	<0.0500	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1	4.20	mg/L	50	5.00	84	67.8 - 129
4-Bromofluorobenzene (4-BFB)		1	3.99	mg/L	50	5.00	80	51.1 - 128

Method Blanks

Method Blank (1) QC Batch: 81000

QC Batch: 81000 | Date Analyzed: 2011-05-05 | Analyzed By: ME
Prep Batch: 68754 | QC Preparation: 2011-05-05 | 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)		1	0.100	mg/L	1	0.100	100	70.2 - 118
4-Bromofluorobenzene (4-BFB)		1	0.0962	mg/L	1	0.100	96	47.3 - 116

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 81000 | Date Analyzed: 2011-05-05 | Analyzed By: ME
Prep Batch: 68754 | QC Preparation: 2011-05-05 | Prepared By: ME

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0823	mg/L	1	0.100	<0.000400	82	76.8 - 110
Toluene		1	0.0952	mg/L	1	0.100	<0.000300	95	81 - 108
Ethylbenzene		1	0.102	mg/L	1	0.100	<0.000300	102	78.8 - 118
Xylene		1	0.306	mg/L	1	0.300	<0.000333	102	80.3 - 119

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	0.0816	mg/L	1	0.100	<0.000400	82	76.8 - 110	1	20
Toluene		1	0.0949	mg/L	1	0.100	<0.000300	95	81 - 108	0	20
Ethylbenzene		1	0.101	mg/L	1	0.100	<0.000300	101	78.8 - 118	1	20
Xylene		1	0.304	mg/L	1	0.300	<0.000333	101	80.3 - 119	1	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)	1	0.0944	0.0917	mg/L	1	0.100	94	92	66.6 - 114
4-Bromofluorobenzene (4-BFB)	1	0.0967	0.0936	mg/L	1	0.100	97	94	68.2 - 124

Matrix Spike (MS-1) Spiked Sample: 265560

QC Batch: 81000 | Date Analyzed: 2011-05-05 | Analyzed By: ME
Prep Batch: 68754 | QC Preparation: 2011-05-05 | Prepared By: ME

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	4.71	mg/L	50	5.00	0.8329	78	77.9 - 114
Toluene		1	4.37	mg/L	50	5.00	<0.0150	87	78.3 - 111
Ethylbenzene		1	5.61	mg/L	50	5.00	0.9705	93	75.3 - 110
Xylene		1	14.2	mg/L	50	15.0	0.4066	92	75.7 - 109

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	4.89	mg/L	50	5.00	0.8329	81	77.9 - 114	4	20
Toluene		1	4.58	mg/L	50	5.00	<0.0150	92	78.3 - 111	5	20
Ethylbenzene		1	5.84	mg/L	50	5.00	0.9705	97	75.3 - 110	4	20
Xylene		1	15.0	mg/L	50	15.0	0.4066	97	75.7 - 109	6	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	4.52	4.52	mg/L	50	5	90	90	68.3 - 107
4-Bromofluorobenzene (4-BFB)	1	4.50	4.47	mg/L	50	5	90	89	60.1 - 135

Calibration Standards

Standard (CCV-1)

QC Batch: 81000 | Date Analyzed: 2011-05-05 | 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	0.0843	84	80 - 120	2011-05-05
Toluene		1	mg/L	0.100	0.100	100	80 - 120	2011-05-05
Ethylbenzene		1	mg/L	0.100	0.104	104	80 - 120	2011-05-05
Xylene		1	mg/L	0.300	0.312	104	80 - 120	2011-05-05

Standard (CCV-2)

QC Batch: 81000 | Date Analyzed: 2011-05-05 | 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	0.0811	81	80 - 120	2011-05-05
Toluene		1	mg/L	0.100	0.0931	93	80 - 120	2011-05-05
Ethylbenzene		1	mg/L	0.100	0.0979	98	80 - 120	2011-05-05
Xylene		1	mg/L	0.300	0.292	97	80 - 120	2011-05-05

