

GW-294

Plains

TNM 97-04 (Townsend)

**Annual Report
2013**

2013
ANNUAL MONITORING REPORT

TNM 97-04
SE ¼ SE ¼ of SECTION 11, TOWNSHIP 16 SOUTH, RANGE 35 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: TNM 97-04
NMOCD Reference GW-0294

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2013 Annual Monitoring Report

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INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), NOVA Safety and Environmental (NOVA) is pleased to submit this 2013 Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. Beginning on May 29, 2004, project management responsibilities were assumed by NOVA. The TNM 97-04 Release Site (the site), which was formerly the responsibility of Texas New Mexico Pipe Line Company (TNM), is now the responsibility of Plains. This report is intended to be viewed as a complete document with text, figures, tables and appendices. The report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2013 only. However, historic data tables as well as 2013 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 2013 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 site is located in the SE 1/4 of the SE 1/4 of Section 11, Township 16 South, Range 35 East in Lea County, New Mexico. Initial site investigation activities were performed for TNM by other environmental consultants. No other specifics concerning the release are currently available. The Release Notification and Corrective Action Form (C-141) is provided as Appendix B.

In October 2009, an *Enhanced Recovery System Workplan* was submitted and subsequently approved by the NMOCD. In March 2009, Plains installed eight air-sparging wells (SW-1 through SW-8) and three recovery wells (RW-2, RW-3 and RW-4) at the site as part of the Enhanced Recovery System. In April 2010, Plains completed the installation of the trailer mounted air-sparging system with ancillary air lines connected to the eight sparging wells. Four total fluid pumps were initially installed within the four, 4-inch diameter recovery wells (RW-1 through RW-4).

The Enhanced Recovery System was initially started during the 3rd quarter of 2010. A System Start-Up Report documenting the activities was submitted to the NMOCD in May 2011.

There are currently 15 monitor wells (MW-2 through MW-7, MW-9 through MW-16, and MW-18) on site along with the eight air-sparging and four recovery wells (RW-1 through RW-4). An NMOCD permitted infiltration gallery associated with the enhanced recovery system is located on the northwest corner of the site.

FIELD ACTIVITIES

Remediation Efforts

The enhanced recovery system utilizes compressed air to power the eight air-sparging wells along with six total fluid pumps placed in recovery wells RW-1 through RW-4 and monitor wells MW-3 and MW-6. The total fluid pumps operate at a pumping rate of approximately two to three gallons per minute (gpm) from each recovery well with a combined pumping rate of eight to twelve gallons per minute gpm. Recovered oil and water is then passed through an oil-water separator with the oil transferred to a 550 gallon poly tank for staging and later transporting off site. Recovered groundwater is pumped to a large poly aeration tank to allow for volatilization of the hydrocarbons. Groundwater is then transferred through a two bag particulate filter system prior to being pumped through two 500 lbs. granulated activated carbon (GAC) filtration canisters. The treated groundwater is sampled from post carbon sampling ports on a monthly basis and is then discharged under Discharge Permit GW-294 to an infiltration gallery located upgradient to the northwest of the release point.

The eight air-sparging wells were each installed to a depth of approximately 65 feet below ground surface (bgs) and operate at a pressure of approximately five psi per well. The air-sparging array is designed to aerate the downgradient edge of the dissolved phase hydrocarbon plume while pressing the PSH plume upgradient towards the four recovery wells (RW-1 through RW-4) and two monitor wells (MW-3 and MW-6).

A measurable thickness of PSH was present in five of fifteen monitor wells (MW-2, MW-3, MW-5, MW-6, and MW-9) and the four recovery wells (RW-1, RW-2, RW-3, and RW-4) during at least three or more quarters of the reporting period. Monitor well MW-4 exhibited measurable PSH during seven bi-monthly gauging events but was not detected during each of the quarterly gauging and sampling events. The average thickness of PSH in monitor wells and recovery wells exhibiting PSH was 0.91 feet. The maximum thickness of PSH in monitor wells and recovery wells was 6.02 feet as recorded in recovery well RW-4 on August 6, 2013. PSH data for the 2013 gauging events can be found in Table 1. Approximately 107.55 gallons (approximately 2.6 barrels) of PSH was recovered from the site during the 2013 reporting period. During the 2013 reporting period, approximately 33,214 barrels of groundwater were processed through the on-site remediation system and re-injected into the infiltration gallery. A total of approximately 8,209.6 gallons (approximately 195.5 barrels) of PSH have been recovered since project inception.

Groundwater Monitoring

Quarterly monitoring events for the reporting period were performed according to the following reduced sampling schedule, which was approved by the NMOCD in correspondence dated April 28, 2004 and amended in correspondences dated June 22, 2005 and May 5, 2006.

NMOCD Approved Sampling Schedule							
MW-1	Plugged & Abandoned (P&A)	MW-8	P&A	MW-15	Quarterly	RW-3	Quarterly
MW-2	Quarterly	MW-9	Quarterly	MW-16	Semi-Annual	RW-4	Quarterly
MW-3	Quarterly	MW-10	Annual	MW-17	P&A		
MW-4	Quarterly	MW-11	Annual	MW-18	Quarterly		
MW-5	Quarterly	MW-12	Annual	RW-1	Quarterly		
MW-6	Quarterly	MW-13	Quarterly	RW-2	Quarterly		
MW-7	Annual	MW-14	Quarterly	RW-3	Quarterly		

The site monitor wells were gauged and sampled on February 11, May 6, August 6, and November 18-19, 2013. During each sampling event, monitor wells were purged of a minimum of three well volumes of water or until the wells failed to produce water. Purging was performed using a disposable polyethylene bailer for each well or electrical Grundfos pump and dedicated tubing. Groundwater was allowed to recharge and samples were collected using disposable Teflon samplers. Water samples were placed in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during each quarterly sampling event of 2013, are depicted on the Inferred Groundwater Gradient Map(s), Figures 2A-2D. Groundwater elevation data for 2013 is provided as Table 1. Historic groundwater elevation data beginning at project inception is provided on the enclosed data disk.

The most recent Inferred Groundwater Gradient Map, Figure 2D, indicates a general gradient of 0.0026 feet/foot to the southeast as measured between monitor well MW-10 and MW-13. This is consistent with data presented on Figures 2A through 2C from earlier in the year. The corrected groundwater elevations ranged between 3,921.06 and 3,922.93 feet above mean sea level, in recovery well RW-1 on June 26, 2013 and monitor well MW-16 on June 26, 2013, respectively.

LABORATORY RESULTS

Monitor wells MW-2, MW-3, MW-5, MW-6 and MW-9 and recovery wells RW-1, RW-2, RW-3, and RW-4 contained PSH throughout the reporting period and were not sampled during 1st, 2nd, 3rd and 4th quarters of 2013. Monitor well MW-4 sporadically exhibited PSH during the 2nd, 3rd and 4th quarters. Monitor well MW-4 was sampled during all four quarters of the reporting period.

Groundwater and effluent water samples obtained during the quarterly and monthly sampling events of 2013, respectively, 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 4th quarter of 2013 on monitor well MW-4 and monthly on the samples obtained from the effluent water samples (Post Carbon). PAH analysis scheduled to be conducted on monitor wells MW-2, MW-3, MW-5, MW-6, MW-9, and recovery wells RW-1, RW-2, RW-3, and RW-4 during 2013 were suspended due to the presence of PSH during the 4th quarter sampling event. Based upon historic PAH analytical data, only those wells exhibiting elevated constituent concentrations above WQCC Standards are sampled, with the exclusion of those wells containing measurable PSH thicknesses. WQCC Metals analysis was conducted on samples obtained from the post carbon sampling ports (Table 6). Listings of BTEX constituent concentrations in groundwater and effluent water for 2013 are summarized in Table 2 and Table 4, respectively, and the Historic PAH constituent concentrations in groundwater and effluent water samples are summarized in Table 3 and Table 5, respectively. Copies of the laboratory reports generated for 2013 are provided on the enclosed data disk. The quarterly groundwater

sample results for BTEX constituent concentrations in groundwater are depicted on Figures 3A through 3D.

Monitor well MW-2 is monitored on a quarterly schedule. Monitor well MW-2 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.96 feet, 0.90 feet, 1.59 feet and 1.01 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2013, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

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 1.17 feet, 0.91 feet, 0.02 feet and 0.87 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2013, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-4 is sampled on a quarterly schedule. Due to an inconsistency in sample results during the November 19, 2013 sampling event, NOVA, on behalf of Plains, resampled and resubmitted a sample from MW-4 to the laboratory on December 8, 2013. Analytical results indicate benzene concentrations ranged from 0.0777 mg/L during the 4th quarter to 0.396 mg/L during the 2nd quarter. Benzene concentrations were above the NMOCD regulatory guidelines during all four quarters of the reporting period. Toluene concentrations were below MDL and NMOCD regulatory guidelines during all four quarters of 2013. Ethylbenzene concentrations ranged from <0.0500 mg/L during the 4th quarter to 0.480 mg/L during the 2nd quarter of 2013. Ethylbenzene concentrations were below the NMOCD regulatory guidelines during all four quarters of the reporting period. Xylene concentrations ranged from <0.150 mg/L during the 4th quarter to 1.55 mg/L during the 2nd quarter of 2013. Xylene concentrations were above NMOCD regulatory guidelines during the 1st, 2nd and 3rd quarters of the reporting period. PAH analysis during the 4th quarter sampling event indicated elevated concentrations above WQCC Drinking Water Standards for naphthalene (0.0877 mg/L), 1-methylnaphthalene (0.109 mg/L) and 2-methylnaphthalene (0.121 mg/L). Additional PAH constituents detected above MDLs include dibenzofuran (12.6 mg/L). Please refer to the TraceAnalysis Letter of Explanation within Appendix A for more details in regard to the 4th quarter sampling events.

Monitor well MW-5 is monitored 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 1.35 feet, 1.48 feet, 1.57 feet and 1.66 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2013, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-6 is monitored on a quarterly schedule. Monitor well MW-6 was not sampled during the 1st, 2nd, 3rd, and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.67 feet, 0.07 feet, 0.01 feet and 0.05 feet of PSH were reported the 1st, 2nd, 3rd and 4th quarters of 2013, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-7 is sampled on an annual schedule. Due to an inconsistency in sample results during the November 19, 2013 sampling event, NOVA, on behalf of Plains, resampled and resubmitted a sample from MW-7 to the laboratory on December 8, 2013. The analytical results indicate BTEX constituent concentrations were below the MDL and NMOCD regulatory guidelines for each BTEX constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines since the 3rd quarter of 2001. PAH analysis was not required in MW-7 based on historic PAH data. Please refer to the TraceAnalysis Letter of Explanation within Appendix A for more details in regard to the 4th quarter sampling events.

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 0.52 feet, 0.37 feet, 0.38 feet and 0.50 feet were reported during the 1st, 2nd, 3rd and 4th quarters of 2013, respectively. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Monitor well MW-10 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX constituent during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines since the installation of the monitor well in the 1st quarter of 2000. PAH analysis was not required in MW-10 based on historic PAH data.

Monitor well MW-11 is sampled on an annual schedule and analytical results indicate BTEX constituent concentrations were 0.0023 mg/L during the 4th quarter sampling event. Benzene concentrations were below the NMOCD regulatory guidelines during the 4th quarter of the reporting period. Toluene, ethylbenzene and xylene concentrations were below the MDL and NMOCD regulatory guidelines during the 4th quarter sampling event. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines for the last 17 consecutive quarters. PAH analysis was not required in MW-11 based on historic PAH data.

Monitor well MW-12 is sampled on an annual schedule. Due to an inconsistency in sample results during the November 19, 2013 sampling event, NOVA, on behalf of Plains, resampled and resubmitted a sample from MW-4 to the laboratory on December 8, 2013. The analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX constituent during the 4th quarter sampling event. PAH analysis was not required in MW-12 based on historic PAH data. Please refer to the TraceAnalysis Letter of Explanation within Appendix A for more details in regard to the 4th quarter sampling events.

Monitor well MW-13 is sampled on a quarterly schedule. Analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines since the 2nd quarter of 2012. PAH analysis was not required in MW-13 based on historic PAH data.

Monitor well MW-14 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from <0.00100 mg/L in the 1st, 2nd, and 3rd quarters to 0.0019 mg/L during the 4th quarter of the reporting period. Benzene concentrations were below the NMOCD regulatory guidelines during the reporting period. Toluene concentrations were below the MDL and NMOCD regulatory guidelines during the reporting period. Ethylbenzene concentrations ranged from <0.00100 mg/L during the 4th quarter to 0.0173 mg/L during the 1st quarter of 2013. Ethylbenzene concentrations were below the NMOCD regulatory guidelines during the reporting period. Xylene concentrations ranged from <0.00300 mg/L during the 4th quarter to 0.0473 mg/L during the 3rd quarter of 2013. Xylene concentrations were below the NMOCD regulatory guidelines during the reporting period. PAH analysis was not required in MW-14 based on historic PAH data.

Monitor well MW-15 is sampled on a quarterly schedule. Due to an inconsistency in sample results during the November 19, 2013 sampling event, NOVA, on behalf of Plains, resampled and resubmitted a sample from MW-4 to the laboratory on December 8, 2013. The analytical results indicate benzene, toluene and xylene were below MDL and NMOCD regulatory guidelines during all four quarters of 2013. Ethylbenzene concentrations ranged from <0.00100 mg/L during the 1st, 2nd, and 3rd quarters to 0.00710 mg/L during the 4th quarter of 2013. Ethylbenzene concentrations were below the NMOCD regulatory guidelines during all four quarters of the reporting period. PAH analysis was not required in MW-15 based on historic PAH data. Please refer to the TraceAnalysis Letter of Explanation within Appendix A for more details in regard to the 4th quarter sampling event.

Monitor well MW-16 is sampled on a semi-annual schedule and analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX constituent during the 2nd and 4th quarter sampling events. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines since the 1st quarter of 2004. PAH analysis was not required in MW-16 based on historic PAH data.

Monitor well MW-18 is sampled on a quarterly schedule. Analytical results indicate BTEX constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX constituent during all four quarters of the reporting period. The analytical results indicate BTEX constituent concentrations have been below NMOCD regulatory guidelines since the installation of the monitor well in the 3rd quarter of 2009. PAH analysis was not required in MW-18 based on historic PAH data.

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 1.93 feet, 1.27 feet, 0.07 feet, and 0.53 feet were reported during the 1st, 2nd, 3rd, and 4th quarters of 2013. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Recovery well RW-2 is monitored on a quarterly schedule. Recovery well RW-2 was not sampled during the 1st, 2nd, 3rd and 4th quarters of the reporting period, due to the presence of PSH. PSH thicknesses of 0.10 feet, 0.12 feet, 0.14 feet, and 0.28 feet were reported during the

1st, 2nd, 3rd, and 4th quarters of 2013. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Recovery well RW-3 is monitored on a quarterly schedule. Recovery well RW-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 0.84 feet, 0.92 feet, 1.47 feet, and 1.50 feet were reported during the 1st, 2nd, 3rd, and 4th quarters of 2013. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Recovery well RW-4 is monitored on a quarterly schedule. Recovery well RW-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 1.93 feet, 1.69 feet, 6.02 feet, and 2.00 feet were reported during the 1st, 2nd, 3rd, and 4th quarters of 2013. PAH analysis was not conducted during the 4th quarter sampling event due to the presence of PSH.

Post carbon sampling ports are sampled on a monthly schedule. Due to system repairs, sampling of the effluent water did not take place in the months April and May 2013. Analytical results indicate BTEX constituent concentrations and PAH constituent concentrations were below MDL and NMOCD regulatory guidelines for each BTEX and PAH constituent during the reporting period, with the exception of the analytical results for effluent water collected on March 28, 2013. The analytical results for the effluent water sample collected on March 28, 2013 indicated BTEX constituent concentrations were 0.114 mg/L for benzene, 0.406 mg/L for toluene, 0.0059 mg/L for ethylbenzene, and 0.2195 mg/L for xylenes. The analytical results for the “Pre Carbon” groundwater sampled collected on March 28, 2013 indicated all BTEX constituent concentrations were below the MDL and NMOCD regulatory guidelines. Based on the analytical results of the March 28, 2013 “Pre and Post Carbon” effluent water, it is likely a field or laboratory error occurred. On April 12, 2013, an effluent water Post Carbon groundwater sample was collected to confirm the field or laboratory error. The April 12, 2013 analytical results for Post Carbon effluent water indicated BTEX concentrations were below MDL and NMOCD regulatory guidelines. April 12, 2013 PAH analysis indicated all PAH constituent concentrations were below the MDL and NMOCD regulatory guidelines. The effluent water was sampled for WQCC metals on February 28, 2014. WQCC metal analysis conducted during the February 2014 sampling event indicated all metal concentrations were below WQCC Drinking Water Standards. Concentrations of Boron (0.0270 mg/L), Iron (0.415 mg/L), Manganese (0.104 mg/L) and Barium (0.249 mg/L) were detected at concentrations above the laboratory MDL and below the WQCC Drinking Water Standards.

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

SUMMARY

This report presents the results of monitoring activities for the 2013 annual monitoring period. There are currently 15 monitor wells (MW-2 through MW-7, and MW-9 through MW-16, and MW-18) and four recovery well (RW-1, RW-2, RW-3, and RW-4) on site. Groundwater

elevation contours generated from water level measurements indicate a general gradient of 0.0026 feet/foot to the southeast.

A measurable thickness of PSH was present in five monitor wells (MW-2, MW-3, MW-5, MW-6, and MW-9) and four recovery well (RW-1, RW-2, RW-3, and RW-4) during at least three or more quarters of the reporting period. Monitor well MW-4 exhibited measurable PSH during seven bi-monthly gauging events but was not detected during each of the quarterly gauging and sampling events. Approximately 107.55 gallons (approximately 2.6 barrels) of PSH was recovered from the site during the 2013 reporting period. A total of approximately 8,209.6 gallons (approximately 195.5 barrels) of PSH have been recovered since project inception. The average thickness of PSH in monitor wells and recovery wells displaying PSH was 0.91 feet. During the 2013 reporting period, approximately 33,214 barrels of groundwater were processed through the on-site remediation system and re-injected into the infiltration gallery.

Review of laboratory analytical results of groundwater samples collected during the 2013 reporting period indicates BTEX constituent concentrations are below NMOCD regulatory guidelines in nine of the nineteen on site monitor and recovery wells. The remaining ten monitor and recovery wells, either contained measurable thicknesses of PSH and were not sampled during the four quarterly events or exhibited analytical results above the NMOCD regulatory guidelines during the 2013 reporting period.

The analytical results indicate the on-site TNM 97-04 Sparging System has been effective in confining the dissolved phase hydrocarbon plume to the core of the TNM 97-04 Release Site. Down-gradient monitor wells (MW-7, MW-13, MW-15 and MW-18) have not exhibited BTEX concentrations exceeding the NMOCD regulatory guidelines since the 2nd quarter of 2012.

The analytical results for the post carbon effluent water from the enhanced recovery system were below NMOCD and WQCC Standards for all BTEX and PAH analysis conducted during the reporting period. WQCC metal analysis conducted on the post carbon effluent water was below WQCC Drinking Water Standards.

ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling will continue in 2014. Plains will modify the sampling schedule for the following monitor wells per NMOCD approval given on March 27, 2012 by email correspondence:

Monitor well MW-16 is currently sampled on a semi-annual schedule. Plains will modify the schedule to an annual schedule.

The Enhanced Recovery System will continue to operate during the 2014 reporting period. The system may be shut down for short durations of time to conduct routine maintenance and repairs. During adverse weather conditions, the system may be shut down as a safety precaution and/or to protect the integrity of the system.

PSH recovery, quarterly groundwater monitoring and sampling will continue in 2014. An Annual Monitoring Report will be submitted to the NMOCD before April 1, 2015.

Based on the results of the PAH analysis over the past several years, further PAH analysis will be conducted only on monitor wells MW-4 and MW-6. As the PSH plume diminishes, other wells which have historically exhibited elevated constituents near or above the WQCC Standards will be sampled for PAH, as necessary

LIMITATIONS

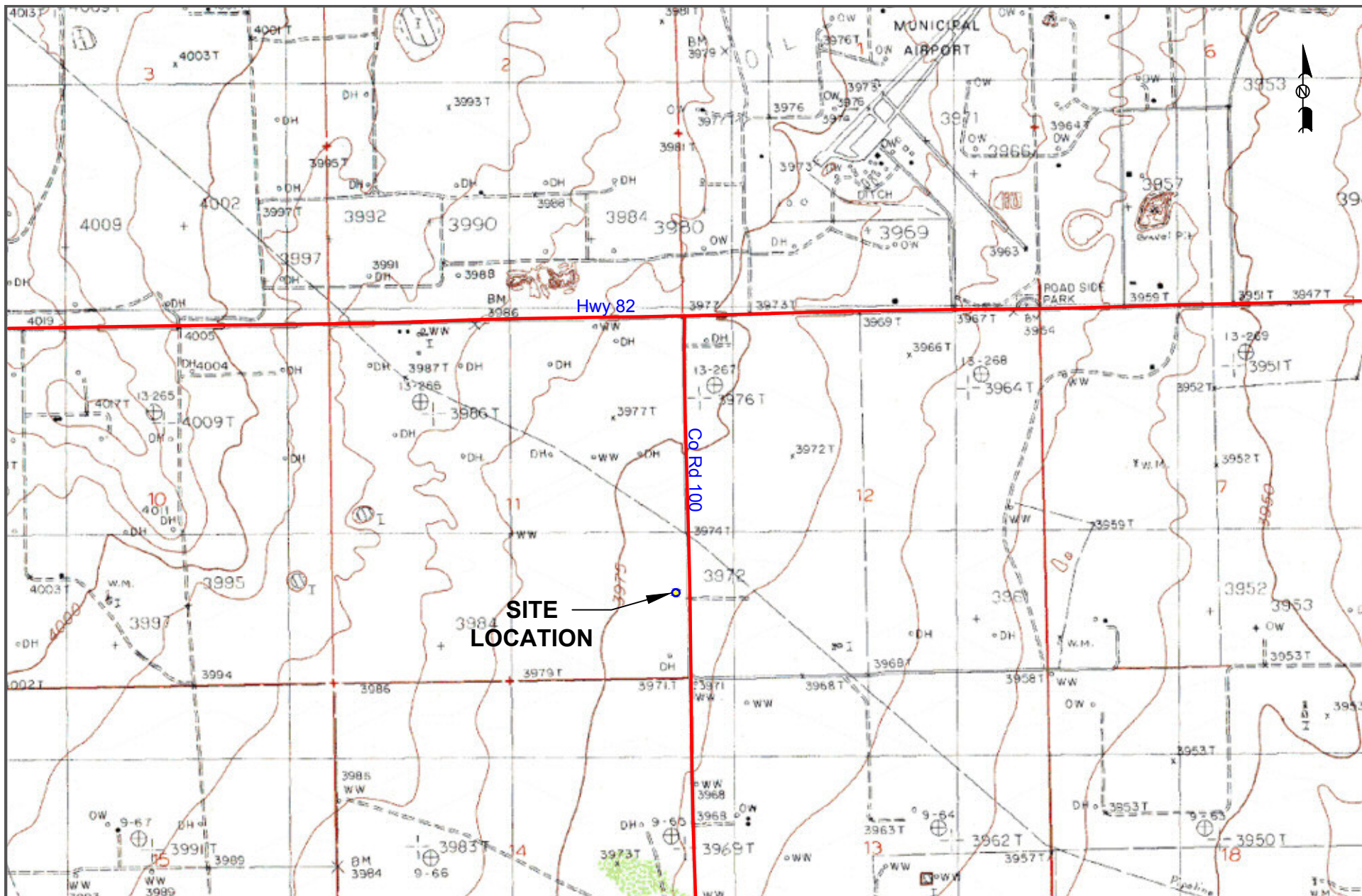
NOVA has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

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.

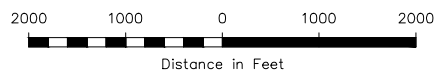
This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA and/or Plains.

DISTRIBUTION

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LEGEND:



NMOCD Reference #GW-0294

Figure 1
Site Location Map
TNM 97-04
Plains Marketing, L.P.
Lea County, NM

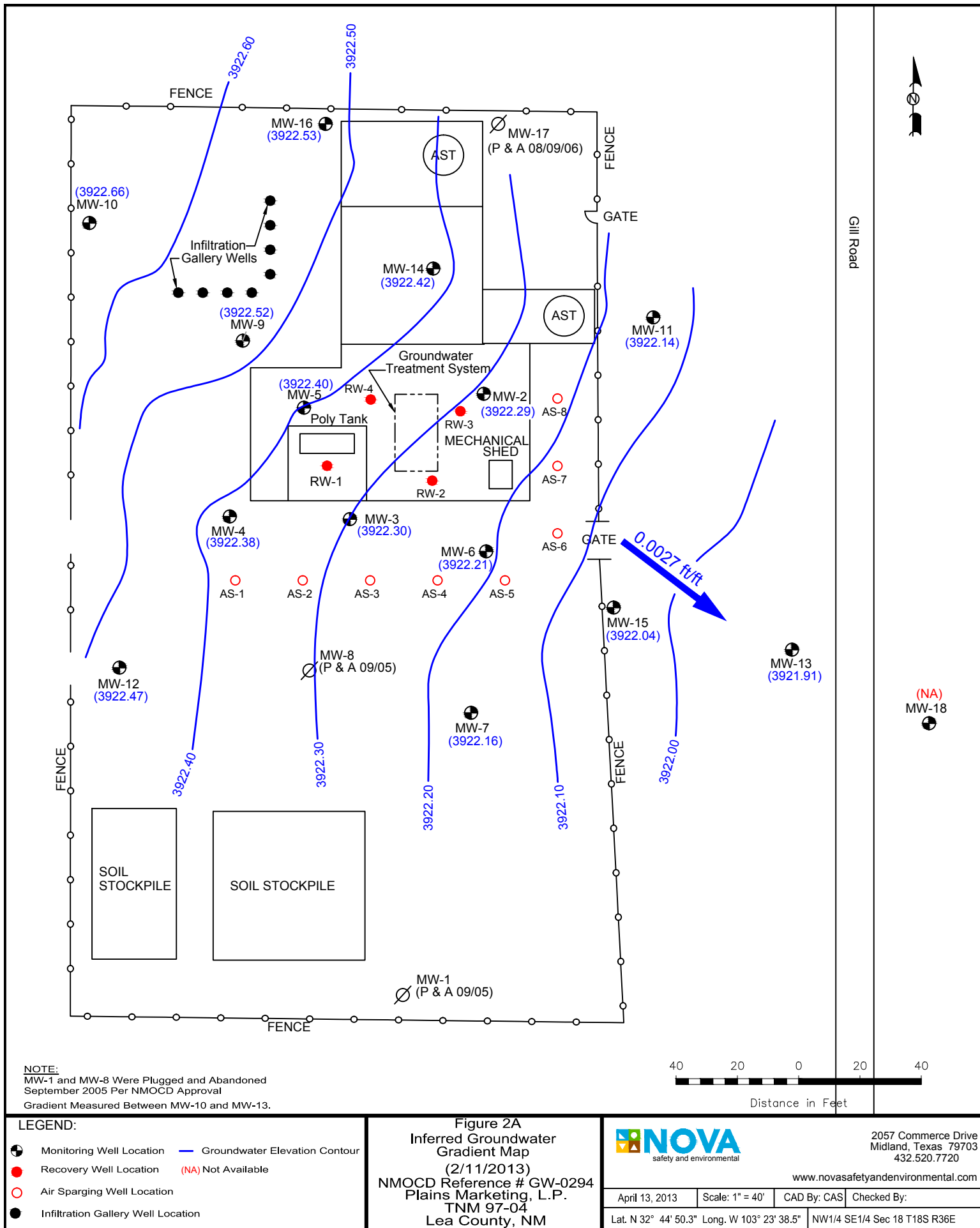


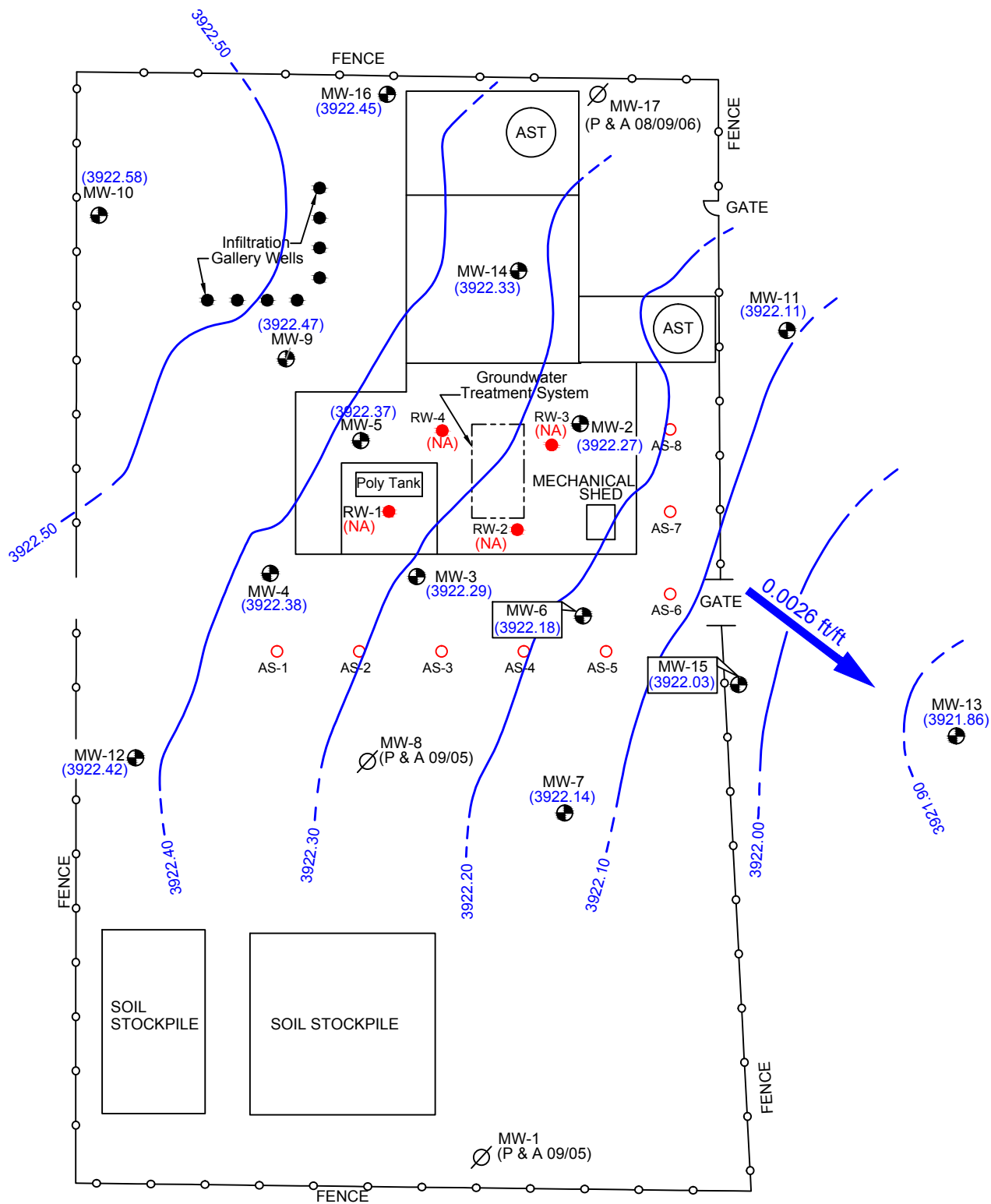
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432.520.7720

www.novasafetyandenvironmental.com

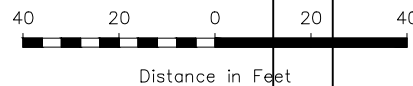
March 3, 2011 Scale: 1" = 2000' CAD By: TA Checked By: RKR

LATITUDE & LONGITUDE COORDINATES: N 32° 55' 57.1" W 103° 25' 12.3"





NOTE:
 MW-1 and MW-8 Were Plugged and Abandoned
 September 2005 Per NMOCD Approval
 RW-1 was not in the Construction of this Map
 Gradient Measured Between MW-10 and MW-13.



LEGEND:

- Monitoring Well Location
- Recovery Well Location (NA) Not Available
- Air Sparging Well Location
- Infiltration Gallery Well Location
- Groundwater Elevation Contour

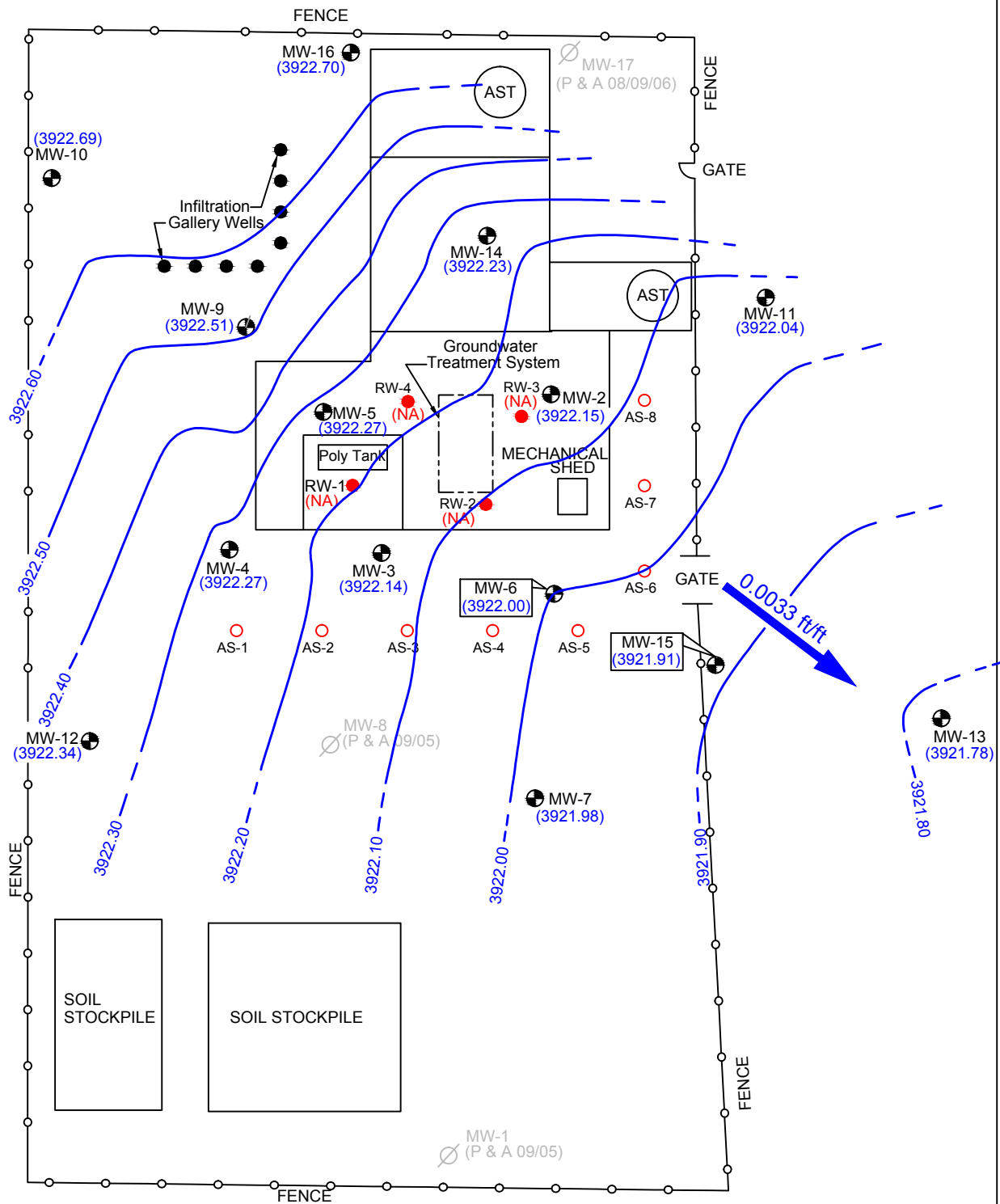
Figure 2B
 Inferred Groundwater
 Gradient Map
 (5/6/2013)
 NMOCD Reference # GW-0294
 Plains Marketing, L.P.
 TNM 97-04
 Lea County, NM



2057 Commerce Drive
 Midland, Texas 79703
 432.520.7720

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July 12, 2013	Scale: 1" = 40'	CAD By: CAS	Checked By:
Lat. N 32° 44' 50.3" Long. W 103° 23' 38.5"		NW1/4 SE1/4 Sec 18 T18S R36E	



NOTE:
 MW-1 and MW-8 Were Plugged and Abandoned
 September 2005 Per NMOCD Approval
 RW-1, RW-2, RW-3, & RW-4 were not used in the Construction of this Map
 Gradient Measured Between MW-10 and MW-13.

LEGEND:

- Monitoring Well Location
- Recovery Well Location (NA) Not Available
- Air Sparging Well Location
- Infiltration Gallery Well Location
- Groundwater Elevation Contour

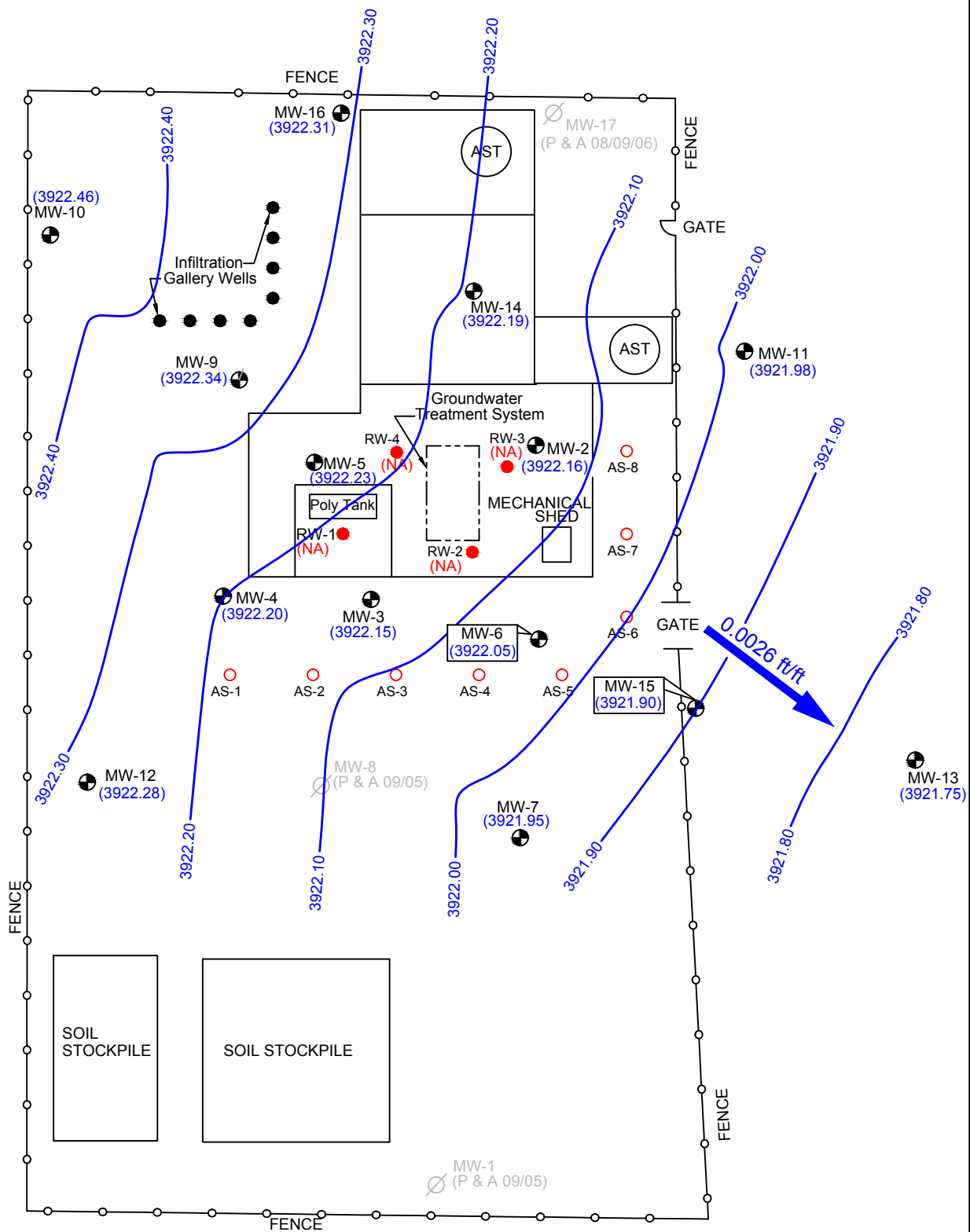
Figure 2C
 Inferred Groundwater
 Gradient Map
 (8/6/2013)
 NMOCD Reference # GW-0294
 Plains Marketing, L.P.
 TNM 97-04
 Lea County, NM



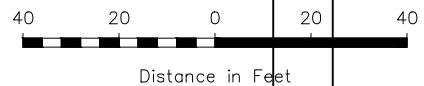
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 Midland, Texas 79703
 432.520.7720

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September 26, 2013	Scale: 1" = 40'	CAD By: TA	Checked By: CJB
Lat. N 32° 44' 50.3" Long. W 103° 23' 38.5"		NW1/4 SE1/4 Sec 18 T18S R36E	



NOTE:
 MW-1 and MW-8 Were Plugged and Abandoned
 September 2005 Per NMOCD Approval
 RW-1, RW-2, RW-3, & RW-4 were not used in the Construction of this Map
 Gradient Measured Between MW-10 and MW-13.