Standard (CCV-3)

QC Batch: 81000 | Date Analyzed: 2011-05-05 | 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	0.0809	81	80 - 120	2011-05-05
Toluene		1	mg/L	0.100	0.0929	93	80 - 120	2011-05-05
Ethylbenzene		1	mg/L	0.100	0.0971	97	80 - 120	2011-05-05
Xylene		1	mg/L	0.300	0.291	97	80 - 120	2011-05-05

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 # 1105040b

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 #:
Address: (Street, City, Zip) 2057 Commerce Drive
Fax #:
Contact Person: Ron Rounsaville
E-mail:
Invoice to: (If different from above)
Project #: 2005-00138
Project Name: 34 Junction South
Project Location (including state): Lovington, N.M.
Sampler Signature: Carl Vessels

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
265428	mw15	3	VOA	X				X				X		5/3/11	1228
429	mw16	3													1238
430	mw17	3													1247
431	mw7	3													1303
432	mw14	3													1310
433	mw1	3													1325
434	mw6	3													1330
435	mw2	3													1337
436	mw12	3													1349
437	mw13	3													1358

ANALYSIS REQUEST columns: 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

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	Nova	5/4/11	0832		T/A	5/4/11	8:32	INST 7.9 °C OBS °C COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C OBS °C COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C 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

Carrier # Carry

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

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
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 19, 2011

Work Order: 11081718

Project Location: SW of Lovington, NM
Project Name: 34 Junction South
Project Number: 34 Junction South
SRS #: 2005-00138

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
274750	MW-15	water	2011-08-16	11:00	2011-08-17
274751	MW-16	water	2011-08-16	11:45	2011-08-17
274752	MW-17	water	2011-08-16	12:30	2011-08-17
274753	MW-7	water	2011-08-16	13:15	2011-08-17
274754	MW-1	water	2011-08-16	14:00	2011-08-17
274755	MW-6	water	2011-08-16	14:45	2011-08-17
274756	MW-2	water	2011-08-16	15:30	2011-08-17
274757	MW-14	water	2011-08-16	16:15	2011-08-17
274758	MW-12	water	2011-08-16	17:00	2011-08-17
274759	MW-13	water	2011-08-16	17:45	2011-08-17

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.

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

Report Contents

Case Narrative

Samples for project 34 Junction South were received by TraceAnalysis, Inc. on 2011-08-17 and assigned to work order 11081718. Samples for work order 11081718 were received intact without headspace and at a temperature of 3.3 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	71373	2011-08-18 at 11:38	84063	2011-08-18 at 11:38

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 11081718 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: 274750 - MW-15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0912	mg/L	1	0.100	91	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0927	mg/L	1	0.100	93	67.5 - 140.8

Sample: 274751 - MW-16

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0979	mg/L	1	0.100	98	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0981	mg/L	1	0.100	98	67.5 - 140.8

Sample: 274752 - MW-17

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0911	mg/L	1	0.100	91	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0913	mg/L	1	0.100	91	67.5 - 140.8

Sample: 274753 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0919	mg/L	1	0.100	92	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0913	mg/L	1	0.100	91	67.5 - 140.8

Sample: 274754 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0960	mg/L	1	0.100	96	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0963	mg/L	1	0.100	96	67.5 - 140.8

Sample: 274755 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0933	mg/L	1	0.100	93	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0924	mg/L	1	0.100	92	67.5 - 140.8

Sample: 274756 - MW-2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0935	mg/L	1	0.100	94	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0928	mg/L	1	0.100	93	67.5 - 140.8

Sample: 274757 - MW-14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	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)			0.0934	mg/L	1	0.100	93	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0926	mg/L	1	0.100	93	67.5 - 140.8