LEGEND:

- Monitoring Well Location
- Recovery Well Location
- Air Sparging Well Location
- Infiltration Gallery Well Location
- Groundwater Elevation Contour
- (NA) Not Available

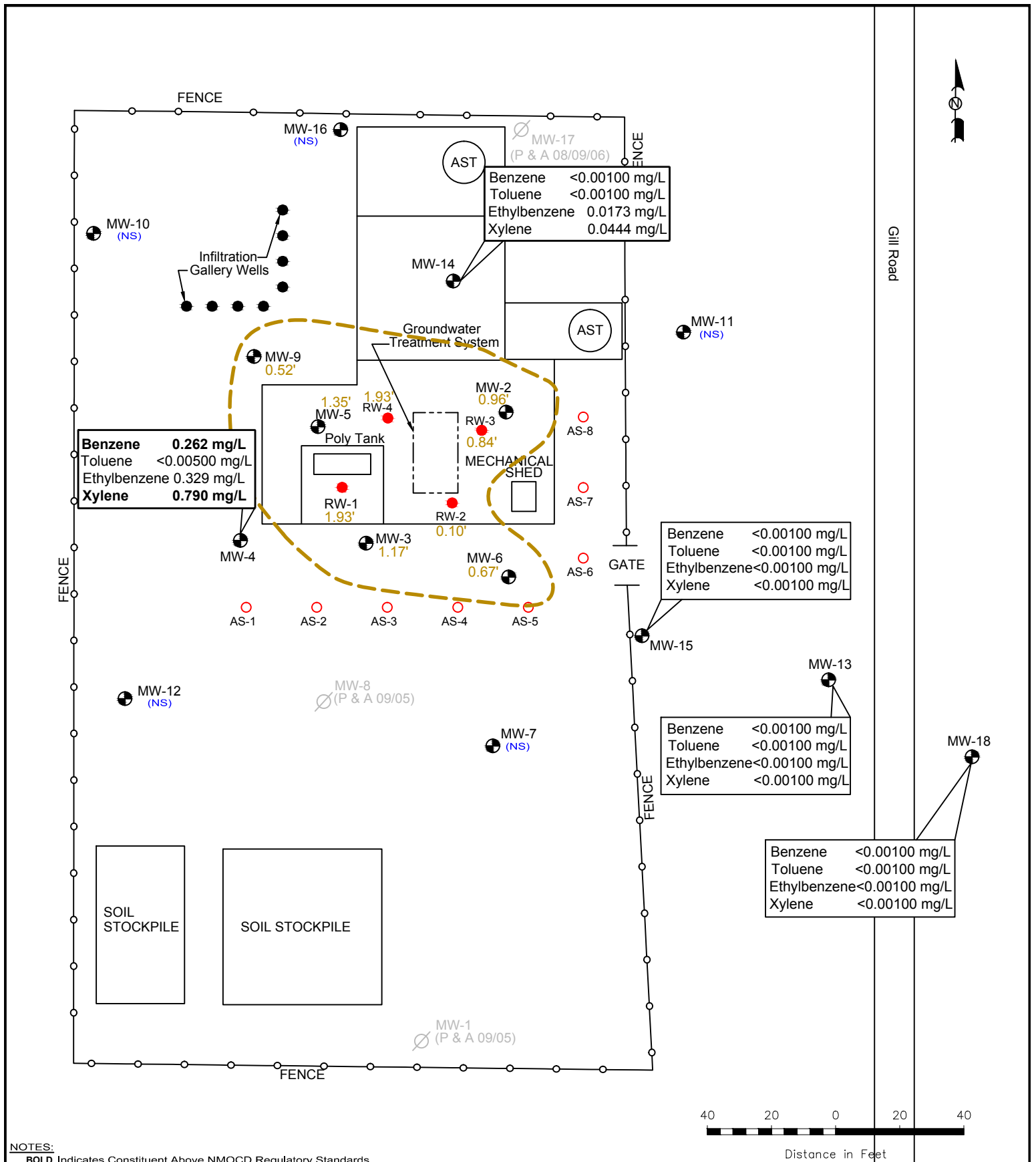
Figure 2D
 Inferred Groundwater
 Gradient Map
 (11/18/2013-11/19/2013)
 NMOCD Reference # GW-0294
 Plains Marketing, L.P.
 TNM 97-04
 Lea County, NM



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January 2, 2014	Scale: 1" = 40'	CAD By: TA	Checked By: CS
Lat. N 32° 44' 50.3" Long. W 103° 23' 38.5"		NW1/4 SE1/4 Sec 18 T18S R36E	



NOTES:
BOLD Indicates Constituent Above NMOCD Regulatory Standards

LEGEND:

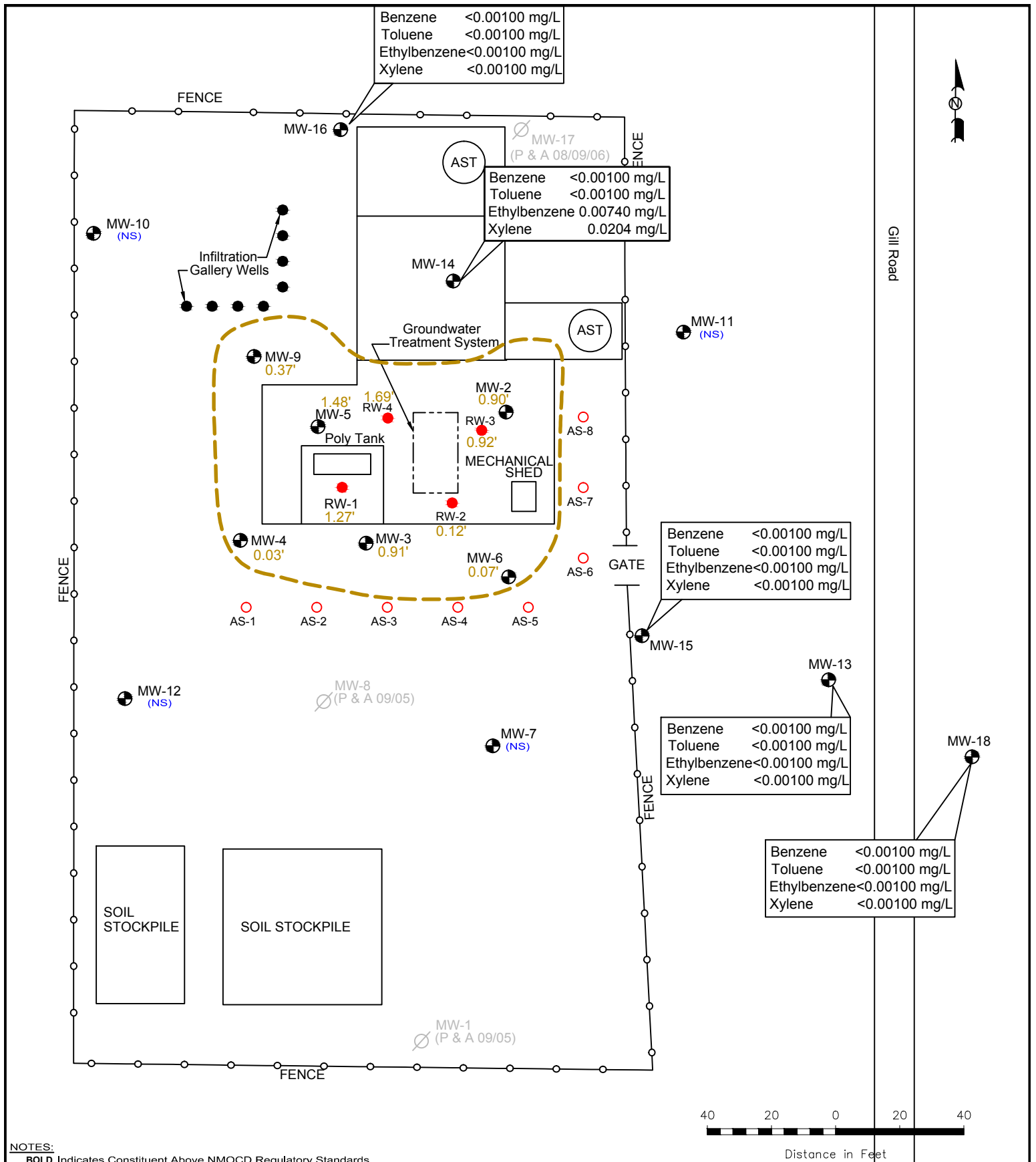
	Monitoring Well Location		Inferred PSH Extent
	Recovery Well Location	<0.001	Constituent Concentration (mg/L)
	Air Sparging Well Location	2.42'	Thickness of PSH (feet)
	Infiltration Gallery Well Location	(ND)	Not Sampled

Figure 3A
 Groundwater Concentration
 and Inferred PSH Extent Map
 (2/11/2013)
 NMOCD Reference # GW-0294
 Plains Marketing, L.P.
 TNM 97-04
 Lea County, NM

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April 9, 2013	Scale: 1" = 40'	CAD By: CAS	Checked By:
Lat. N 32° 55' 57.1" Long. W 103° 25' 12.3"		NW1/4 SE1/4 Sec 18 T18S R36E	



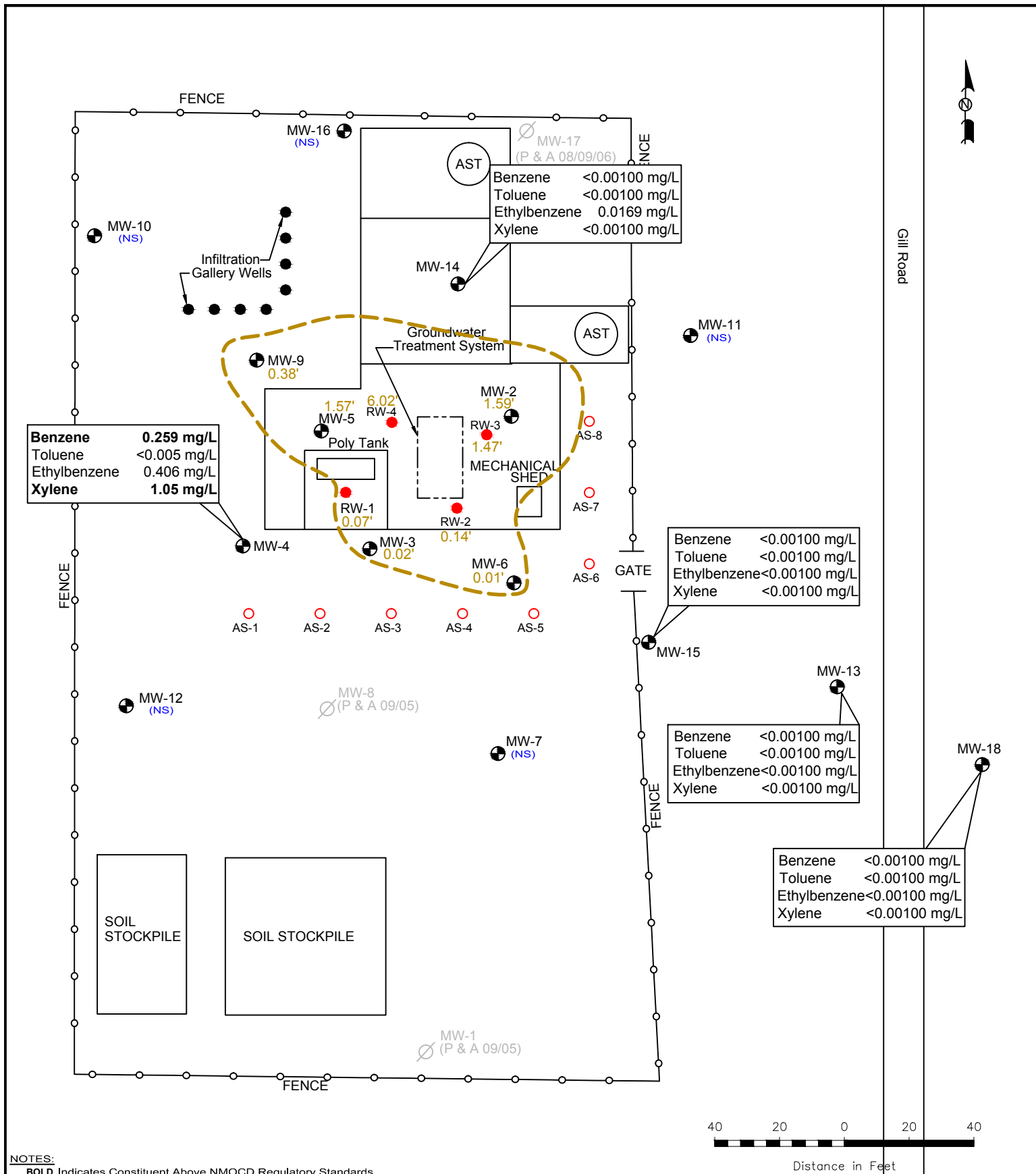
NOTES:
BOLD Indicates Constituent Above NMOCD Regulatory Standards

LEGEND:	
	Monitoring Well Location
	Recovery Well Location
	Air Sparging Well Location
	Infiltration Gallery Well Location
	Inferred PSH Extent
	<0.001 Constituent Concentration (mg/L)
	2.42' Thickness of PSH (feet)
	(ND) Not Sampled

Figure 3B
Groundwater Concentration
and Inferred PSH Extent Map
(5/6/2013)
NMOCD Reference # GW-0294
Plains Marketing, L.P.
TNM 97-04
Lea County, NM

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July 12, 2013	Scale: 1" = 40'	CAD By: CAS	Checked By:
Lat. N 32° 55' 57.1" Long. W 103° 25' 12.3"		NW1/4 SE1/4 Sec 18 T18S R36E	



NOTES:
BOLD Indicates Constituent Above NMOCD Regulatory Standards

Monitoring Well Location	Inferred PSH Extent
Recovery Well Location	<0.001 Constituent Concentration (mg/L)
Air Sparging Well Location	2.42' Thickness of PSH (feet)
Infiltration Gallery Well Location	(ND) Not Sampled

Figure 3C
Groundwater Concentration
and Inferred PSH Extent Map
(8/6/2013)
NMOCD Reference # GW-0294
Plains Marketing, L.P.
TNM 97-04
Lea County, NM



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September 25, 2013	Scale: 1" = 40'	CAD By: TA	Checked By: CJB
Lat. N 32° 55' 57.1" Long. W 103° 25' 12.3"		NW1/4 SE1/4 Sec 18 T18S R36E	

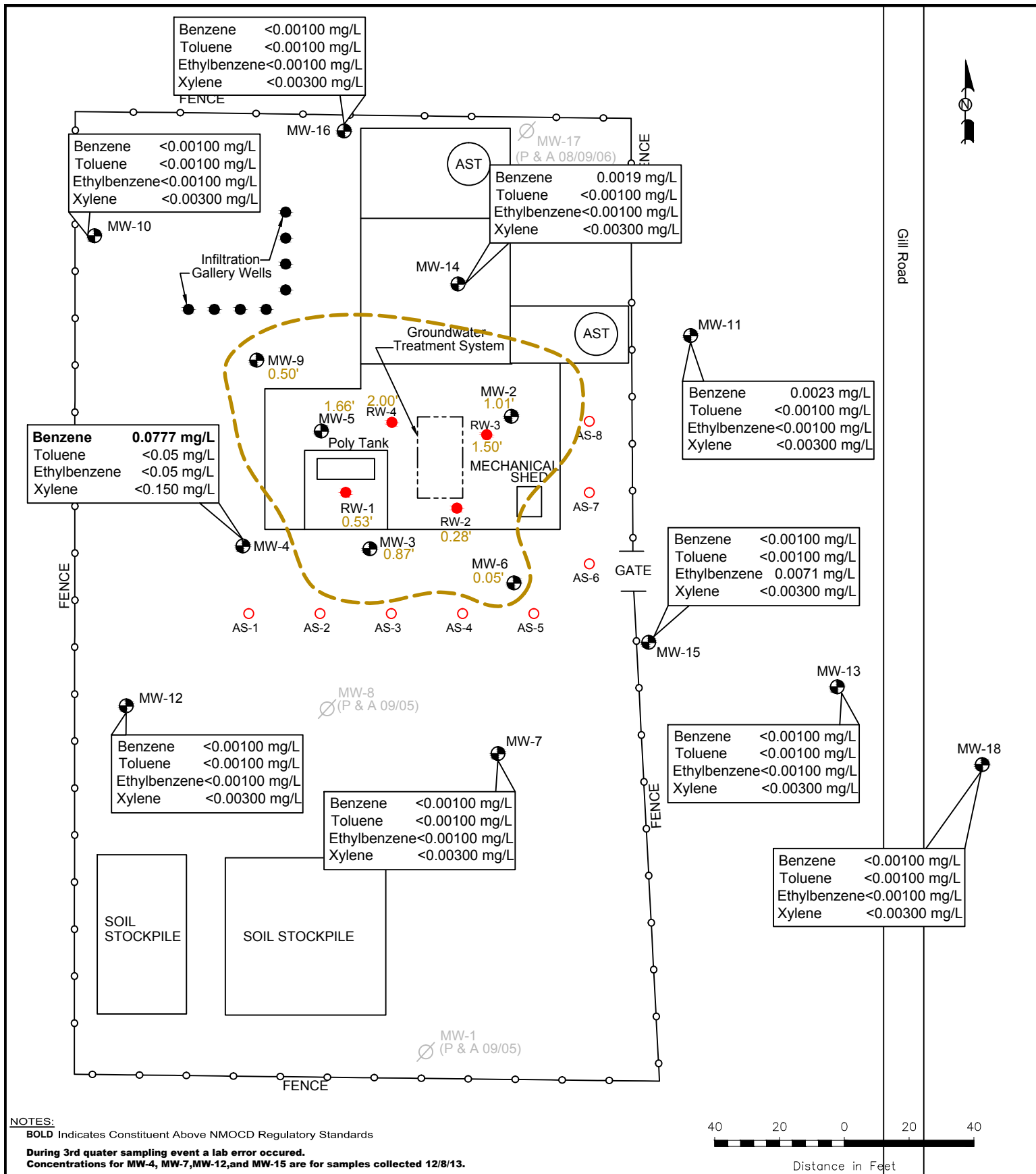


TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	09/14/05	PLUGGED & ABANDONED				
MW - 2	02/11/13	3974.62	52.19	53.15	0.96	3922.29
MW - 2	04/11/13	3974.62	52.39	53.90	1.51	3922.00
MW - 2	04/15/13	3974.62	52.62	54.49	1.87	3921.72
MW - 2	04/22/13	3974.62	52.21	53.03	0.82	3922.29
MW - 2	05/06/13	3974.62	52.22	53.12	0.90	3922.27
MW - 2	05/09/13	3974.62	52.22	53.16	0.94	3922.26
MW - 2	05/20/13	3974.62	52.22	53.20	0.98	3922.25
MW - 2	05/24/13	3974.62	52.34	53.68	1.34	3922.08
MW - 2	05/29/13	3974.62	52.21	53.18	0.97	3922.26
MW - 2	05/31/13	3974.62	52.31	53.61	1.30	3922.12
MW - 2	06/07/13	3974.62	52.64	54.51	1.87	3921.70
MW - 2	06/12/13	3974.62	52.56	54.57	2.01	3921.76
MW - 2	06/14/13	3974.62	52.63	53.92	1.29	3921.80
MW - 2	06/19/13	3974.62	52.63	54.46	1.83	3921.72
MW - 2	06/21/13	3974.62	52.74	54.13	1.39	3921.67
MW - 2	06/25/13	3974.62	52.22	53.15	0.93	3922.26
MW - 2	06/26/13	3974.62	52.40	53.72	1.32	3922.02
MW - 2	07/03/13	3974.62	52.62	54.30	1.68	3921.75
MW - 2	07/09/13	3974.62	52.73	54.09	1.36	3921.69
MW - 2	07/11/13	3974.62	52.71	53.98	1.27	3921.72
MW - 2	07/24/13	3974.62	52.54	53.77	1.23	3921.90
MW - 2	07/26/13	3974.62	52.45	54.29	1.84	3921.89
MW - 2	07/31/13	3974.62	52.20	53.86	1.66	3922.17
MW - 2	08/02/13	3974.62	52.48	54.04	1.56	3921.91
MW - 2	08/06/13	3974.62	52.23	53.82	1.59	3922.15
MW - 2	08/14/13	3974.62	52.23	54.04	1.81	3922.12
MW - 2	08/21/13	3974.62	52.48	54.61	2.13	3921.82
MW - 2	08/26/13	3974.62	52.50	54.25	1.75	3921.86
MW - 2	09/06/13	3974.62	52.41	53.65	1.24	3922.02
MW - 2	08/30/13	3974.62	52.25	53.72	1.47	3922.15
MW - 2	09/13/13	3974.62	52.35	53.37	1.02	3922.12
MW - 2	09/27/13	3974.62	52.35	54.18	1.83	3922.00
MW - 2	09/30/13	3974.62	52.33	53.79	1.46	3922.07
MW - 2	10/02/13	3974.62	52.55	54.25	1.70	3921.82
MW - 2	10/03/13	3974.62	52.48	53.27	0.79	3922.02
MW - 2	10/11/13	3974.62	52.29	53.32	1.03	3922.18
MW - 2	10/17/13	3974.62	52.31	53.39	1.08	3922.15
MW - 2	10/22/13	3974.62	52.29	53.40	1.11	3922.16
MW - 2	10/24/13	3974.62	52.43	53.60	1.17	3922.01
MW - 2	10/30/13	3974.62	52.37	53.76	1.39	3922.04
MW - 2	11/01/13	3974.62	52.33	53.33	1.00	3922.14
MW - 2	11/04/13	3974.62	52.32	53.41	1.09	3922.14

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	11/08/13	3974.62	52.67	54.50	1.83	3921.68
MW - 2	11/13/13	3974.62	52.30	53.45	1.15	3922.15
MW - 2	11/15/13	3974.62	52.40	53.36	0.96	3922.08
MW - 2	11/18/13	3974.62	52.31	53.32	1.01	3922.16
MW - 2	12/12/13	3974.62	52.30	53.39	1.09	3922.16
MW - 2	12/16/13	3974.62	52.31	53.56	1.25	3922.12
MW - 2	12/18/13	3974.62	52.34	53.52	1.18	3922.10
MW - 2	12/23/13	3974.62	52.36	53.83	1.47	3922.04
MW - 2	12/30/13	3974.62	52.32	53.67	1.35	3922.10
MW - 3	02/11/13	3974.60	52.12	53.29	1.17	3922.30
MW - 3	03/18/13	3974.60	52.29	52.48	0.19	3922.28
MW - 3	04/11/13	3974.60	52.58	52.65	0.07	3922.01
MW - 3	05/06/13	3974.60	52.17	53.08	0.91	3922.29
MW - 3	05/29/13	3974.60	52.55	52.69	0.14	3922.03
MW - 3	06/26/13	3974.60	52.63	52.68	0.05	3921.96
MW - 3	07/31/13	3974.60	52.46	52.49	0.03	3922.14
MW - 3	08/06/13	3974.60	52.46	52.48	0.02	3922.14
MW - 3	09/30/13	3974.60	52.50	52.60	0.10	3922.09
MW - 3	11/18/13	3974.60	52.32	53.19	0.87	3922.15
MW - 4	02/11/13	3974.53	-	52.15	0.00	3922.38
MW - 4	04/11/13	3974.53	-	52.35	0.00	3922.18
MW - 4	04/15/13	3974.53	-	52.32	0.00	3922.21
MW - 4	04/22/13	3974.53	52.13	52.15	0.02	3922.40
MW - 4	05/06/13	3974.53	52.15	52.18	0.03	3922.38
MW - 4	05/09/13	3974.53	-	52.15	0.00	3922.38
MW - 4	05/20/13	3974.53	-	52.17	0.00	3922.36
MW - 4	05/24/13	3974.53	-	52.31	0.00	3922.22
MW - 4	05/29/13	3974.53	-	52.35	0.00	3922.18
MW - 4	05/31/13	3974.53	-	52.24	0.00	3922.29
MW - 4	06/07/13	3974.53	52.39	52.40	0.01	3922.14
MW - 4	06/12/13	3974.53	-	52.36	0.00	3922.17
MW - 4	06/14/13	3974.53	-	52.33	0.00	3922.20
MW - 4	06/19/13	3974.53	-	52.45	0.00	3922.08
MW - 4	06/21/13	3974.53	-	52.39	0.00	3922.14
MW - 4	06/25/13	3974.53	-	52.16	0.00	3922.37
MW - 4	06/26/13	3974.53	-	52.34	0.00	3922.19
MW - 4	07/03/13	3974.53	52.38	52.39	0.01	3922.15
MW - 4	07/09/13	3974.53	52.39	52.43	0.04	3922.13
MW - 4	07/11/13	3974.53	-	52.38	0.00	3922.15
MW - 4	07/24/13	3974.53	-	52.35	0.00	3922.18
MW - 4	07/26/13	3974.53	-	52.34	0.00	3922.19
MW - 4	07/31/13	3974.53	-	52.25	0.00	3922.28

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	08/02/13	3974.53	-	52.33	0.00	3922.20
MW - 4	08/06/13	3974.53	-	52.26	0.00	3922.27
MW - 4	08/14/13	3974.53	-	52.28	0.00	3922.25
MW - 4	08/21/13	3974.53	-	52.37	0.00	3922.16
MW - 4	08/26/13	3974.53	-	52.36	0.00	3922.17
MW - 4	09/06/13	3974.53	-	52.35	0.00	3922.18
MW - 4	08/30/13	3974.53	-	52.30	0.00	3922.23
MW - 4	09/13/13	3974.53	-	52.30	0.00	3922.23
MW - 4	09/27/13	3974.53	-	52.36	0.00	3922.17
MW - 4	09/30/13	3974.53	-	52.35	0.00	3922.18
MW - 4	10/02/13	3974.53	-	52.44	0.00	3922.09
MW - 4	10/03/13	3974.53	-	52.33	0.00	3922.20
MW - 4	10/11/13	3974.53	-	52.26	0.00	3922.27
MW - 4	10/17/13	3974.53	-	52.28	0.00	3922.25
MW - 4	10/22/13	3974.53	-	52.28	0.00	3922.25
MW - 4	10/24/13	3974.53	-	52.41	0.00	3922.12
MW - 4	10/30/13	3974.53	-	52.36	0.00	3922.17
MW - 4	11/01/13	3974.53	-	52.27	0.00	3922.26
MW - 4	11/04/13	3974.53	-	52.30	0.00	3922.23
MW - 4	11/08/13	3974.53	-	52.40	0.00	3922.13
MW - 4	11/13/13	3974.53	-	52.28	0.00	3922.25
MW - 4	11/15/13	3974.53	-	52.28	0.00	3922.25
MW - 4	11/19/13	3974.53	-	52.33	0.00	3922.20
MW - 4	12/08/13	3974.53	52.28	52.31	0.03	3922.25
MW - 4	12/12/13	3974.53	-	52.30	0.00	3922.23
MW - 4	12/16/13	3974.53	52.31	52.32	0.01	3922.22
MW - 4	12/18/13	3974.53	-	52.35	0.00	3922.18
MW - 4	12/23/13	3974.53	-	52.35	0.00	3922.18
MW - 4	12/30/13	3974.53	-	52.33	0.00	3922.20
MW - 5	02/11/13	3974.27	51.67	53.02	1.35	3922.40
MW - 5	04/11/13	3974.27	51.82	53.84	2.02	3922.15
MW - 5	04/15/13	3974.27	51.85	53.78	1.93	3922.13
MW - 5	04/22/13	3974.27	51.65	53.14	1.49	3922.40
MW - 5	05/06/13	3974.27	51.68	53.16	1.48	3922.37
MW - 5	05/09/13	3974.27	51.67	53.18	1.51	3922.37
MW - 5	05/20/13	3974.27	51.67	53.23	1.56	3922.37
MW - 5	05/24/13	3974.27	51.74	53.86	2.12	3922.21
MW - 5	05/29/13	3974.27	51.66	53.25	1.59	3922.37
MW - 5	05/31/13	3974.27	51.74	53.40	1.66	3922.28
MW - 5	06/07/13	3974.27	51.98	53.99	2.01	3921.99
MW - 5	06/12/13	3974.27	51.93	53.88	1.95	3922.05
MW - 5	06/14/13	3974.27	51.42	53.62	2.20	3922.52
MW - 5	06/19/13	3974.27	51.96	53.88	1.92	3922.02

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	06/21/13	3974.27	52.01	53.76	1.75	3922.00
MW - 5	06/25/13	3974.27	51.73	52.71	0.98	3922.39
MW - 5	06/26/13	3974.27	51.85	53.57	1.72	3922.16
MW - 5	07/03/13	3974.27	52.03	53.89	1.86	3921.96
MW - 5	07/09/13	3974.27	52.00	54.19	2.19	3921.94
MW - 5	07/11/13	3974.27	51.98	54.00	2.02	3921.99
MW - 5	07/24/13	3974.27	51.95	52.87	0.92	3922.18
MW - 5	07/26/13	3974.27	51.89	53.65	1.76	3922.12
MW - 5	07/31/13	3974.27	51.73	53.38	1.65	3922.29
MW - 5	08/02/13	3974.27	51.93	53.71	1.78	3922.07
MW - 5	08/06/13	3974.27	51.76	53.33	1.57	3922.27
MW - 5	08/14/13	3974.27	51.78	53.42	1.64	3922.24
MW - 5	08/21/13	3974.27	51.92	53.75	1.83	3922.08
MW - 5	08/26/13	3974.27	51.89	53.56	1.67	3922.13
MW - 5	09/06/13	3974.27	51.91	53.75	1.84	3922.08
MW - 5	08/30/13	3974.27	51.77	53.32	1.55	3922.27
MW - 5	09/13/13	3974.27	51.83	53.27	1.44	3922.22
MW - 5	09/27/13	3974.27	51.86	53.67	1.81	3922.14
MW - 5	09/30/13	3974.27	51.80	53.52	1.72	3922.21
MW - 5	10/02/13	3974.27	51.94	53.85	1.91	3922.04
MW - 5	10/03/13	3974.27	51.89	53.15	1.26	3922.19
MW - 5	10/11/13	3974.27	51.77	53.33	1.56	3922.27
MW - 5	10/17/13	3974.27	51.77	53.39	1.62	3922.26
MW - 5	10/22/13	3974.27	51.76	53.41	1.65	3922.26
MW - 5	10/24/13	3974.27	51.88	53.71	1.83	3922.12
MW - 5	11/01/13	3974.27	51.80	53.25	1.45	3922.25
MW - 5	11/04/13	3974.27	51.80	53.36	1.56	3922.24
MW - 5	11/08/13	3974.27	51.95	54.00	2.05	3922.01
MW - 5	11/13/13	3974.27	51.77	53.35	1.58	3922.26
MW - 5	11/15/13	3974.27	51.76	53.36	1.60	3922.27
MW - 5	11/18/13	3974.27	51.79	53.45	1.66	3922.23
MW - 5	12/12/13	3974.27	51.80	53.55	1.75	3922.21
MW - 5	12/16/13	3974.27	51.80	53.53	1.73	3922.21
MW - 5	12/18/13	3974.27	51.81	53.54	1.73	3922.20
MW - 5	12/23/13	3974.27	51.84	53.58	1.74	3922.17
MW - 5	12/30/13	3974.27	51.81	53.45	1.64	3922.21
MW - 6	02/11/13	3974.72	52.41	53.08	0.67	3922.21
MW - 6	03/18/13	3974.72	52.52	52.74	0.22	3922.17
MW - 6	04/11/13	3974.72	52.89	52.90	0.01	3921.83
MW - 6	05/06/13	3974.72	52.53	52.60	0.07	3922.18
MW - 6	05/29/13	3974.72	52.89	52.91	0.02	3921.83
MW - 6	06/26/13	3974.72	-	52.90	0.00	3921.82
MW - 6	07/31/13	3974.72	-	52.76	0.00	3921.96

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	08/06/13	3974.72	52.72	52.73	0.01	3922.00
MW - 6	09/30/13	3974.72	52.78	52.79	0.01	3921.94
MW - 6	11/18/13	3974.72	52.66	52.71	0.05	3922.05
MW - 7	02/11/13	3974.60	-	52.44	0.00	3922.16
MW - 7	04/11/13	3974.60	-	52.76	0.00	3921.84
MW - 7	05/06/13	3974.60	-	52.46	0.00	3922.14
MW - 7	05/29/13	3974.60	-	52.71	0.00	3921.89
MW - 7	06/26/13	3974.60	-	52.68	0.00	3921.92
MW - 7	07/31/13	3974.60	-	52.62	0.00	3921.98
MW - 7	08/06/13	3974.60	-	52.62	0.00	3921.98
MW - 7	09/30/13	3974.60	-	52.65	0.00	3921.95
MW - 7	11/19/13	3974.60	-	52.65	0.00	3921.95
MW - 7	12/08/13	3974.60	-	52.60	0.00	3922.00
MW - 8	09/14/05	PLUGGED & ABANDONED				0.00
MW - 9	02/11/13	3975.06	52.46	52.98	0.52	3922.52
MW - 9	04/11/13	3975.06	52.52	52.85	0.33	3922.49
MW - 9	04/15/13	3975.06	52.39	52.66	0.27	3922.63
MW - 9	04/22/13	3975.06	52.51	52.79	0.28	3922.51
MW - 9	05/06/13	3975.06	52.53	52.90	0.37	3922.47
MW - 9	05/09/13	3975.06	52.53	52.93	0.40	3922.47
MW - 9	05/20/13	3975.06	52.53	52.99	0.46	3922.46
MW - 9	05/24/13	3975.06	52.61	53.07	0.46	3922.38
MW - 9	05/29/13	3975.06	52.47	52.54	0.07	3922.58
MW - 9	05/31/13	3975.06	52.49	52.75	0.26	3922.53
MW - 9	06/07/13	3975.06	52.45	52.73	0.28	3922.57
MW - 9	06/12/13	3975.06	52.43	52.69	0.26	3922.59
MW - 9	06/14/13	3975.06	52.44	52.70	0.26	3922.58
MW - 9	06/19/13	3975.06	52.43	52.58	0.15	3922.61
MW - 9	06/21/13	3975.06	52.47	52.61	0.14	3922.57
MW - 9	06/25/13	3975.06	52.43	52.63	0.20	3922.60
MW - 9	06/26/13	3975.06	52.57	52.75	0.18	3922.46
MW - 9	07/03/13	3975.06	52.62	52.92	0.30	3922.40
MW - 9	07/09/13	3975.06	52.69	53.05	0.36	3922.32
MW - 9	07/11/13	3975.06	52.52	52.84	0.32	3922.49
MW - 9	07/24/13	3975.06	52.47	52.83	0.36	3922.54
MW - 9	07/26/13	3975.06	52.45	52.78	0.33	3922.56
MW - 9	07/31/13	3975.06	52.45	52.81	0.36	3922.56
MW - 9	08/02/13	3975.06	52.48	52.85	0.37	3922.52
MW - 9	08/06/13	3975.06	52.49	52.87	0.38	3922.51
MW - 9	08/14/13	3975.06	52.45	52.86	0.41	3922.55
MW - 9	08/21/13	3975.06	52.50	52.94	0.44	3922.49

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	08/26/13	3975.06	52.53	52.95	0.42	3922.47
MW - 9	09/06/13	3975.06	52.60	53.03	0.43	3922.40
MW - 9	08/30/13	3975.06	52.50	52.87	0.37	3922.50
MW - 9	09/13/13	3975.06	52.62	52.91	0.29	3922.40
MW - 9	09/27/13	3975.06	52.58	53.00	0.42	3922.42
MW - 9	09/30/13	3975.06	52.55	52.95	0.40	3922.45
MW - 9	10/02/13	3975.06	52.53	52.93	0.40	3922.47
MW - 9	10/03/13	3975.06	52.52	52.92	0.40	3922.48
MW - 9	10/11/13	3975.06	52.62	52.98	0.36	3922.39
MW - 9	10/17/13	3975.06	52.64	52.97	0.33	3922.37
MW - 9	10/22/13	3975.06	52.65	52.95	0.30	3922.37
MW - 9	10/24/13	3975.06	52.70	52.91	0.21	3922.33
MW - 9	10/30/13	3975.06	52.66	52.94	0.28	3922.36
MW - 9	11/01/13	3975.06	52.64	52.87	0.23	3922.39
MW - 9	11/04/13	3975.06	52.66	52.98	0.32	3922.35
MW - 9	11/08/13	3975.06	52.65	53.00	0.35	3922.36
MW - 9	11/13/13	3975.06	52.63	53.01	0.38	3922.37
MW - 9	11/15/13	3975.06	52.63	53.03	0.40	3922.37
MW - 9	11/18/13	3975.06	52.65	53.15	0.50	3922.34
MW - 9	12/12/13	3975.06	52.65	53.23	0.58	3922.32
MW - 9	12/16/13	3975.06	52.64	53.25	0.61	3922.33
MW - 9	12/18/13	3975.06	52.66	53.21	0.55	3922.32
MW - 9	12/23/13	3975.06	52.60	53.05	0.45	3922.39
MW - 9	12/30/13	3975.06	52.60	52.95	0.35	3922.41
MW - 10	02/11/13	3975.02	-	52.36	0.00	3922.66
MW - 10	04/11/13	3975.02	-	52.34	0.00	3922.68
MW - 10	05/06/13	3975.02	-	52.44	0.00	3922.58
MW - 10	05/29/13	3975.02	-	52.41	0.00	3922.61
MW - 10	06/26/13	3975.02	-	52.36	0.00	3922.66
MW - 10	07/31/13	3975.02	-	52.29	0.00	3922.73
MW - 10	08/06/13	3975.02	-	52.33	0.00	3922.69
MW - 10	09/30/13	3975.02	-	52.40	0.00	3922.62
MW - 10	11/18/13	3975.02	-	52.56	0.00	3922.46
MW - 11	02/11/13	3975.30	-	53.16	0.00	3922.14
MW - 11	04/11/13	3975.30	-	53.39	0.00	3921.91
MW - 11	05/06/13	3975.30	-	53.19	0.00	3922.11
MW - 11	05/29/13	3975.30	-	53.34	0.00	3921.96
MW - 11	06/26/13	3975.30	-	53.36	0.00	3921.94
MW - 11	07/31/13	3975.30	-	53.29	0.00	3922.01
MW - 11	08/06/13	3975.30	-	53.26	0.00	3922.04
MW - 11	09/30/13	3975.30	-	53.35	0.00	3921.95
MW - 11	11/18/13	3975.30	-	53.32	0.00	3921.98