Sample: 274758 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**0.335**	mg/L	10	0.00100
Toluene	U	1	<0.0100	mg/L	10	0.00100
Ethylbenzene	U	1	<0.0100	mg/L	10	0.00100
Xylene	U	1	<0.0100	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.852	mg/L	10	1.00	85	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.875	mg/L	10	1.00	88	67.5 - 140.8

Sample: 274759 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	84063	Date Analyzed:	2011-08-18	Analyzed By:	ME
Prep Batch:	71373	Sample Preparation:	2011-08-18	Prepared By:	ME

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	**5.94**	mg/L	50	0.00100
Toluene	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene	U	1	<0.0500	mg/L	50	0.00100
Xylene	U	1	<0.0500	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	QBR		3.96	mg/L	50	5.00	79	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			4.01	mg/L	50	5.00	80	67.5 - 140.8

Method Blanks

Method Blank (1) QC Batch: 84063

QC Batch: 84063 | Date Analyzed: 2011-08-18 | Analyzed By: ME
Prep Batch: 71373 | QC Preparation: 2011-08-18 | 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)			0.0899	mg/L	1	0.100	90	61.1 - 118.4
4-Bromofluorobenzene (4-BFB)			0.0899	mg/L	1	0.100	90	45.9 - 126.4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 84063
Prep Batch: 71373

Date Analyzed: 2011-08-18
QC Preparation: 2011-08-18

Analyzed By: ME
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	76.8 - 110.3
Toluene		1	0.108	mg/L	1	0.100	<0.000300	108	90.9 - 122.2
Ethylbenzene		1	0.117	mg/L	1	0.100	<0.000300	117	72.7 - 120.2
Xylene		1	0.355	mg/L	1	0.300	<0.000333	118	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	0.0885	mg/L	1	0.100	<0.000400	88	76.8 - 110.3	2	20
Toluene		1	0.106	mg/L	1	0.100	<0.000300	106	90.9 - 122.2	2	20
Ethylbenzene		1	0.115	mg/L	1	0.100	<0.000300	115	72.7 - 120.2	2	20
Xylene		1	0.348	mg/L	1	0.300	<0.000333	116	72.1 - 121.5	2	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)	0.0998	0.102	mg/L	1	0.100	100	102	61.9 - 119.2
4-Bromofluorobenzene (4-BFB)	0.109	0.113	mg/L	1	0.100	109	113	56.4 - 127.9

Matrix Spike (MS-1) Spiked Sample: 274759

QC Batch: 84063
Prep Batch: 71373

Date Analyzed: 2011-08-18
QC Preparation: 2011-08-18

Analyzed By: ME
Prepared By: ME

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	9.66	mg/L	50	5.00	5.9444	74	66.9 - 128.2
Toluene		1	4.54	mg/L	50	5.00	<0.0150	91	81.6 - 122.9
Ethylbenzene		1	4.92	mg/L	50	5.00	<0.0150	98	62.7 - 117.9
Xylene		1	14.7	mg/L	50	15.0	<0.0166	98	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	10.1	mg/L	50	5.00	5.9444	83	66.9 - 128.2	4	20
Toluene		1	4.81	mg/L	50	5.00	<0.0150	96	81.6 - 122.9	6	20
Ethylbenzene		1	5.21	mg/L	50	5.00	<0.0150	104	62.7 - 117.9	6	20
Xylene		1	15.7	mg/L	50	15.0	<0.0166	105	62.9 - 118.2	7	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)	4.52	4.58	mg/L	50	5	90	92	58.6 - 119.7
4-Bromofluorobenzene (4-BFB)	4.97	5.19	mg/L	50	5	99	104	52.2 - 135.8

Calibration Standards

Standard (CCV-1)

QC Batch: 84063 Date Analyzed: 2011-08-18 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	0.0888	89	80 - 120	2011-08-18
Toluene		1	mg/L	0.100	0.107	107	80 - 120	2011-08-18
Ethylbenzene		1	mg/L	0.100	0.117	117	80 - 120	2011-08-18
Xylene		1	mg/L	0.300	0.354	118	80 - 120	2011-08-18