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 12	02/11/13	3974.55	-	52.08	0.00	3922.47
MW - 12	04/11/13	3974.55	-	52.30	0.00	3922.25
MW - 12	05/06/13	3974.55	-	52.13	0.00	3922.42
MW - 12	05/29/13	3974.55	-	52.26	0.00	3922.29
MW - 12	06/26/13	3974.55	-	52.31	0.00	3922.24
MW - 12	07/31/13	3974.55	-	52.21	0.00	3922.34
MW - 12	08/06/13	3974.55	-	52.21	0.00	3922.34
MW - 12	09/30/13	3974.55	-	52.25	0.00	3922.30
MW - 12	11/18/13	3974.55	-	52.27	0.00	3922.28
MW - 12	12/08/13	3974.55	-	52.28	0.00	3922.27
MW - 13	02/11/13	3975.00	-	53.09	0.00	3921.91
MW - 13	04/11/13	3975.00	-	53.29	0.00	3921.71
MW - 13	04/15/13	3975.00	-	53.20	0.00	3921.80
MW - 13	04/22/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/06/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/09/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/20/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/24/13	3975.00	-	53.25	0.00	3921.75
MW - 13	05/29/13	3975.00	-	53.26	0.00	3921.74
MW - 13	05/31/13	3975.00	-	53.23	0.00	3921.77
MW - 13	06/07/13	3975.00	-	53.31	0.00	3921.69
MW - 13	06/12/13	3975.00	-	53.30	0.00	3921.70
MW - 13	06/14/13	3975.00	-	53.25	0.00	3921.75
MW - 13	06/19/13	3975.00	-	53.24	0.00	3921.76
MW - 13	06/21/13	3975.00	-	53.28	0.00	3921.72
MW - 13	06/25/13	3975.00	-	53.21	0.00	3921.79
MW - 13	06/26/13	3975.00	-	53.26	0.00	3921.74
MW - 13	07/03/13	3975.00	-	53.26	0.00	3921.74
MW - 13	07/09/13	3975.00	-	53.25	0.00	3921.75
MW - 13	07/11/13	3975.00	-	53.31	0.00	3921.69
MW - 13	07/24/13	3975.00	-	53.22	0.00	3921.78
MW - 13	07/26/13	3975.00	-	53.29	0.00	3921.71
MW - 13	07/31/13	3975.00	-	53.25	0.00	3921.75
MW - 13	08/02/13	3975.00	-	53.29	0.00	3921.71
MW - 13	08/06/13	3975.00	-	53.22	0.00	3921.78
MW - 13	08/14/13	3975.00	-	53.28	0.00	3921.72
MW - 13	08/21/13	3975.00	-	53.32	0.00	3921.68
MW - 13	08/26/13	3975.00	-	53.29	0.00	3921.71
MW - 13	09/06/13	3975.00	-	53.30	0.00	3921.70
MW - 13	08/30/13	3975.00	-	53.28	0.00	3921.72
MW - 13	09/13/13	3975.00	-	53.23	0.00	3921.77
MW - 13	09/27/13	3975.00	-	53.34	0.00	3921.66

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 13	09/30/13	3975.00	-	53.35	0.00	3921.65
MW - 13	10/02/13	3975.00	-	53.30	0.00	3921.70
MW - 13	10/03/13	3975.00	-	53.28	0.00	3921.72
MW - 13	10/11/13	3975.00	-	53.21	0.00	3921.79
MW - 13	10/17/13	3975.00	-	53.22	0.00	3921.78
MW - 13	10/22/13	3975.00	-	53.22	0.00	3921.78
MW - 13	10/24/13	3975.00	-	53.37	0.00	3921.63
MW - 13	10/30/13	3975.00	-	53.34	0.00	3921.66
MW - 13	11/01/13	3975.00	-	53.25	0.00	3921.75
MW - 13	11/04/13	3975.00	-	53.29	0.00	3921.71
MW - 13	11/08/13	3975.00	-	53.32	0.00	3921.68
MW - 13	11/13/13	3975.00	-	53.25	0.00	3921.75
MW - 13	11/15/13	3975.00	-	53.25	0.00	3921.75
MW - 13	11/19/13	3975.00	-	53.25	0.00	3921.75
MW - 13	12/12/13	3975.00	-	53.31	0.00	3921.69
MW - 13	12/16/13	3975.00	-	53.30	0.00	3921.70
MW - 13	12/18/13	3975.00	-	53.30	0.00	3921.70
MW - 13	12/23/13	3975.00	-	53.36	0.00	3921.64
MW - 13	12/30/13	3975.00	-	53.33	0.00	3921.67
MW - 14	02/11/13	3976.15	-	53.73	0.00	3922.42
MW - 14	04/11/13	3976.15	-	53.96	0.00	3922.19
MW - 14	05/06/13	3976.15	-	53.82	0.00	3922.33
MW - 14	05/29/13	3976.15	-	53.93	0.00	3922.22
MW - 14	06/26/13	3976.15	-	53.86	0.00	3922.29
MW - 14	07/31/13	3976.15	-	53.79	0.00	3922.36
MW - 14	08/06/13	3976.15	-	53.82	0.00	3922.33
MW - 14	09/30/13	3976.15	-	53.90	0.00	3922.25
MW - 14	11/19/13	3976.15	-	53.96	0.00	3922.19
MW - 15	02/11/13	3974.69	-	52.65	0.00	3922.04
MW - 15	04/11/13	3974.69	-	52.91	0.00	3921.78
MW - 15	04/15/13	3974.69	-	52.91	0.00	3921.78
MW - 15	04/22/13	3974.69	-	52.66	0.00	3922.03
MW - 15	05/06/13	3974.69	-	52.66	0.00	3922.03
MW - 15	05/09/13	3974.69	-	52.68	0.00	3922.01
MW - 15	05/20/13	3974.69	-	52.69	0.00	3922.00
MW - 15	05/24/13	3974.69	-	52.83	0.00	3921.86
MW - 15	05/29/13	3974.69	-	52.92	0.00	3921.77
MW - 15	05/31/13	3974.69	-	52.82	0.00	3921.87
MW - 15	06/07/13	3974.69	-	52.93	0.00	3921.76
MW - 15	06/12/13	3974.69	-	52.91	0.00	3921.78
MW - 15	06/14/13	3974.69	-	52.86	0.00	3921.83
MW - 15	06/19/13	3974.69	-	52.88	0.00	3921.81

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	06/21/13	3974.69	-	52.94	0.00	3921.75
MW - 15	06/25/13	3974.69	-	52.75	0.00	3921.94
MW - 15	06/26/13	3974.69	-	52.88	0.00	3921.81
MW - 15	07/03/13	3974.69	-	52.86	0.00	3921.83
MW - 15	07/09/13	3974.69	-	52.87	0.00	3921.82
MW - 15	07/11/13	3974.69	-	52.92	0.00	3921.77
MW - 15	07/24/13	3974.69	-	52.84	0.00	3921.85
MW - 15	07/26/13	3974.69	-	52.88	0.00	3921.81
MW - 15	07/31/13	3974.69	-	52.83	0.00	3921.86
MW - 15	08/02/13	3974.69	-	52.87	0.00	3921.82
MW - 15	08/06/13	3974.69	-	52.78	0.00	3921.91
MW - 15	08/14/13	3974.69	-	52.89	0.00	3921.80
MW - 15	08/21/13	3974.69	-	52.91	0.00	3921.78
MW - 15	08/26/13	3974.69	-	52.87	0.00	3921.82
MW - 15	09/06/13	3974.69	-	52.87	0.00	3921.82
MW - 15	08/30/13	3974.69	-	52.84	0.00	3921.85
MW - 15	09/13/13	3974.69	-	52.80	0.00	3921.89
MW - 15	09/27/13	3974.69	-	52.93	0.00	3921.76
MW - 15	09/30/13	3974.69	-	52.91	0.00	3921.78
MW - 15	10/02/13	3974.69	-	52.92	0.00	3921.77
MW - 15	10/03/13	3974.69	-	52.88	0.00	3921.81
MW - 15	10/11/13	3974.69	-	52.76	0.00	3921.93
MW - 15	10/17/13	3974.69	-	52.79	0.00	3921.90
MW - 15	10/22/13	3974.69	-	52.78	0.00	3921.91
MW - 15	10/24/13	3974.69	-	52.96	0.00	3921.73
MW - 15	10/30/13	3974.69	-	52.92	0.00	3921.77
MW - 15	11/01/13	3974.69	-	52.85	0.00	3921.84
MW - 15	11/04/13	3974.69	-	52.83	0.00	3921.86
MW - 15	11/08/13	3974.69	-	52.95	0.00	3921.74
MW - 15	11/13/13	3974.69	-	52.80	0.00	3921.89
MW - 15	11/15/13	3974.69	-	52.81	0.00	3921.88
MW - 15	11/19/13	3974.69	-	52.79	0.00	3921.90
MW - 15	12/08/13	3974.69	-	52.79	0.00	3921.90
MW - 15	12/12/13	3974.69	-	52.85	0.00	3921.84
MW - 15	12/16/13	3974.69	-	52.83	0.00	3921.86
MW - 15	12/18/13	3974.69	-	52.84	0.00	3921.85
MW - 15	12/23/13	3974.69	-	52.94	0.00	3921.75
MW - 15	12/30/13	3974.69	-	52.89	0.00	3921.80
MW - 16	02/11/13	3975.12	-	52.59	0.00	3922.53
MW - 16	04/11/13	3975.12	-	52.19	0.00	3922.93
MW - 16	05/06/13	3975.12	-	52.67	0.00	3922.45
MW - 16	05/29/13	3975.12	-	52.42	0.00	3922.70
MW - 16	06/26/13	3975.12	-	52.19	0.00	3922.93

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 16	07/31/13	3975.12	-	52.32	0.00	3922.80
MW - 16	08/06/13	3975.12	-	52.42	0.00	3922.70
MW - 16	09/30/13	3975.12	-	52.49	0.00	3922.63
MW - 16	11/19/13	3975.12	-	52.81	0.00	3922.31
MW - 17	08/09/06	PLUGGED & ABANDONED				
MW - 18	02/11/13	-	-	53.85	0.00	-
MW - 18	04/11/13	-	-	53.95	0.00	-
MW - 18	05/06/13	-	-	53.85	0.00	-
MW - 18	05/29/13	-	-	53.90	0.00	-
MW - 18	06/26/13	-	-	53.94	0.00	-
MW - 18	07/31/13	-	-	53.94	0.00	-
MW - 18	08/06/13	-	-	53.93	0.00	-
MW - 18	09/30/13	-	-	53.99	0.00	-
MW - 18	11/19/13	-	-	54.01	0.00	-
RW - 1	02/11/13	3970.79	47.86	49.79	1.93	3922.64
RW - 1	04/11/13	3970.79	-	48.41	0.00	3922.38
RW - 1	05/06/13	3970.79	47.98	49.25	1.27	3922.62
RW - 1	05/29/13	3970.79	-	48.33	0.00	3922.46
RW - 1	06/26/13	3970.79	-	49.73	0.00	3921.06
RW - 1	07/31/13	3970.79	48.13	49.15	1.02	3922.51
RW - 1	08/06/13	3970.79	48.30	48.37	0.07	3922.48
RW - 1	09/30/13	3970.79	48.21	48.96	0.75	3922.47
RW - 1	11/18/13	3970.79	48.23	48.76	0.53	3922.48
RW - 2	02/11/13	-	52.76	52.86	0.10	-
RW - 2	04/11/13	-	53.05	53.07	0.02	-
RW - 2	05/06/13	-	52.77	52.89	0.12	-
RW - 2	05/29/13	-	53.00	53.09	0.09	-
RW - 2	06/26/13	-	53.04	53.29	0.25	-
RW - 2	07/31/13	-	52.89	53.09	0.20	-
RW - 2	08/06/13	-	52.89	53.03	0.14	-
RW - 2	09/30/13	-	52.95	53.14	0.19	-
RW - 2	11/18/13	-	52.90	53.18	0.28	-
RW - 3	02/11/13	-	53.16	54.00	0.84	-
RW - 3	04/11/13	-	53.44	54.19	0.75	-
RW - 3	05/06/13	-	53.18	54.10	0.92	-
RW - 3	05/29/13	-	53.35	54.16	0.81	-
RW - 3	06/26/13	-	53.38	54.26	0.88	-
RW - 3	07/31/13	-	53.20	54.55	1.35	-
RW - 3	08/06/13	-	53.19	54.66	1.47	-

TABLE 1

2013 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 3	09/30/13	-	53.27	54.71	1.44	-
RW - 3	11/18/13	-	52.22	53.72	1.50	-
RW - 4	02/11/13		52.99	54.92	1.93	
RW - 4	03/18/13	-	-	-	-	-
RW - 4	04/11/13	-	53.22	55.13	1.91	-
RW - 4	05/06/13	-	53.07	54.76	1.69	-
RW - 4	05/29/13	-	53.19	55.05	1.86	-
RW - 4	06/26/13	-	52.83	56.36	3.53	-
RW - 4	07/31/13	-	52.47	57.93	5.46	-
RW - 4	08/06/13	-	52.40	58.42	6.02	-
RW - 4	09/30/13	-	52.72	57.32	4.60	-
RW - 4	11/18/13	-	53.15	55.15	2.00	-

TABLE 2

2013 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
NMOCD REGULATORY LIMIT		0.01	0.75	0.75	0.62	
MW - 1	09/14/05	Plugged and Abandoned				
MW - 2	02/11/13	Not Sampled Due to PSH in Well				
MW - 2	05/06/13	Not Sampled Due to PSH in Well				
MW - 2	08/06/13	Not Sampled Due to PSH in Well				
MW - 2	11/18/13	Not Sampled Due to PSH in Well				
MW - 3	02/11/13	Not Sampled Due to PSH in Well				
MW - 3	05/06/13	Not Sampled Due to PSH in Well				
MW - 3	08/06/13	Not Sampled Due to PSH in Well				
MW - 3	11/18/13	Not Sampled Due to PSH in Well				
MW - 4	02/11/13	0.262	<0.00500	0.329	0.790	
MW - 4	05/06/13	0.396	<0.00500	0.480	1.55	
MW - 4	08/06/13	0.259	<0.00500	0.406	1.05	
MW - 4	11/19/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 4	12/08/13	0.0777	<0.0500	<0.0500	<0.150	
MW - 5	02/11/13	Not Sampled Due to PSH in Well				
MW - 5	05/06/13	Not Sampled Due to PSH in Well				
MW - 5	08/06/13	Not Sampled Due to PSH in Well				
MW - 5	11/18/13	Not Sampled Due to PSH in Well				
MW - 6	02/11/13	Not Sampled Due to PSH in Well				
MW - 6	05/06/13	Not Sampled Due to PSH in Well				
MW - 6	08/06/13	Not Sampled Due to PSH in Well				
MW - 6	11/18/13	Not Sampled Due to PSH in Well				
MW - 7	02/11/13	Not Sampled on Current Sample Schedule				
MW - 7	05/06/13	Not Sampled on Current Sample Schedule				
MW - 7	08/06/13	Not Sampled on Current Sample Schedule				
MW - 7	11/19/13	0.0729	0.0023	0.0788	0.2020	
MW - 7	12/08/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 8	09/14/05	Plugged and Abandoned				
MW - 9	02/11/13	Not Sampled Due to PSH in Well				
MW - 9	05/06/13	Not Sampled Due to PSH in Well				
MW - 9	08/06/13	Not Sampled Due to PSH in Well				
MW - 9	11/18/13	Not Sampled Due to PSH in Well				

TABLE 2

2013 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 10	02/11/13	Not Sampled on Current Sample Schedule				
MW - 10	05/06/13	Not Sampled on Current Sample Schedule				
MW - 10	08/06/13	Not Sampled on Current Sample Schedule				
MW - 10	11/18/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 11	02/11/13	Not Sampled on Current Sample Schedule				
MW - 11	05/06/13	Not Sampled on Current Sample Schedule				
MW - 11	08/06/13	Not Sampled on Current Sample Schedule				
MW - 11	11/18/13	0.0023	<0.00100	<0.00100	<0.00300	
MW - 12	02/11/13	Not Sampled on Current Sample Schedule				
MW - 12	05/06/13	Not Sampled on Current Sample Schedule				
MW - 12	08/06/13	Not Sampled on Current Sample Schedule				
MW - 12	11/18/13	0.386	<0.00100	0.0412	0.0058	
MW - 12	12/08/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 13	02/11/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	11/19/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 14	02/11/13	<0.00100	<0.00100	0.0173	0.0444	
MW - 14	05/06/13	<0.00100	<0.00100	0.00740	0.0204	
MW - 14	08/06/13	<0.00100	<0.00100	0.0169	0.0473	
MW - 14	11/19/13	0.0019	<0.00100	<0.00100	<0.00300	
MW - 15	02/11/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 15	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 15	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 15	11/19/13	0.0194	<0.00100	<0.00100	<0.00100	
MW - 15	12/08/13	<0.00100	<0.00100	0.00710	<0.00300	
MW - 16	02/11/13	Not Sampled on Current Sample Schedule				
MW - 16	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 16	08/06/13	Not Sampled on Current Sample Schedule				
MW - 16	11/19/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 17	08/09/06	Plugged and Abandoned				
MW - 18	02/11/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	11/19/13	<0.00100	<0.00100	<0.00100	<0.00100	

TABLE 2

2013 CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCACTION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
RW - 1	02/11/13	Not Sampled Due to PSH in Well				
RW - 1	05/06/13	Not Sampled Due to PSH in Well				
RW - 1	08/06/13	Not Sampled Due to PSH in Well				
RW - 1	11/18/13	Not Sampled Due to PSH in Well				
RW - 2	02/11/13	Not Sampled Due to PSH in Well				
RW - 2	05/06/13	Not Sampled Due to PSH in Well				
RW - 2	08/06/13	Not Sampled Due to PSH in Well				
RW - 2	11/18/13	Not Sampled Due to PSH in Well				
RW - 3	02/11/13	Not Sampled Due to PSH in Well				
RW - 3	05/06/13	Not Sampled Due to PSH in Well				
RW - 3	08/06/13	Not Sampled Due to PSH in Well				
RW - 3	11/18/13	Not Sampled Due to PSH in Well				
RW - 4	02/11/13	Not Sampled Due to PSH in Well				
RW - 4	05/06/13	Not Sampled Due to PSH in Well				
RW - 4	08/06/13	Not Sampled Due to PSH in Well				
RW - 4	11/18/13	Not Sampled Due to PSH in Well				

TABLE 3

2013 POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

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[ghi]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-2	11/18/13	Not Sampled due to the presence of PSH.																		
MW-3	11/18/13	Not Sampled due to the presence of PSH.																		
MW-4	11/19/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.0877	0.109	0.121	12.6
MW-5	11/18/13	Not Sampled due to the presence of PSH.																		
MW-6	11/18/13	Not Sampled due to the presence of PSH.																		
MW-7	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-9	11/18/13	Not Sampled due to the presence of PSH.																		
MW-10	11/18/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-11	11/18/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-12	11/18/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-13	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-14	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-15	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-16	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-18	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		

TABLE 3

2013 POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.
 TNM 97-04 TOWNSEND
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE NUMBER GW-0294

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[ghi]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			—
RW-1	11/18/13	Not Sampled due to the presence of PSH.																		
RW-2	11/18/13	Not Sampled due to the presence of PSH.																		
RW-3	11/18/13	Not Sampled due to the presence of PSH.																		
RW-4	11/18/13	Not Sampled due to the presence of PSH.																		

TABLE 4**2013 BTEX CONCENTRATIONS IN EFFLUENT GROUNDWATER**

**PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294**

Results and Regulatory Guidelines in mg/L

Sample Date	Sample Location	Benzene	Toluene	Ethylbenzene	Xylenes
NMOCD Regulatory Guidelines		0.010	0.75	0.75	0.62
01/31/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
02/27/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
03/28/13	Post Carbon	0.114	0.0406	0.0059	0.059
04/12/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
06/24/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
07/29/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
08/29/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
09/25/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
10/30/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100
11/26/13	Post Carbon	0.00150	<0.00100	<0.00100	<0.00300
12/26/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00300

TABLE 5

2013 POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
 TNM 97-04 TOWNSEND
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE NUMBER GW-0294

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		--	
Post Carbon*	01/31/13	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	
Post Carbon	02/27/13	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	
Post Carbon	04/12/13	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	
Post Carbon	06/24/13	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	
Post Carbon	07/29/13	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	
Post Carbon	08/29/13	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	
Post Carbon	09/25/13	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	
Post Carbon	10/30/13	<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	
Post Carbon	11/26/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Post Carbon	12/26/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	

TABLE 6

2013 WQCC METALS CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	Total Aluminum	Total Boron	Total Cobalt	Total Copper	Total Iron	Total Manganese	Total Molybdenum	Total Nickel	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Mercury	Total Lead	Total Selenium	Total Silver	Total Zinc
		5.0 mg/L	0.75 mg/L	0.05 mg/L	1.0 mg/L	1.0 mg/L	0.2 mg/L	1.0 mg/L	0.2 mg/L	0.1 mg/L	1.0 mg/L	0.01 mg/L	0.05 mg/L	0.002 mg/L	0.05 mg/L	0.05 mg/L	0.05 mg/L	10 mg/L
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.																		
Post Carbon	02/28/14	<0.0500	0.0270	<0.0100	<0.00500	0.415	0.104	<0.0500	<0.0100	<0.0100	0.249	<0.0100	<0.0100	<0.000200	<0.0100	<0.0200	<0.00500	<0.0100



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December 11, 2013

Curt Stanley

Nova Safety and Environmental

2057 Commerce St.

Midland, TX. 79703

Re: TNM 97-04 Townsend

To Whom It May Concern,

On November 20th, 2013 Nova Safety and Environmental submitted ten samples for BTEX and PAH analysis for the TNM 97-04 Townsend project. The project was given a unique work order 13112007 and each sample associated with the project was assigned a unique laboratory identifier cross referenced to the field code. It was observed that BTEX results for samples 347041, 347042, 347046, and 347048 affiliated with QC Batch 107033 were confounding. Trace investigated this issue and determined that an auto-sampler error required all samples linked to that QC Batch be removed and reloaded into a back-up system. These samples were accidentally shuffled up and the reported results are not indicative of the samples actual concentrations. This error was not discovered until the results were reported and samples were out of holding time.

Subsequently, Nova resampled the wells in question. It was submitted to TraceAnalysis on December 9th, 2013 and given a work order number 13120905. The field codes MW-12, MW-7, MW-15 and MW-4 were cross referenced to the laboratory identifiers 348304, 348305, 348306, and 348307, respectively. The samples were analyzed immediately and results were reported to the client on December 10th. Due to the obvious error in the first sampling event Trace recommends using the latter results for all analytical decisions. If you have any questions regarding these issues please do not hesitate to contact me.

Thank you,



Dr. Michael Abel, PhD.

Laboratory Manager

TraceAnalysis, Inc.

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Fax: (806)794-1298

e-mail: mabel@traceanalysis.com

DISTRICT I

P.O. BOX 1990, HOBBS, NM 88241-1990

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSUBMIT 2 COPIES TO
APPROPRIATE DISTRICT
OFFICE IN ACCORDANCE
WITH RULE 116 PRINTED
ON BACK SIDE OF FORM**DISTRICT II**P.O. DRAWER DD, ARTESIA, NM 88211-
8719**OIL CONSERVATION DIVISION****DISTRICT III**

1000 Rio Brazos Rd, Aztec, NM 87410

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

*Initial Report***NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS**

OPERATOR Texas-New Mexico Pipe Line Company			ADDRESS P. O. Box 60023, San Angelo, TX 76906			TELEPHONE (915) 947-9000	
REPORT OF	FIRE	BREAK	SPILL	LEAK	BLOWOUT	OTHER*	
				X			
TYPE OF FACILITY	DRUG WELL	PROD WELL	TANK BTRY	PIPE LINE X	GASO PLANT	OIL RFY	OTHER*
FACILITY NAME: 4" gathering line							
LOCATION OF FACILITY Qtr/Qtr Sec. or Footage. SW/4 SW/4 SE/4 SE/4			SEC. 11	TWP. 11S	RGE. 16S	COUNTY Lea	
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK 2 miles west of Lovington							
DATE AND HOUR OF OCCURRENCE Unknown			DATE AND HOUR OF DISCOVERY April 16, 1997 4:00 p.m.				
WAS IMMEDIATE NOTICE GIVEN?	YES	NO	NOT REQUIRED X	IF YES, TO WHOM Wayne Price			
BY WHOM B. D. Chapman (reported that quantity may be more than 10 barrels)				DATE AND HOUR April 25, 1997 9:00 a.m.			
TYPE OF FLUID LOST Sweet Crude		QUANTITY OF LOSS Unknown (*see note below)		VOLUME RECOVERED None			
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO	QUANTITY				
		X					
IF YES, DESCRIBE FULLY**							
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**							
External Corrosion. Leak successfully clamped off.							
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**							
Approximately 1500 sq.ft. pasture land. Will remediate on site.							
*Originally estimated at 10 barrels. Under investigation. An amended report will be issued when quantity is determined.							
DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER*			
		X					
SURFACE CONDITION	SANDY	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW
				X		X	
RECORD CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**							
75 degrees, clear							
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF							
SIGNED	PRINTED NAME AND TITLE Edwin H. Gripp, District Manager			DATE April 25, 1997			

*SPECIFY

State Corp. Commission
Pipe Line Division

**ATTACH ADDITIONAL SHEETS IF NECESSARY

Hazardous Waste Section
NM Environmental Improvement Div.

TNM-97-04

BDC

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 1	03/02/00	3974.18	-	53.01	0.00	3921.17
MW - 1	04/25/00	3974.18	-	53.02	0.00	3921.16
MW - 1	09/06/00	3974.18	-	53.07	0.00	3921.11
MW - 1	11/28/00	3974.18	-	53.08	0.00	3921.10
MW - 1	02/21/01	3974.18	-	52.98	0.00	3921.20
MW - 1	05/31/01	3974.18	-	52.94	0.00	3921.24
MW - 1	08/23/01	3974.18	-	52.95	0.00	3921.23
MW - 1	11/21/01	3974.18	-	52.99	0.00	3921.19
MW - 1	02/13/02	3974.18	-	53.04	0.00	3921.14
MW - 1	06/12/02	3974.18	-	52.99	0.00	3921.19
MW - 1	08/26/02	3974.18	-	53.02	0.00	3921.16
MW - 1	11/21/02	3974.18	-	53.07	0.00	3921.11
MW - 1	02/05/03	3974.18	-	53.00	0.00	3921.18
MW - 1	05/07/03	3974.18	-	52.96	0.00	3921.22
MW - 1	08/18/03	3974.18	-	53.01	0.00	3921.17
MW - 1	12/01/03	3974.18	-	53.07	0.00	3921.11
MW - 1	02/05/04	3974.18	-	53.07	0.00	3921.11
MW - 1	05/05/04	3974.18	-	53.50	0.00	3920.68
MW - 1	09/01/04	3974.18	-	53.11	0.00	3921.07
MW - 1	12/15/04	3974.18	-	53.09	0.00	3921.09
MW - 1	03/22/05	3974.18	-	52.80	0.00	3921.38
MW - 1	06/22/05	3974.18	-	52.75	0.00	3921.43
MW - 1	09/14/05	PLUGGED & ABANDONED				
MW - 2	03/02/00	3974.62	52.49	55.38	2.89	3921.70
MW - 2	04/25/00	3974.62	52.59	55.42	2.83	3921.61
MW - 2	09/05/00	3974.62	52.58	55.71	3.13	3921.57
MW - 2	12/01/00	3974.62	52.75	55.23	2.48	3921.50
MW - 2	02/21/01	3974.62	52.52	55.75	3.23	3921.62
MW - 2	05/31/01	3974.62	52.77	54.75	1.98	3921.55
MW - 2	08/23/01	3974.62	52.40	55.83	3.43	3921.71
MW - 2	11/21/01	3974.62	53.02	54.21	1.19	3921.42
MW - 2	02/13/02	3974.62	52.48	56.14	3.66	3921.59
MW - 2	06/12/02	3974.62	52.44	56.11	3.67	3921.63
MW - 2	08/26/02	3974.62	-	-	-	-
MW - 2	11/08/02	3974.62	52.59	55.99	3.40	3921.52
MW - 2	11/21/02	3974.62	53.13	53.54	0.41	3921.43
MW - 2	12/27/02	3974.62	52.64	55.65	3.01	3921.53
MW - 2	01/06/03	3974.62	52.80	54.81	2.01	3921.52
MW - 2	01/08/03	3974.62	52.95	54.14	1.19	3921.49
MW - 2	01/10/03	3974.62	53.15	53.32	0.17	3921.44
MW - 2	01/13/03	3974.62	53.14	53.32	0.18	3921.45
MW - 2	02/05/03	3974.62	52.70	55.28	2.58	3921.53
MW - 2	02/26/03	3974.62	52.57	55.74	3.17	3921.57

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	03/04/03	3974.62	52.58	55.75	3.17	3921.56
MW - 2	03/12/03	3974.62	52.60	55.79	3.19	3921.54
MW - 2	03/18/03	3974.62	52.61	55.71	3.10	3921.55
MW - 2	03/25/03	3974.62	52.60	55.77	3.17	3921.54
MW - 2	03/31/03	3974.62	52.59	55.71	3.12	3921.56
MW - 2	04/09/03	3974.62	52.60	53.13	0.53	3921.94
MW - 2	04/14/03	3974.62	52.64	52.89	0.25	3921.94
MW - 2	05/07/03	3974.62	52.52	55.73	3.21	3921.62
MW - 2	05/08/03	3974.62	52.60	55.81	3.21	3921.54
MW - 2	05/13/03	3974.62	52.61	55.79	3.18	3921.53
MW - 2	05/21/03	3974.62	52.62	55.83	3.21	3921.52
MW - 2	05/27/03	3974.62	52.57	55.71	3.14	3921.58
MW - 2	05/28/03	3974.62	52.63	55.83	3.20	3921.51
MW - 2	06/03/03	3974.62	52.76	55.81	3.05	3921.40
MW - 2	06/09/03	3974.62	52.62	55.79	3.17	3921.52
MW - 2	07/01/03	3974.62	52.80	53.81	1.01	3921.67
MW - 2	07/08/03	3974.62	52.69	55.92	3.23	3921.45
MW - 2	07/29/03	3974.62	52.57	55.72	3.15	3921.58
MW - 2	08/04/03	3974.62	52.76	55.91	3.15	3921.39
MW - 2	08/18/03	3974.62	52.85	54.18	1.33	3921.57
MW - 2	08/25/03	3974.62	52.86	56.04	3.18	3921.28
MW - 2	10/01/03	3974.62	52.76	52.99	0.23	3921.83
MW - 2	10/06/03	3974.62	52.63	55.69	3.06	3921.53
MW - 2	10/08/03	3974.62	52.95	56.07	3.12	3921.20
MW - 2	10/15/03	3974.62	52.93	56.08	3.15	3921.22
MW - 2	11/12/03	3974.62	53.04	54.18	1.14	3921.41
MW - 2	11/19/03	3974.62	53.03	56.18	3.15	3921.12
MW - 2	12/01/03	3974.62	53.08	56.21	3.13	3921.07
MW - 2	12/10/03	3974.62	52.74	55.82	3.08	3921.42
MW - 2	02/05/04	3974.62	53.09	56.18	3.09	3921.07
MW - 2	02/17/04	3974.62	52.78	53.51	0.73	3921.73
MW - 2	02/25/04	3974.62	53.06	56.03	2.97	3921.11
MW - 2	03/09/04	3974.62	52.83	55.87	3.04	3921.33
MW - 2	03/16/04	3974.62	52.85	55.80	2.95	3921.33
MW - 2	03/22/04	3974.62	53.32	54.00	0.68	3921.20
MW - 2	04/07/04	3974.62	52.88	53.14	0.26	3921.70
MW - 2	04/12/04	3974.62	53.21	56.03	2.82	3920.99
MW - 2	04/19/04	3974.62	52.88	53.98	1.10	3921.58
MW - 2	05/05/04	3974.62	52.88	55.83	2.95	3921.30
MW - 2	05/11/04	3974.62	52.98	55.95	2.97	3921.19
MW - 2	06/07/04	3974.62	52.63	55.49	2.86	3921.56
MW - 2	06/15/04	3974.62	-	52.57	0.00	3922.05
MW - 2	06/20/04	3974.62	52.57	WELL OBSTRUCTED		
MW - 2	06/21/04	3974.62	52.58	WELL OBSTRUCTED		

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	06/28/04	3974.62	52.58	WELL OBSTRUCTED		
MW - 2	07/08/04	3974.62	52.58	WELL OBSTRUCTED		
MW - 2	07/12/04	3974.62	52.59	WELL OBSTRUCTED		
MW - 2	08/12/04	3974.62	52.59	WELL OBSTRUCTED		
MW - 2	08/17/04	3974.62	52.63	WELL OBSTRUCTED		
MW - 2	08/26/04	3974.62	52.62	WELL OBSTRUCTED		
MW - 2	09/01/04	3974.62	53.86	54.75	0.89	3920.63
MW - 2	09/03/04	3974.62	53.86	54.75	0.89	3920.63
MW - 2	09/08/04	3974.62	53.92	54.75	0.83	3920.58
MW - 2	09/14/04	3974.62	52.90	54.75	1.85	3921.44
MW - 2	09/22/04	3974.62	53.01	54.75	1.74	3921.35
MW - 2	10/01/04	3974.62	52.88	54.90	2.02	3921.44
MW - 2	10/08/04	3974.62	52.94	55.10	2.16	3921.36
MW - 2	10/15/04	3974.62	53.10	55.10	2.00	3921.22
MW - 2	10/22/04	3974.62	52.73	55.15	2.42	3921.53
MW - 2	11/12/04	3974.62	52.68	55.65	2.97	3921.49
MW - 2	11/26/04	3974.62	52.70	54.60	1.90	3921.64
MW - 2	12/02/04	3974.62	52.72	55.50	2.78	3921.48
MW - 2	12/06/04	3974.62	52.99	55.31	2.32	3921.28
MW - 2	12/13/04	3974.62	52.80	54.70	1.90	3921.54
MW - 2	12/15/04	3974.62	52.80	54.70	1.90	3921.54
MW - 2	12/27/04	3974.62	52.80	55.20	2.40	3921.46
MW - 2	01/10/05	3974.62	52.57	55.40	2.83	3921.63
MW - 2	01/18/05	3974.62	52.63	55.17	2.54	3921.61
MW - 2	01/18/05	3974.62	52.78	54.33	1.55	3921.61
MW - 2	01/25/05	3974.62	52.51	55.35	2.84	3921.68
MW - 2	01/27/05	3974.62	52.55	55.22	2.67	3921.67
MW - 2	02/01/05	3974.62	52.52	55.55	3.03	3921.65
MW - 2	02/07/05	3974.62	52.50	55.34	2.84	3921.69
MW - 2	02/11/05	3974.62	52.50	55.23	2.73	3921.71
MW - 2	02/15/05	3974.62	52.49	55.25	2.76	3921.72
MW - 2	02/22/05	3974.62	52.46	55.44	2.98	3921.71
MW - 2	02/24/05	3974.62	52.43	55.50	3.07	3921.73
MW - 2	03/03/05	3974.62	52.43	55.41	2.98	3921.74
MW - 2	03/09/05	3974.62	52.43	55.35	2.92	3921.75
MW - 2	03/22/05	3974.62	53.03	53.13	0.10	3921.58
MW - 2	03/24/05	3974.62	53.03	53.13	0.10	3921.58
MW - 2	03/31/05	3974.62	53.05	53.12	0.07	3921.56
MW - 2	06/22/05	3974.62	52.86	53.38	0.52	3921.68
MW - 2	07/21/05	3974.62	52.73	53.24	0.51	3921.81
MW - 2	08/03/05	3974.62	52.45	54.54	2.09	3921.86
MW - 2	08/12/05	3974.62	52.42	54.58	2.16	3921.88
MW - 2	08/15/05	3974.62	52.48	54.40	1.92	3921.85
MW - 2	08/22/05	3974.62	52.41	54.50	2.09	3921.90

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	08/30/05	3974.62	52.40	54.64	2.24	3921.88
MW - 2	09/07/05	3974.62	52.38	54.62	2.24	3921.90
MW - 2	09/14/05	3974.62	52.32	54.63	2.31	3921.95
MW - 2	09/20/05	3974.62	52.39	54.48	2.09	3921.92
MW - 2	09/21/05	3974.62	52.36	54.61	2.25	3921.92
MW - 2	09/28/05	3974.62	52.38	54.60	2.22	3921.91
MW - 2	10/06/05	3974.62	52.32	54.85	2.53	3921.92
MW - 2	10/13/05	3974.62	52.32	54.85	2.53	3921.92
MW - 2	10/20/05	3974.62	52.32	54.84	2.52	3921.92
MW - 2	10/26/05	3974.62	52.33	54.83	2.50	3921.92
MW - 2	11/03/05	3974.62	52.28	54.80	2.52	3921.96
MW - 2	11/10/05	3974.62	52.29	54.79	2.50	3921.96
MW - 2	11/16/05	3974.62	52.31	54.79	2.48	3921.94
MW - 2	11/23/05	3974.62	52.33	54.75	2.42	3921.93
MW - 2	11/28/05	3974.62	52.27	54.83	2.56	3921.97
MW - 2	12/05/05	3974.62	52.30	54.72	2.42	3921.96
MW - 2	12/12/05	3974.62	52.29	54.70	2.41	3921.97
MW - 2	12/16/05	3974.62	53.01	53.84	0.83	3921.49
MW - 2	12/19/05	3974.62	52.35	54.76	2.41	3921.91
MW - 2	12/29/05	3974.62	52.26	54.82	2.56	3921.98
MW - 2	01/04/06	3974.62	52.30	54.80	2.50	3921.95
MW - 2	01/10/06	3974.62	52.29	54.80	2.51	3921.95
MW - 2	01/17/06	3974.62	52.29	54.78	2.49	3921.96
MW - 2	01/26/06	3974.62	52.26	54.78	2.52	3921.98
MW - 2	01/31/06	3974.62	52.28	54.74	2.46	3921.97
MW - 2	02/07/06	3974.62	52.27	54.73	2.46	3921.98
MW - 2	02/09/06	3974.62	52.34	54.57	2.23	3921.95
MW - 2	02/13/06	3974.62	52.28	54.60	2.32	3921.99
MW - 2	02/22/06	3974.62	52.27	54.73	2.46	3921.98
MW - 2	02/28/06	3974.62	52.29	54.70	2.41	3921.97
MW - 2	03/07/06	3974.62	52.27	54.68	2.41	3921.99
MW - 2	03/15/06	3974.62	52.24	54.70	2.46	3922.01
MW - 2	03/20/06	3974.62	52.22	54.64	2.42	3922.04
MW - 2	03/22/06	3974.62	52.60	53.40	0.80	3921.90
MW - 2	03/29/06	3974.62	52.24	54.57	2.33	3922.03
MW - 2	04/11/06	3974.62	52.21	54.59	2.38	3922.05
MW - 2	04/18/06	3974.62	52.22	54.60	2.38	3922.04
MW - 2	04/25/06	3974.62	52.29	54.63	2.34	3921.98
MW - 2	05/02/06	3974.62	52.22	53.98	1.76	3922.14
MW - 2	05/09/06	3974.62	52.21	54.43	2.22	3922.08
MW - 2	05/16/06	3974.62	52.22	54.61	2.39	3922.04
MW - 2	05/23/06	3974.62	52.23	54.59	2.36	3922.04
MW - 2	05/31/06	3974.62	52.21	54.58	2.37	3922.05
MW - 2	06/06/06	3974.62	52.22	54.54	2.32	3922.05