Standard (CCV-2)

QC Batch: 84063 Date Analyzed: 2011-08-18 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	0.0921	92	80 - 120	2011-08-18
Toluene		1	mg/L	0.100	0.110	110	80 - 120	2011-08-18
Ethylbenzene		1	mg/L	0.100	0.119	119	80 - 120	2011-08-18
Xylene		1	mg/L	0.300	0.357	119	80 - 120	2011-08-18

Standard (CCV-3)

QC Batch: 84063 Date Analyzed: 2011-08-18 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	0.0845	84	80 - 120	2011-08-18
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2011-08-18
Ethylbenzene		1	mg/L	0.100	0.108	108	80 - 120	2011-08-18
Xylene		1	mg/L	0.300	0.326	109	80 - 120	2011-08-18

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 # 1108171 8

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) 2052 Commerce Midland TX 79705

Fax #: 432-520-7701

Contact Person: Don R.

E-mail:

Invoice to: (If different from above)

Project #: 2005-00138

Project Name: 341 J South

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, SO4, NO3, NO2, Alkalinity	Na, Ca, Mg, K, TDS, EC					Turn Around Time if different from standard	Hold
274750	MW-15	3	VOA	X				X				X		8-16	10:00		X																						
751	MW-16														11:45																									
752	MW-17														12:30																									
753	MW-7														13:15																									
754	MW-1														14:00																									
755	MW-6														14:45																									
756	MW-2														15:30																									
757	MW-14														16:15																									
758	MW-12														17:00																									
759	MW-13														17:45																									

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
		8/17/11	1145		T/A	8/17/11	11:45	INST ___ OBS 3.3 °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C
								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 #

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
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: December 1, 2011

Work Order: 11112903

Project Location: SW of Lovington, NM
Project Name: 34 Junction South
Project Number: 34 Junction South
SRS #: 2005-00138

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
283262	MW 15	water	2011-11-28	13:50	2011-11-29
283263	MW 16	water	2011-11-28	14:00	2011-11-29
283264	MW 17	water	2011-11-28	14:10	2011-11-29
283265	MW 7	water	2011-11-28	14:25	2011-11-29
283266	MW 1	water	2011-11-28	14:40	2011-11-29
283267	MW 6	water	2011-11-28	14:55	2011-11-29
283268	MW 2	water	2011-11-28	15:10	2011-11-29
283269	MW 14	water	2011-11-28	15:20	2011-11-29
283270	MW 12	water	2011-11-28	15:35	2011-11-29
283271	MW 13	water	2011-11-28	15:40	2011-11-29

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 34 Junction South were received by TraceAnalysis, Inc. on 2011-11-29 and assigned to work order 11112903. Samples for work order 11112903 were received intact without headspace and at a temperature of 12.1 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	73727	2011-11-30 at 08:30	86824	2011-11-30 at 09:23

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 11112903 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.

Samples were received with no ice.

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: 283262 - MW 15

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.112	mg/L	1	0.100	112	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0966	mg/L	1	0.100	97	67.5 - 140.8

Sample: 283263 - MW 16

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.104	mg/L	1	0.100	104	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0911	mg/L	1	0.100	91	67.5 - 140.8

Sample: 283264 - MW 17

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.104	mg/L	1	0.100	104	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0881	mg/L	1	0.100	88	67.5 - 140.8

Sample: 283265 - MW 7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.104	mg/L	1	0.100	104	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0897	mg/L	1	0.100	90	67.5 - 140.8

Sample: 283266 - MW 1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.101	mg/L	1	0.100	101	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0866	mg/L	1	0.100	87	67.5 - 140.8

Sample: 283267 - MW 6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.106	mg/L	1	0.100	106	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0877	mg/L	1	0.100	88	67.5 - 140.8

Sample: 283268 - MW 2

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.100	mg/L	1	0.100	100	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0835	mg/L	1	0.100	84	67.5 - 140.8