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	06/13/06	3974.62	52.22	54.54	2.32	3922.05
MW - 2	06/20/06	3974.62	52.21	54.51	2.30	3922.07
MW - 2	06/21/06	3974.62	52.36	53.85	1.49	3922.04
MW - 2	07/06/06	3974.62	52.20	54.53	2.33	3922.07
MW - 2	07/12/06	3974.62	52.25	54.31	2.06	3922.06
MW - 2	07/20/06	3974.62	52.29	53.18	0.89	3922.20
MW - 2	07/25/06	3974.62	52.25	54.28	2.03	3922.07
MW - 2	08/01/06	3974.62	52.26	54.31	2.05	3922.05
MW - 2	08/16/06	3974.62	52.26	54.32	2.06	3922.05
MW - 2	08/23/06	3974.62	52.27	53.26	0.99	3922.20
MW - 2	08/28/06	3974.62	52.28	54.24	1.96	3922.05
MW - 2	09/12/06	3974.62	52.25	54.27	2.02	3922.07
MW - 2	09/22/06	3974.62	52.27	54.27	2.00	3922.05
MW - 2	09/27/06	3974.62	52.27	54.20	1.93	3922.06
MW - 2	10/06/06	3974.62	52.25	54.29	2.04	3922.06
MW - 2	10/10/06	3974.62	52.69	54.19	1.50	3921.71
MW - 2	10/16/06	3974.62	52.28	54.25	1.97	3922.04
MW - 2	10/26/06	3974.62	52.27	54.25	1.98	3922.05
MW - 2	11/03/06	3974.62	52.27	54.24	1.97	3922.05
MW - 2	11/09/06	3974.62	52.28	54.14	1.86	3922.06
MW - 2	11/16/06	3974.62	52.26	54.18	1.92	3922.07
MW - 2	11/22/06	3974.62	52.25	54.18	1.93	3922.08
MW - 2	12/04/06	3974.62	52.25	54.15	1.90	3922.09
MW - 2	12/08/06	3974.62	52.25	54.19	1.94	3922.08
MW - 2	12/15/06	3974.62	52.16	54.37	2.21	3922.13
MW - 2	01/05/07	3974.62	52.20	54.43	2.23	3922.09
MW - 2	01/12/07	3974.62	52.19	54.37	2.18	3922.10
MW - 2	01/18/07	3974.62	52.17	54.37	2.20	3922.12
MW - 2	01/24/07	3974.62	52.20	54.35	2.15	3922.10
MW - 2	01/29/07	3974.62	52.17	54.28	2.11	3922.13
MW - 2	02/09/07	3974.62	52.17	54.31	2.14	3922.13
MW - 2	02/16/07	3974.62	52.18	54.34	2.16	3922.12
MW - 2	02/23/07	3974.62	52.15	54.25	2.10	3922.16
MW - 2	03/02/07	3974.62	52.16	54.30	2.14	3922.14
MW - 2	03/14/07	3974.62	52.20	53.88	1.68	3922.17
MW - 2	03/26/07	3974.62	52.19	54.13	1.94	3922.14
MW - 2	04/03/07	3974.62	52.15	54.22	2.07	3922.16
MW - 2	04/09/07	3974.62	52.14	54.20	2.06	3922.17
MW - 2	04/26/07	3974.62	52.15	54.21	2.06	3922.16
MW - 2	04/30/07	3974.62	52.16	54.13	1.97	3922.16
MW - 2	05/11/07	3974.62	52.15	54.16	2.01	3922.17
MW - 2	05/16/07	3974.62	52.16	54.13	1.97	3922.16
MW - 2	05/22/07	3974.62	52.15	54.12	1.97	3922.17
MW - 2	05/29/07	3974.62	52.13	54.12	1.99	3922.19

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	06/01/07	3974.62	52.12	54.14	2.02	3922.20
MW - 2	06/08/07	3974.62	52.14	54.12	1.98	3922.18
MW - 2	06/11/07	3974.62	52.16	54.00	1.84	3922.18
MW - 2	06/20/07	3974.62	52.15	54.10	1.95	3922.18
MW - 2	07/10/07	3974.62	52.13	54.08	1.95	3922.20
MW - 2	07/20/07	3974.62	52.14	54.06	1.92	3922.19
MW - 2	07/25/07	3974.62	52.14	54.02	1.88	3922.20
MW - 2	08/01/07	3974.62	52.11	54.01	1.90	3922.23
MW - 2	08/10/07	3974.62	52.15	54.02	1.87	3922.19
MW - 2	08/15/07	3974.62	52.14	54.00	1.86	3922.20
MW - 2	08/30/07	3974.62	52.15	54.00	1.85	3922.19
MW - 2	08/31/07	3974.62	52.15	54.00	1.85	3922.19
MW - 2	09/10/07	3974.62	52.14	53.98	1.84	3922.20
MW - 2	09/19/07	3974.62	52.12	53.98	1.86	3922.22
MW - 2	09/27/07	3974.62	52.11	53.94	1.83	3922.24
MW - 2	10/01/07	3974.62	52.14	53.88	1.74	3922.22
MW - 2	10/19/07	3974.62	52.10	53.96	1.86	3922.24
MW - 2	10/26/07	3974.62	52.10	53.91	1.81	3922.25
MW - 2	11/12/07	3974.62	52.12	53.89	1.77	3922.23
MW - 2	11/16/07	3974.62	52.10	53.88	1.78	3922.25
MW - 2	11/29/07	3974.62	52.10	53.89	1.79	3922.25
MW - 2	12/13/07	3974.62	52.10	53.86	1.76	3922.26
MW - 2	01/10/08	3974.62	52.08	53.79	1.71	3922.28
MW - 2	01/17/08	3974.62	52.10	53.79	1.69	3922.27
MW - 2	01/22/08	3974.62	52.08	53.74	1.66	3922.29
MW - 2	2/6/08 #1	3974.62	52.10	53.71	1.61	3922.28
MW - 2	02/06/08 #2	3974.62	52.32	52.79	0.47	3922.23
MW - 2	2/12/08#1	3974.62	52.11	53.72	1.61	3922.27
MW - 2	2/12/08#2	3974.62	52.34	52.68	0.34	3922.23
MW - 2	2/20/08 #1	3974.62	52.11	53.70	1.59	3922.27
MW - 2	2/20/08 #2	3974.62	52.30	52.78	0.48	3922.25
MW - 2	2/27/08 #1	3974.62	52.11	53.67	1.56	3922.28
MW - 2	2/27/08 #2	3974.62	52.28	52.87	0.59	3922.25
MW - 2	03/07/08	3974.62	52.10	53.66	1.56	3922.29
MW - 2	3/12/2008 #1	3974.62	52.10	53.66	1.56	3922.29
MW - 2	3/12/2008 #2	3974.62	52.29	52.30	0.01	3922.33
MW - 2	3/20/08 #1	3974.62	52.10	53.65	1.55	3922.29
MW - 2	3/20/08#2	3974.62	52.29	52.76	0.47	3922.26
MW - 2	3/23/08 #1	3974.62	52.09	53.64	1.55	3922.30
MW - 2	3/23/08 #2	3974.62	52.30	52.31	0.01	3922.32
MW - 2	4/2/08 #1	3974.62	52.09	53.60	1.51	3922.30
MW - 2	4/2/08 #2	3974.62	52.23	52.89	0.66	3922.29
MW - 2	4/9/08 #1	3974.62	52.09	53.59	1.50	3922.31
MW - 2	4/9/08 #2	3974.62	52.23	52.92	0.69	3922.29

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	04/16/08	3974.62	52.06	53.57	1.51	3922.33
MW - 2	04/23/08	3974.62	52.08	53.57	1.49	3922.32
MW - 2	04/30/08	3974.62	52.08	53.55	1.47	3922.32
MW - 2	05/29/08	3974.62	52.07	53.50	1.43	3922.34
MW - 2	06/02/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	06/03/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	06/11/08	3974.62	52.07	53.52	1.45	3922.33
MW - 2	06/18/08	3974.62	52.07	53.52	1.45	3922.33
MW - 2	06/23/08	3974.62	52.08	53.48	1.40	3922.33
MW - 2	07/01/08	3974.62	52.09	53.51	1.42	3922.32
MW - 2	07/09/08	3974.62	52.09	53.51	1.42	3922.32
MW - 2	07/15/08	3974.62	52.08	53.45	1.37	3922.33
MW - 2	07/22/08	3974.62	52.08	53.48	1.40	3922.33
MW - 2	08/02/08	3974.62	52.08	53.38	1.30	3922.35
MW - 2	08/13/08	3974.62	52.08	53.46	1.38	3922.33
MW - 2	09/03/08	3974.62	52.04	53.44	1.40	3922.37
MW - 2	09/11/08	3974.62	52.07	53.45	1.38	3922.34
MW - 2	09/19/08	3974.62	52.05	53.41	1.36	3922.37
MW - 2	09/26/08	3974.62	52.06	53.41	1.35	3922.36
MW - 2	10/10/08	3974.62	52.06	53.41	1.35	3922.36
MW - 2	10/17/08	3974.62	52.08	53.37	1.29	3922.35
MW - 2	10/21/08	3974.62	52.17	53.35	1.18	3922.27
MW - 2	10/30/08	3974.62	52.05	53.36	1.31	3922.37
MW - 2	11/04/08	3974.62	52.08	53.36	1.28	3922.35
MW - 2	11/18/08	3974.62	52.08	53.36	1.28	3922.35
MW - 2	11/25/08	3974.62	52.08	53.35	1.27	3922.35
MW - 2	11/25/08	3974.62	52.71	52.72	0.01	3921.91
MW - 2	12/10/08	3974.62	52.09	53.44	1.35	3922.33
MW - 2	12/18/08	3974.62	52.05	53.34	1.29	3922.38
MW - 2	01/06/09	3974.62	52.05	53.39	1.34	3922.37
MW - 2	01/14/09	3974.62	52.19	53.35	1.16	3922.26
MW - 2	01/21/09	3974.62	52.25	53.11	0.86	3922.24
MW - 2	01/22/09	3974.62	52.03	53.33	1.30	3922.40
MW - 2	01/30/09	3974.62	52.05	53.30	1.25	3922.38
MW - 2	02/03/09	3974.62	52.06	53.27	1.21	3922.38
MW - 2	02/12/09	3974.62	52.06	53.28	1.22	3922.38
MW - 2	02/19/09	3974.62	52.05	53.26	1.21	3922.39
MW - 2	03/04/09	3974.62	52.10	53.23	1.13	3922.35
MW - 2	03/06/09	3974.62	52.05	53.26	1.21	3922.39
MW - 2	03/11/09	3974.62	52.08	53.24	1.16	3922.37
MW - 2	03/16/09	3974.62	52.13	53.25	1.12	3922.32
MW - 2	03/19/09	3974.62	52.06	53.25	1.19	3922.38
MW - 2	03/24/09	3974.62	52.03	53.19	1.16	3922.42
MW - 2	04/03/09	3974.62	52.05	53.11	1.06	3922.41

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	04/15/09	3974.62	52.06	53.12	1.06	3922.40
MW - 2	04/17/09	3974.62	52.09	52.94	0.85	3922.40
MW - 2	04/22/09	3974.62	52.07	53.10	1.03	3922.40
MW - 2	04/29/09	3974.62	52.03	53.15	1.12	3922.42
MW - 2	05/20/09	3974.62	52.05	53.11	1.06	3922.41
MW - 2	05/20/09	3974.62	52.05	53.11	1.06	3922.41
MW - 2	06/09/09	3974.62	52.05	53.11	1.06	3922.41
MW - 2	06/17/09	3974.62	52.06	53.14	1.08	3922.40
MW - 2	06/23/09	3974.62	52.07	53.08	1.01	3922.40
MW - 2	07/01/09	3974.62	52.05	53.10	1.05	3922.41
MW - 2	07/08/09	3974.62	52.05	53.07	1.02	3922.42
MW - 2	07/15/09	3974.62	52.06	53.06	1.00	3922.41
MW - 2	07/17/09	3974.62	52.10	53.00	0.90	3922.39
MW - 2	07/23/09	3974.62	52.06	53.09	1.03	3922.41
MW - 2	07/24/09	3974.62	52.09	52.89	0.80	3922.41
MW - 2	07/30/09	3974.62	52.06	53.05	0.99	3922.41
MW - 2	08/04/09	3974.62	52.06	53.02	0.96	3922.42
MW - 2	08/12/09	3974.62	52.08	53.06	0.98	3922.39
MW - 2	08/20/09	3974.62	52.06	53.08	1.02	3922.41
MW - 2	08/26/09	3974.62	52.55	53.08	0.53	3921.99
MW - 2	09/02/09	3974.62	52.05	53.07	1.02	3922.42
MW - 2	09/09/09	3974.62	52.06	53.06	1.00	3922.41
MW - 2	09/14/09	3974.62	52.05	53.08	1.03	3922.42
MW - 2	09/21/09	3974.62	52.06	52.08	0.02	3922.56
MW - 2	10/01/09	3974.62	52.08	53.08	1.00	3922.39
MW - 2	10/08/09	3974.62	52.08	53.09	1.01	3922.39
MW - 2	10/14/09	3974.62	52.08	53.06	0.98	3922.39
MW - 2	10/21/09	3974.62	52.04	53.07	1.03	3922.43
MW - 2	10/28/09	3974.62	52.03	53.08	1.05	3922.43
MW - 2	11/04/09	3974.62	52.05	53.00	0.95	3922.43
MW - 2	11/11/09	3974.62	52.05	52.98	0.93	3922.43
MW - 2	11/18/09	3974.62	52.05	53.02	0.97	3922.42
MW - 2	11/25/09	3974.62	52.05	53.01	0.96	3922.43
MW - 2	12/02/09	3974.62	52.06	53.05	0.99	3922.41
MW - 2	12/10/09	3974.62	52.06	53.03	0.97	3922.41
MW - 2	12/17/09	3974.62	52.09	53.04	0.95	3922.39
MW - 2	12/21/09	3974.62	52.03	52.83	0.80	3922.47
MW - 2	12/30/09	3974.62	52.09	52.96	0.87	3922.40
MW - 2	01/07/10	3974.62	52.09	52.85	0.76	3922.42
MW - 2	01/18/10	3974.62	52.04	52.92	0.88	3922.45
MW - 2	02/02/10	3974.62	52.05	52.89	0.84	3922.44
MW - 2	02/11/10	3974.62	52.05	52.90	0.85	3922.44
MW - 2	02/18/10	3974.62	52.04	52.90	0.86	3922.45
MW - 2	02/25/10	3974.62	52.08	52.95	0.87	3922.41

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	03/02/10	3974.62	52.11	52.92	0.81	3922.39
MW - 2	03/04/10	3974.62	52.09	52.83	0.74	3922.42
MW - 2	03/10/10	3974.62	52.08	52.93	0.85	3922.41
MW - 2	03/12/10	3974.62	52.15	52.86	0.71	3922.36
MW - 2	03/15/10	3974.62	52.09	52.74	0.65	3922.43
MW - 2	03/18/10	3974.62	52.10	52.69	0.59	3922.43
MW - 2	03/22/10	3974.62	52.18	52.74	0.56	3922.36
MW - 2	03/24/10	3974.62	52.17	52.68	0.51	3922.37
MW - 2	03/30/10	3974.62	52.15	52.65	0.50	3922.40
MW - 2	04/07/10	3974.62	52.18	52.63	0.45	3922.37
MW - 2	04/12/10	3974.62	52.03	52.81	0.78	3922.47
MW - 2	04/16/10	3974.62	52.69	54.59	1.90	3921.65
MW - 2	04/20/10	3974.62	52.55	54.31	1.76	3921.81
MW - 2	04/27/10	3974.62	52.54	54.40	1.86	3921.80
MW - 2	04/30/10	3974.62	52.58	54.08	1.50	3921.82
MW - 2	05/12/10	3974.62	52.52	54.20	1.68	3921.85
MW - 2	05/14/10	3974.62	52.54	54.39	1.85	3921.80
MW - 2	05/17/10	3974.62	52.55	54.19	1.64	3921.82
MW - 2	05/20/10	3974.62	52.50	54.19	1.69	3921.87
MW - 2	05/25/10	3974.62	52.38	53.90	1.52	3922.01
MW - 2	06/01/10	3974.62	52.39	53.89	1.50	3922.01
MW - 2	06/09/10	3974.62	52.37	53.86	1.49	3922.03
MW - 2	06/16/10	3974.62	52.43	53.11	0.68	3922.09
MW - 2	06/28/10	3974.62	52.36	53.47	1.11	3922.09
MW - 2	07/09/10	3974.62	52.44	53.12	0.68	3922.08
MW - 2	07/14/10	3974.62	52.06	52.58	0.52	3922.48
MW - 2	07/23/10	3974.62	52.09	52.60	0.51	3922.45
MW - 2	07/29/10	3974.62	52.07	52.60	0.53	3922.47
MW - 2	08/05/10	3974.62	52.08	52.60	0.52	3922.46
MW - 2	08/12/10	3974.62	52.07	52.60	0.53	3922.47
MW - 2	08/16/10	3974.62	52.07	52.60	0.53	3922.47
MW - 2	08/18/10	3974.62	52.07	52.62	0.55	3922.47
MW - 2	08/26/10	3974.62	52.34	53.05	0.71	3922.17
MW - 2	09/02/10	3974.62	52.41	53.40	0.99	3922.06
MW - 2	09/09/10	3974.62	52.09	52.59	0.50	3922.46
MW - 2	09/30/10	3974.62	52.09	52.61	0.52	3922.45
MW - 2	10/07/10	3974.62	52.09	52.72	0.63	3922.44
MW - 2	10/14/10	3974.62	52.48	53.43	0.95	3922.00
MW - 2	10/21/10	3974.62	52.51	53.42	0.91	3921.97
MW - 2	11/04/10	3974.62	52.08	52.71	0.63	3922.45
MW - 2	11/10/10	3974.62	52.51	53.42	0.91	3921.97
MW - 2	12/01/10	3974.62	52.02	52.85	0.83	3922.48
MW - 2	12/08/10	3974.62	52.39	53.22	0.83	3922.11
MW - 2	01/26/11	3974.62	52.08	52.62	0.54	3922.46

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	02/28/11	3974.62	52.48	53.50	1.02	3921.99
MW - 2	03/04/11	3974.62	52.27	52.90	0.63	3922.26
MW - 2	03/09/11	3974.62	52.29	53.43	1.14	3922.16
MW - 2	04/28/11	3974.62	52.53	53.42	0.89	3921.96
MW - 2	05/04/11	3974.62	52.22	53.24	1.02	3922.25
MW - 2	05/11/11	3974.62	52.23	53.36	1.13	3922.22
MW - 2	05/12/11	3974.62	52.15	52.94	0.79	3922.35
MW - 2	05/18/11	3974.62	52.16	53.08	0.92	3922.32
MW - 2	05/23/11	3974.62	52.30	53.49	1.19	3922.14
MW - 2	06/08/11	3974.62	52.45	53.50	1.05	3922.01
MW - 2	06/16/11	3974.62	52.38	53.26	0.88	3922.11
MW - 2	06/22/11	3974.62	52.30	53.11	0.81	3922.20
MW - 2	06/30/11	3974.62	52.22	53.24	1.02	3922.25
MW - 2	07/06/11	3974.62	52.08	53.11	1.03	3922.39
MW - 2	07/13/11	3974.62	52.29	53.20	0.91	3922.19
MW - 2	07/15/11	3974.62	52.26	53.66	1.40	3922.15
MW - 2	07/19/11	3974.62	52.09	52.72	0.63	3922.44
MW - 2	07/21/11	3974.62	52.10	52.98	0.88	3922.39
MW - 2	07/26/11	3974.62	52.24	52.94	0.70	3922.28
MW - 2	07/28/11	3974.62	52.04	53.04	1.00	3922.43
MW - 2	08/02/11	3974.62	52.48	53.60	1.12	3921.97
MW - 2	08/09/11	3974.62	52.34	53.79	1.45	3922.06
MW - 2	08/12/11	3974.62	52.37	53.40	1.03	3922.10
MW - 2	08/15/11	3974.62	52.37	53.40	1.03	3922.10
MW - 2	08/16/11	3974.62	52.13	52.68	0.55	3922.41
MW - 2	08/19/11	3974.62	52.20	52.79	0.59	3922.33
MW - 2	08/23/11	3974.62	52.15	52.69	0.54	3922.39
MW - 2	08/26/11	3974.62	52.25	53.18	0.93	3922.23
MW - 2	08/30/11	3974.62	52.11	52.55	0.44	3922.44
MW - 2	09/01/11	3974.62	52.13	52.44	0.31	3922.44
MW - 2	09/08/11	3974.62	52.30	53.59	1.29	3922.13
MW - 2	09/13/11	3974.62	52.17	52.31	0.14	3922.43
MW - 2	09/15/11	3974.62	52.27	53.17	0.90	3922.22
MW - 2	09/22/11	3974.62	52.08	52.72	0.64	3922.44
MW - 2	10/06/11	3974.62	52.30	52.96	0.66	3922.22
MW - 2	10/13/11	3974.62	52.42	53.77	1.35	3922.00
MW - 2	10/26/11	3974.62	52.27	53.48	1.21	3922.17
MW - 2	11/22/11	3974.62	52.32	53.20	0.88	3922.17
MW - 2	12/02/11	3974.62	52.08	52.74	0.66	3922.44
MW - 2	12/29/11	3974.62	52.07	52.70	0.63	3922.46
MW - 2	01/26/12	3974.62	52.24	53.48	1.24	3922.19
MW - 2	01/31/12	3974.62	52.33	53.92	1.59	3922.05
MW - 2	02/15/12	3974.62	52.10	52.68	0.58	3922.43
MW - 2	02/28/12	3974.62	52.09	52.83	0.74	3922.42