Sample: 283269 - MW 14

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	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)			0.101	mg/L	1	0.100	101	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.0861	mg/L	1	0.100	86	67.5 - 140.8

Sample: 283270 - MW 12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	Prepared By:	AG

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Benzene			1	**0.217**	mg/L	10	0.00100
Toluene	U	U	1	<0.0100	mg/L	10	0.00100
Ethylbenzene	U	U	1	<0.0100	mg/L	10	0.00100
Xylene	U	U	1	<0.0100	mg/L	10	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.959	mg/L	10	1.00	96	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			0.837	mg/L	10	1.00	84	67.5 - 140.8

Sample: 283271 - MW 13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	Sample Preparation:	2011-11-30	Prepared By:	AG

Parameter		Flag	Cert	RL Result	Units	Dilution	RL
Benzene			1	**3.52**	mg/L	50	0.00100
Toluene	U	U	1	<0.0500	mg/L	50	0.00100
Ethylbenzene	U	U	1	<0.0500	mg/L	50	0.00100
Xylene	U	U	1	<0.0500	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.91	mg/L	50	5.00	98	79.1 - 127.2
4-Bromofluorobenzene (4-BFB)			4.33	mg/L	50	5.00	87	67.5 - 140.8

Method Blanks

Method Blank (1) QC Batch: 86824

QC Batch:	86824	Date Analyzed:	2011-11-30	Analyzed By:	AG
Prep Batch:	73727	QC Preparation:	2011-11-30	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)			0.102	mg/L	1	0.100	102	61.1 - 118.4
4-Bromofluorobenzene (4-BFB)			0.0855	mg/L	1	0.100	86	45.9 - 126.4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 86824 | Date Analyzed: 2011-11-30 | Analyzed By: AG
Prep Batch: 73727 | QC Preparation: 2011-11-30 | Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0987	mg/L	1	0.100	<0.000400	99	76.8 - 120.3
Toluene		1	0.0947	mg/L	1	0.100	<0.000300	95	80.9 - 122.2
Ethylbenzene		1	0.0910	mg/L	1	0.100	<0.000300	91	72.7 - 120.2
Xylene		1	0.272	mg/L	1	0.300	<0.000333	91	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	0.105	mg/L	1	0.100	<0.000400	105	76.8 - 120.3	6	20
Toluene		1	0.101	mg/L	1	0.100	<0.000300	101	80.9 - 122.2	6	20
Ethylbenzene		1	0.0976	mg/L	1	0.100	<0.000300	98	72.7 - 120.2	7	20
Xylene		1	0.293	mg/L	1	0.300	<0.000333	98	72.1 - 121.5	7	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)	0.0976	0.0991	mg/L	1	0.100	98	99	61.9 - 119.2
4-Bromofluorobenzene (4-BFB)	0.0954	0.0968	mg/L	1	0.100	95	97	56.4 - 127.9

Matrix Spike (MS-1) Spiked Sample: 283271

QC Batch: 86824 | Date Analyzed: 2011-11-30 | Analyzed By: AG
Prep Batch: 73727 | QC Preparation: 2011-11-30 | Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	9.12	mg/L	50	5.00	3.5206	112	66.9 - 128.2
Toluene		1	5.05	mg/L	50	5.00	<0.0150	101	81.6 - 122.9
Ethylbenzene		1	4.75	mg/L	50	5.00	<0.0150	95	62.7 - 117.9
Xylene		1	14.2	mg/L	50	15.0	<0.0166	95	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	9.08	mg/L	50	5.00	3.5206	111	66.9 - 128.2	0	20
Toluene		1	5.08	mg/L	50	5.00	<0.0150	102	81.6 - 122.9	1	20
Ethylbenzene		1	4.92	mg/L	50	5.00	<0.0150	98	62.7 - 117.9	4	20
Xylene		1	14.5	mg/L	50	15.0	<0.0166	97	62.9 - 118.2	2	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)	4.66	4.81	mg/L	50	5	93	96	58.6 - 119.7
4-Bromofluorobenzene (4-BFB)	4.57	4.66	mg/L	50	5	91	93	52.2 - 135.8

Calibration Standards

Standard (CCV-1)

QC Batch: 86824 Date Analyzed: 2011-11-30 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	2011-11-30
Toluene		1	mg/L	0.100	0.0943	94	80 - 120	2011-11-30
Ethylbenzene		1	mg/L	0.100	0.0877	88	80 - 120	2011-11-30
Xylene		1	mg/L	0.300	0.263	88	80 - 120	2011-11-30

Standard (CCV-2)

QC Batch: 86824 Date Analyzed: 2011-11-30 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	0.108	108	80 - 120	2011-11-30
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2011-11-30
Ethylbenzene		1	mg/L	0.100	0.0986	99	80 - 120	2011-11-30
Xylene		1	mg/L	0.300	0.296	99	80 - 120	2011-11-30

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 # 11112903

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 Safety and Environmental
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: 345 South
Project Location (including state):
Sampler Signature: Ryan Hoskins

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
28326	MW 15	3	VOA	X				X				X		11-28-11	1350
263	MW 16														1400
264	MW 17														1410
265	MW 7														1425
266	MW 1														1440
267	MW 6														1455
268	MW 2														1510
269	MW 14														1520
270	MW 12														1535
271	MW 13														1540

ANALYSIS REQUEST	BTEX 8021 / 602 / 8260 / 624
MTBE 8021 / 602 / 8260 / 624	X
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	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Ryan Hoskins	Nova	11-29-11	0800		TA	11/29/11	9:30	INST 2.1 °C
								OBS °C
								COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C
								OBS °C
								COR °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST °C
								OBS °C
								COR °C

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

REMARKS:
Midland

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

Carrier # Carry In

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

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
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: 11122007

Project Location: SW of Lovington, NM
Project Name: 34 Junction South
Project Number: 34 Junction South
SRS #: 2005-00138

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
284919	MW-13	water	2011-12-16	13:40	2011-12-19
284920	MW-15	water	2011-12-16	13:05	2011-12-19
284921	MW-16	water	2011-12-16	13:25	2011-12-19
284922	MW-17	water	2011-12-16	14:40	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 34 Junction South were received by TraceAnalysis, Inc. on 2011-12-19 and assigned to work order 11122007. Samples for work order 11122007 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 11122007 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: 284919 - MW-13

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		1	**0.000439**	mg/L	0.922	0.000200
2-Methylnaphthalene	U	1	<0.000184	mg/L	0.922	0.000200
1-Methylnaphthalene			**0.00197**	mg/L	0.922	0.000200
Acenaphthylene	U	1	<0.000184	mg/L	0.922	0.000200
Acenaphthene	U	1	<0.000184	mg/L	0.922	0.000200
Dibenzofuran		1	**0.000314**	mg/L	0.922	0.000200
Fluorene		1	**0.000362**	mg/L	0.922	0.000200
Anthracene	U	1	<0.000184	mg/L	0.922	0.000200
Phenanthrene			**0.000397**	mg/L	0.922	0.000200
Fluoranthene	U		<0.000184	mg/L	0.922	0.000200
Pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene	U		<0.000184	mg/L	0.922	0.000200
Chrysene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(b)fluoranthene	U		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene	Qr,U	1	<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(g,h,i)perylene	U		<0.000184	mg/L	0.922	0.000200

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Qsr	Qsr		0.00370	mg/L	0.922	0.0800	5	10 - 117
2-Fluorobiphenyl				0.0259	mg/L	0.922	0.0800	32	10 - 99
Terphenyl-d14				0.0471	mg/L	0.922	0.0800	59	22.6 - 115

Sample: 284920 - MW-15

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	<0.000186	mg/L	0.93	0.000200
2-Methylnaphthalene	U	1	<0.000186	mg/L	0.93	0.000200
1-Methylnaphthalene	U		<0.000186	mg/L	0.93	0.000200
Acenaphthylene	U	1	<0.000186	mg/L	0.93	0.000200
Acenaphthene	U	1	<0.000186	mg/L	0.93	0.000200
Dibenzofuran	U	1	<0.000186	mg/L	0.93	0.000200
Fluorene	U	1	<0.000186	mg/L	0.93	0.000200
Anthracene	U	1	<0.000186	mg/L	0.93	0.000200
Phenanthrene	U		<0.000186	mg/L	0.93	0.000200
Fluoranthene	U		<0.000186	mg/L	0.93	0.000200
Pyrene	U	1	<0.000186	mg/L	0.93	0.000200
Benzo(a)anthracene	U		<0.000186	mg/L	0.93	0.000200
Chrysene	U	1	<0.000186	mg/L	0.93	0.000200
Benzo(b)fluoranthene	U		<0.000186	mg/L	0.93	0.000200
Benzo(k)fluoranthene	Qr,U	1	<0.000186	mg/L	0.93	0.000200
Benzo(a)pyrene	U	1	<0.000186	mg/L	0.93	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000186	mg/L	0.93	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000186	mg/L	0.93	0.000200
Benzo(g,h,i)perylene	U		<0.000186	mg/L	0.93	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0239	mg/L	0.93	0.0800	30	10 - 117
2-Fluorobiphenyl			0.0245	mg/L	0.93	0.0800	31	10 - 99
Terphenyl-d14			0.0333	mg/L	0.93	0.0800	42	22.6 - 115

Sample: 284921 - MW-16

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	<0.000184	mg/L	0.922	0.000200

continued ...

sample 284921 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
2-Methylnaphthalene	U	1	<0.000184	mg/L	0.922	0.000200
1-Methylnaphthalene	U		<0.000184	mg/L	0.922	0.000200
Acenaphthylene	U	1	<0.000184	mg/L	0.922	0.000200
Acenaphthene	U	1	<0.000184	mg/L	0.922	0.000200
Dibenzofuran	U	1	<0.000184	mg/L	0.922	0.000200
Fluorene	U	1	<0.000184	mg/L	0.922	0.000200
Anthracene	U	1	<0.000184	mg/L	0.922	0.000200
Phenanthrene	U		<0.000184	mg/L	0.922	0.000200
Fluoranthene	U		<0.000184	mg/L	0.922	0.000200
Pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene	U		<0.000184	mg/L	0.922	0.000200
Chrysene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(b)fluoranthene	U		<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene	Qr,U	1	<0.000184	mg/L	0.922	0.000200
Benzo(a)pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(g,h,i)perylene	U		<0.000184	mg/L	0.922	0.000200

Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Qsr	Qsr		0.00300	mg/L	0.922	0.0800	4	10 - 117
2-Fluorobiphenyl				0.0154	mg/L	0.922	0.0800	19	10 - 99
Terphenyl-d14				0.0381	mg/L	0.922	0.0800	48	22.6 - 115

Sample: 284922 - MW-17

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	<0.000194	mg/L	0.971	0.000200
2-Methylnaphthalene	U	1	<0.000194	mg/L	0.971	0.000200
1-Methylnaphthalene	U		<0.000194	mg/L	0.971	0.000200
Acenaphthylene	U	1	<0.000194	mg/L	0.971	0.000200
Acenaphthene	U	1	<0.000194	mg/L	0.971	0.000200
Dibenzofuran	U	1	<0.000194	mg/L	0.971	0.000200

continued ...

sample 284922 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Fluorene	U	1	<0.000194	mg/L	0.971	0.000200
Anthracene	U	1	<0.000194	mg/L	0.971	0.000200
Phenanthrene	U		<0.000194	mg/L	0.971	0.000200
Fluoranthene	U		<0.000194	mg/L	0.971	0.000200
Pyrene	U	1	<0.000194	mg/L	0.971	0.000200
Benzo(a)anthracene	U		<0.000194	mg/L	0.971	0.000200
Chrysene	U	1	<0.000194	mg/L	0.971	0.000200
Benzo(b)fluoranthene	U		<0.000194	mg/L	0.971	0.000200
Benzo(k)fluoranthene	Qr,U	1	<0.000194	mg/L	0.971	0.000200
Benzo(a)pyrene	U	1	<0.000194	mg/L	0.971	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000194	mg/L	0.971	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000194	mg/L	0.971	0.000200
Benzo(g,h,i)perylene	U		<0.000194	mg/L	0.971	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0496	mg/L	0.971	0.0800	62	10 - 117
2-Fluorobiphenyl			0.0474	mg/L	0.971	0.0800	59	10 - 99
Terphenyl-d14			0.0444	mg/L	0.971	0.0800	56	22.6 - 115

Method Blanks

Method Blank (1) QC Batch: 87624

QC Batch: 87624
Prep Batch: 74399

Date Analyzed: 2012-01-05
QC Preparation: 2012-12-22

Analyzed By: MN
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-1)

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	56.5	94	80 - 120	2012-01-05
1-Methylnaphthalene			mg/L	60.0	57.0	95	80 - 120	2012-01-05
Acenaphthylene		1	mg/L	60.0	54.7	91	80 - 120	2012-01-05
Acenaphthene		1	mg/L	60.0	55.9	93	80 - 120	2012-01-05
Dibenzofuran		1	mg/L	60.0	54.5	91	80 - 120	2012-01-05
Fluorene		1	mg/L	60.0	54.0	90	80 - 120	2012-01-05
Anthracene		1	mg/L	60.0	53.2	89	80 - 120	2012-01-05
Phenanthrene			mg/L	60.0	54.0	90	80 - 120	2012-01-05
Fluoranthene			mg/L	60.0	57.8	96	80 - 120	2012-01-05
Pyrene		1	mg/L	60.0	52.7	88	80 - 120	2012-01-05
Benzo(a)anthracene			mg/L	60.0	58.6	98	80 - 120	2012-01-05
Chrysene		1	mg/L	60.0	55.6	93	80 - 120	2012-01-05
Benzo(b)fluoranthene			mg/L	60.0	49.7	83	80 - 120	2012-01-05
Benzo(k)fluoranthene		1	mg/L	60.0	55.0	92	80 - 120	2012-01-05
Benzo(a)pyrene		1	mg/L	60.0	53.4	89	80 - 120	2012-01-05
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	53.4	89	80 - 120	2012-01-05
Dibenzo(a,h)anthracene		1	mg/L	60.0	53.5	89	80 - 120	2012-01-05
Benzo(g,h,i)perylene			mg/L	60.0	53.4	89	80 - 120	2012-01-05

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			55.3	mg/L	1	60.0	92	-
2-Fluorobiphenyl			55.1	mg/L	1	60.0	92	-
Terphenyl-d14			53.5	mg/L	1	60.0	89	-

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

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	55.2	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
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

continued ...

standard continued . . .

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
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 # 11122007

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: 34J South
Project Location (including state): New Mexico
Sampler Signature: Ryan Hoyt

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
284919	MW 13	1	PAH	X								X		12-16	1340
920	MW 15	1													1305
921	MW 16	1													1325
922	MW 17	1													1440

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:	INST / OBS / COR
Ryan Hoyt	Nova	12-19-11	8:32 AM		TA	12/19/11	8:33	INST 10.5 °C / OBS °C / COR °C
	TA	12/19/11	9:09					INST °C / OBS °C / COR °C
					TA	12/20/11	9:20	INST 1.K 3.1 / OBS 3.2 °C / COR °C

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Bottle Review

REMARKS: all tests Lubbock

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

Carrier # Caruzen 15 ZN174141

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

ORIGINAL COPY