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	03/20/12	3974.62	52.35	54.08	1.73	3922.01
MW - 2	03/27/12	3974.62	52.14	52.95	0.81	3922.36
MW - 2	04/10/12	3974.62	52.39	53.30	0.91	3922.09
MW - 2	04/19/12	3974.62	52.14	53.02	0.88	3922.35
MW - 2	04/26/12	3974.62	52.09	52.63	0.54	3922.45
MW - 2	05/08/12	3974.62	52.09	52.63	0.54	3922.45
MW - 2	05/15/12	3974.62	52.09	52.73	0.64	3922.43
MW - 2	05/17/12	3974.62	52.08	52.74	0.66	3922.44
MW - 2	06/05/12	3974.62	52.12	53.02	0.90	3922.37
MW - 2	06/21/12	3974.62	52.12	53.14	1.02	3922.35
MW - 2	06/28/12	3974.62	52.11	53.19	1.08	3922.35
MW - 2	07/17/12	3974.62	52.12	52.93	0.81	3922.38
MW - 2	08/01/12	3974.62	52.20	52.85	0.65	3922.32
MW - 2	10/02/12	3974.62	52.22	53.20	0.98	3922.25
MW - 2	10/09/12	3974.62	52.14	53.72	1.58	3922.24
MW - 2	10/16/12	3974.62	52.19	53.12	0.93	3922.29
MW - 2	10/25/12	3974.62	52.18	53.24	1.06	3922.28
MW - 2	10/30/12	3974.62	52.18	53.24	1.06	3922.28
MW - 2	11/29/12	3974.62	52.22	53.76	1.54	3922.17
MW - 2	12/14/12	3974.62	52.19	53.43	1.24	3922.24
MW - 2	02/11/13	3974.62	52.19	53.15	0.96	3922.29
MW - 2	04/11/13	3974.62	52.39	53.90	1.51	3922.00
MW - 2	04/15/13	3974.62	52.62	54.49	1.87	3921.72
MW - 2	04/22/13	3974.62	52.21	53.03	0.82	3922.29
MW - 2	05/06/13	3974.62	52.22	53.12	0.90	3922.27
MW - 2	05/09/13	3974.62	52.22	53.16	0.94	3922.26
MW - 2	05/20/13	3974.62	52.22	53.20	0.98	3922.25
MW - 2	05/24/13	3974.62	52.34	53.68	1.34	3922.08
MW - 2	05/29/13	3974.62	52.21	53.18	0.97	3922.26
MW - 2	05/31/13	3974.62	52.31	53.61	1.30	3922.12
MW - 2	06/07/13	3974.62	52.64	54.51	1.87	3921.70
MW - 2	06/12/13	3974.62	52.56	54.57	2.01	3921.76
MW - 2	06/14/13	3974.62	52.63	53.92	1.29	3921.80
MW - 2	06/19/13	3974.62	52.63	54.46	1.83	3921.72
MW - 2	06/21/13	3974.62	52.74	54.13	1.39	3921.67
MW - 2	06/25/13	3974.62	52.22	53.15	0.93	3922.26
MW - 2	06/26/13	3974.62	52.40	53.72	1.32	3922.02
MW - 2	07/03/13	3974.62	52.62	54.30	1.68	3921.75
MW - 2	07/09/13	3974.62	52.73	54.09	1.36	3921.69
MW - 2	07/11/13	3974.62	52.71	53.98	1.27	3921.72
MW - 2	07/24/13	3974.62	52.54	53.77	1.23	3921.90
MW - 2	07/26/13	3974.62	52.45	54.29	1.84	3921.89
MW - 2	07/31/13	3974.62	52.20	53.86	1.66	3922.17
MW - 2	08/02/13	3974.62	52.48	54.04	1.56	3921.91

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 2	08/06/13	3974.62	52.23	53.82	1.59	3922.15
MW - 2	08/14/13	3974.62	52.23	54.04	1.81	3922.12
MW - 2	08/21/13	3974.62	52.48	54.61	2.13	3921.82
MW - 2	08/26/13	3974.62	52.50	54.25	1.75	3921.86
MW - 2	09/06/13	3974.62	52.41	53.65	1.24	3922.02
MW - 2	08/30/13	3974.62	52.25	53.72	1.47	3922.15
MW - 2	09/13/13	3974.62	52.35	53.37	1.02	3922.12
MW - 2	09/27/13	3974.62	52.35	54.18	1.83	3922.00
MW - 2	09/30/13	3974.62	52.33	53.79	1.46	3922.07
MW - 2	10/02/13	3974.62	52.55	54.25	1.70	3921.82
MW - 2	10/03/13	3974.62	52.48	53.27	0.79	3922.02
MW - 2	10/11/13	3974.62	52.29	53.32	1.03	3922.18
MW - 2	10/17/13	3974.62	52.31	53.39	1.08	3922.15
MW - 2	10/22/13	3974.62	52.29	53.40	1.11	3922.16
MW - 2	10/24/13	3974.62	52.43	53.60	1.17	3922.01
MW - 2	10/30/13	3974.62	52.37	53.76	1.39	3922.04
MW - 2	11/01/13	3974.62	52.33	53.33	1.00	3922.14
MW - 2	11/04/13	3974.62	52.32	53.41	1.09	3922.14
MW - 2	11/08/13	3974.62	52.67	54.50	1.83	3921.68
MW - 2	11/13/13	3974.62	52.30	53.45	1.15	3922.15
MW - 2	11/15/13	3974.62	52.40	53.36	0.96	3922.08
MW - 2	11/18/13	3974.62	52.31	53.32	1.01	3922.16
MW - 2	12/12/13	3974.62	52.30	53.39	1.09	3922.16
MW - 2	12/16/13	3974.62	52.31	53.56	1.25	3922.12
MW - 2	12/18/13	3974.62	52.34	53.52	1.18	3922.10
MW - 2	12/23/13	3974.62	52.36	53.83	1.47	3922.04
MW - 2	12/30/13	3974.62	52.32	53.67	1.35	3922.10
MW - 3	03/02/00	3974.60	52.71	55.03	2.32	3921.54
MW - 3	04/25/00	3974.60	52.61	55.09	2.48	3921.62
MW - 3	09/06/00	3974.60	52.54	55.66	3.12	3921.59
MW - 3	11/28/00	3974.60	52.64	55.57	2.93	3921.52
MW - 3	02/21/01	3974.60	52.94	53.50	0.56	3921.58
MW - 3	05/31/01	3974.60	52.51	55.71	3.20	3921.61
MW - 3	08/23/01	3974.60	52.46	55.80	3.34	3921.64
MW - 3	11/21/01	3974.60	52.46	55.81	3.35	3921.64
MW - 3	02/13/02	3974.60	52.51	55.78	3.27	3921.60
MW - 3	06/12/02	3974.60	52.47	55.17	2.70	3921.73
MW - 3	08/26/02	3974.60	52.49	55.74	3.25	3921.62
MW - 3	11/08/02	3974.60	53.15	53.21	0.06	3921.44
MW - 3	11/21/02	3974.60	53.15	53.21	0.06	3921.44
MW - 3	12/27/02	3974.60	52.64	55.24	2.60	3921.57
MW - 3	01/06/03	3974.60	52.87	54.47	1.60	3921.49
MW - 3	01/08/03	3974.60	52.77	54.69	1.92	3921.54

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	01/10/03	3974.60	53.04	53.46	0.42	3921.50
MW - 3	01/13/03	3974.60	53.04	53.41	0.37	3921.50
MW - 3	02/05/03	3974.60	53.04	53.41	0.37	3921.50
MW - 3	02/26/03	3974.60	52.81	54.24	1.43	3921.58
MW - 3	03/04/03	3974.60	52.84	54.25	1.41	3921.55
MW - 3	03/12/03	3974.60	52.65	55.24	2.59	3921.56
MW - 3	03/18/03	3974.60	52.72	55.30	2.58	3921.49
MW - 3	03/25/03	3974.60	52.64	55.30	2.66	3921.56
MW - 3	03/31/03	3974.60	52.95	53.74	0.79	3921.53
MW - 3	04/09/03	3974.60	52.41	52.98	0.57	3922.10
MW - 3	04/14/03	3974.60	52.68	52.91	0.23	3921.89
MW - 3	05/07/03	3974.60	52.56	55.23	2.67	3921.64
MW - 3	05/08/03	3974.60	52.64	55.30	2.66	3921.56
MW - 3	05/13/03	3974.60	52.66	55.36	2.70	3921.54
MW - 3	05/21/03	3974.60	52.65	55.40	2.75	3921.54
MW - 3	05/28/03	3974.60	53.03	53.87	0.84	3921.44
MW - 3	06/03/03	3974.60	52.72	55.12	2.40	3921.52
MW - 3	06/09/03	3974.60	52.65	55.50	2.85	3921.52
MW - 3	07/01/03	3974.60	52.68	55.81	3.13	3921.45
MW - 3	07/08/03	3974.60	52.68	55.84	3.16	3921.45
MW - 3	07/29/03	3974.60	52.53	55.71	3.18	3921.59
MW - 3	08/04/03	3974.60	52.70	55.91	3.21	3921.42
MW - 3	08/18/03	3974.60	52.81	56.01	3.20	3921.31
MW - 3	08/25/03	3974.60	53.83	56.06	2.23	3920.44
MW - 3	10/01/03	3974.60	52.60	54.81	2.21	3921.67
MW - 3	10/06/03	3974.60	62.62	55.73	-6.89	3913.01
MW - 3	10/08/03	3974.60	52.90	56.09	3.19	3921.22
MW - 3	10/15/03	3974.60	52.89	56.04	3.15	3921.24
MW - 3	11/12/03	3974.60	53.21	56.72	3.51	3920.86
MW - 3	11/19/03	3974.60	52.99	56.08	3.09	3921.15
MW - 3	12/01/03	3974.60	53.05	56.08	3.03	3921.10
MW - 3	12/10/03	3974.60	52.72	55.74	3.02	3921.43
MW - 3	02/05/04	3974.60	53.04	56.11	3.07	3921.10
MW - 3	02/17/04	3974.60	52.80	55.64	2.84	3921.37
MW - 3	02/25/04	3974.60	53.03	56.08	3.05	3921.11
MW - 3	03/09/04	3974.60	52.83	55.86	3.03	3921.32
MW - 3	03/16/04	3974.60	52.79	55.81	3.02	3921.36
MW - 3	03/22/04	3974.60	52.85	54.16	1.31	3921.55
MW - 3	04/07/04	3974.60	52.87	53.18	0.31	3921.68
MW - 3	04/12/04	3974.60	52.97	55.02	2.05	3921.32
MW - 3	04/19/04	3974.60	52.80	53.06	0.26	3921.76
MW - 3	05/05/04	3974.60	52.87	55.57	2.70	3921.33
MW - 3	05/11/04	3974.60	53.02	55.68	2.66	3921.18
MW - 3	06/07/04	3974.60	52.62	55.29	2.67	3921.58

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	06/15/04	3974.60	52.65	55.27	2.62	3921.56
MW - 3	06/20/04	3974.60	52.65	55.27	2.62	3921.56
MW - 3	06/21/04	3974.60	52.61	55.32	2.71	3921.58
MW - 3	06/28/04	3974.60	52.62	55.34	2.72	3921.57
MW - 3	07/08/04	3974.60	52.60	55.31	2.71	3921.59
MW - 3	07/12/04	3974.60	52.57	55.33	2.76	3921.62
MW - 3	08/06/04	3974.60	52.69	55.36	2.67	3921.51
MW - 3	08/12/04	3974.60	52.68	55.37	2.69	3921.52
MW - 3	08/17/04	3974.60	52.63	55.30	2.67	3921.57
MW - 3	08/26/04	3974.60	52.63	55.79	3.16	3921.50
MW - 3	09/01/04	3974.60	52.74	55.15	2.41	3921.50
MW - 3	09/03/04	3974.60	52.83	55.22	2.39	3921.41
MW - 3	09/08/04	3974.60	52.78	55.42	2.64	3921.42
MW - 3	09/14/04	3974.60	52.76	55.05	2.29	3921.50
MW - 3	09/22/04	3974.60	52.86	55.05	2.19	3921.41
MW - 3	10/01/04	3974.60	52.73	55.30	2.57	3921.48
MW - 3	10/08/04	3974.60	52.78	55.16	2.38	3921.46
MW - 3	10/15/04	3974.60	52.65	54.80	2.15	3921.63
MW - 3	10/22/04	3974.60	52.66	55.20	2.54	3921.56
MW - 3	11/12/04	3974.60	53.11	53.44	0.33	3921.44
MW - 3	11/26/04	3974.60	53.10	53.60	0.50	3921.43
MW - 3	12/02/04	3974.60	53.25	53.50	0.25	3921.31
MW - 3	12/06/04	3974.60	53.09	53.59	0.50	3921.44
MW - 3	12/13/04	3974.60	53.12	53.60	0.48	3921.41
MW - 3	12/15/04	3974.60	53.12	53.60	0.48	3921.41
MW - 3	12/27/04	3974.60	52.87	54.20	1.33	3921.53
MW - 3	01/10/05	3974.60	52.72	54.54	1.82	3921.61
MW - 3	01/18/05	3974.60	52.70	54.70	2.00	3921.60
MW - 3	01/18/05	3974.60	52.81	53.85	1.04	3921.63
MW - 3	01/25/05	3974.60	52.65	54.58	1.93	3921.66
MW - 3	01/27/05	3974.60	52.70	54.40	1.70	3921.65
MW - 3	02/01/05	3974.60	52.66	54.47	1.81	3921.67
MW - 3	02/07/05	3974.60	52.60	54.49	1.89	3921.72
MW - 3	02/11/05	3974.60	52.63	54.38	1.75	3921.71
MW - 3	02/15/05	3974.60	52.64	54.36	1.72	3921.70
MW - 3	02/22/05	3974.60	52.50	54.89	2.39	3921.74
MW - 3	02/24/05	3974.60	52.51	54.85	2.34	3921.74
MW - 3	03/03/05	3974.60	52.49	54.90	2.41	3921.75
MW - 3	03/09/05	3974.60	52.49	54.92	2.43	3921.75
MW - 3	03/22/05	3974.60	52.52	54.84	2.32	3921.73
MW - 3	03/24/05	3974.60	52.52	54.84	2.32	3921.73
MW - 3	03/31/05	3974.60	DAMAGED		-	-
MW - 3	06/22/05	3974.60	52.45	54.60	2.15	3921.83
MW - 3	07/21/05	3974.60	52.38	54.60	2.22	3921.89

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	08/03/05	3974.60	52.40	54.52	2.12	3921.88
MW - 3	08/12/05	3974.60	52.39	53.43	1.04	3922.05
MW - 3	08/15/05	3974.60	52.44	54.27	1.83	3921.89
MW - 3	08/22/05	3974.60	52.43	54.34	1.91	3921.88
MW - 3	08/30/05	3974.60	52.39	54.38	1.99	3921.91
MW - 3	09/07/05	3974.60	52.40	54.39	1.99	3921.90
MW - 3	09/14/05	3974.60	52.43	54.30	1.87	3921.89
MW - 3	09/20/05	3974.60	52.40	54.20	1.80	3921.93
MW - 3	09/21/05	3974.60	52.43	54.33	1.90	3921.89
MW - 3	09/28/05	3974.60	52.39	54.36	1.97	3921.91
MW - 3	10/06/05	3974.60	52.30	54.68	2.38	3921.94
MW - 3	10/13/05	3974.60	52.30	54.66	2.36	3921.95
MW - 3	10/20/05	3974.60	52.31	54.60	2.29	3921.95
MW - 3	10/26/05	3974.60	52.32	54.60	2.28	3921.94
MW - 3	11/03/05	3974.60	52.28	54.59	2.31	3921.97
MW - 3	11/10/05	3974.60	52.27	54.62	2.35	3921.98
MW - 3	11/16/05	3974.60	52.31	54.58	2.27	3921.95
MW - 3	11/23/05	3974.60	52.36	54.50	2.14	3921.92
MW - 3	11/28/05	3974.60	52.25	54.60	2.35	3922.00
MW - 3	12/05/05	3974.60	52.30	54.49	2.19	3921.97
MW - 3	12/12/05	3974.60	52.29	54.51	2.22	3921.98
MW - 3	12/16/05	3974.60	52.89	53.78	0.89	3921.58
MW - 3	12/19/05	3974.60	52.36	54.53	2.17	3921.91
MW - 3	12/29/05	3974.60	52.28	54.60	2.32	3921.97
MW - 3	01/04/06	3974.60	52.33	54.58	2.25	3921.93
MW - 3	01/10/06	3974.60	52.29	54.58	2.29	3921.97
MW - 3	01/17/06	3974.60	52.28	54.52	2.24	3921.98
MW - 3	01/26/06	3974.60	52.27	54.52	2.25	3921.99
MW - 3	01/31/06	3974.60	52.28	54.50	2.22	3921.99
MW - 3	02/07/06	3974.60	52.27	54.46	2.19	3922.00
MW - 3	02/09/06	3974.60	52.36	54.15	1.79	3921.97
MW - 3	02/13/06	3974.60	52.25	54.49	2.24	3922.01
MW - 3	02/22/06	3974.60	52.25	54.53	2.28	3922.01
MW - 3	02/28/06	3974.60	52.27	54.50	2.23	3922.00
MW - 3	03/07/06	3974.60	52.28	54.46	2.18	3921.99
MW - 3	03/15/06	3974.60	52.25	54.44	2.19	3922.02
MW - 3	03/20/06	3974.60	52.24	54.37	2.13	3922.04
MW - 3	03/22/06	3974.60	52.71	52.78	0.07	3921.88
MW - 3	03/29/06	3974.60	52.28	54.11	1.83	3922.05
MW - 3	04/11/06	3974.60	52.23	54.29	2.06	3922.06
MW - 3	04/18/06	3974.60	52.23	54.32	2.09	3922.06
MW - 3	04/25/06	3974.60	52.32	54.12	1.80	3922.01
MW - 3	05/02/06	3974.60	52.23	54.43	2.20	3922.04
MW - 3	05/09/06	3974.60	52.22	54.30	2.08	3922.07

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	05/16/06	3974.60	52.22	54.29	2.07	3922.07
MW - 3	05/23/06	3974.60	52.23	54.30	2.07	3922.06
MW - 3	05/31/06	3974.60	52.23	54.31	2.08	3922.06
MW - 3	06/06/06	3974.60	52.22	54.21	1.99	3922.08
MW - 3	06/13/06	3974.60	52.21	54.24	2.03	3922.09
MW - 3	06/20/06	3974.60	52.21	54.23	2.02	3922.09
MW - 3	06/21/06	3974.60	52.34	53.66	1.32	3922.06
MW - 3	07/06/06	3974.60	52.22	54.25	2.03	3922.08
MW - 3	07/12/06	3974.60	52.29	53.96	1.67	3922.06
MW - 3	07/20/06	3974.60	52.25	53.99	1.74	3922.09
MW - 3	07/25/06	3974.60	52.29	53.88	1.59	3922.07
MW - 3	08/01/06	3974.60	52.29	53.90	1.61	3922.07
MW - 3	08/16/06	3974.60	52.32	53.78	1.46	3922.06
MW - 3	08/23/06	3974.60	53.33	53.75	0.42	3921.21
MW - 3	08/28/06	3974.60	52.32	53.79	1.47	3922.06
MW - 3	09/12/06	3974.60	52.32	53.77	1.45	3922.06
MW - 3	09/22/06	3974.60	52.34	54.01	1.67	3922.01
MW - 3	10/06/06	3974.60	WELL OBSTRUCTED		-	-
MW - 3	10/10/06	3974.60	WELL OBSTRUCTED		-	-
MW - 3	12/04/06	3974.60	WELL OBSTRUCTED		-	-
MW - 3	12/15/06	3974.60	WELL OBSTRUCTED		-	-
MW - 3	01/05/07	3974.60	WELL OBSTRUCTED		-	-
MW - 3	02/09/07	3974.60	INSUFFICIENT		-	-
MW - 3	02/23/07	3974.60	DRY?		-	-
MW - 3	03/14/07	3974.60	52.20	53.73	1.53	3922.17
MW - 3	03/26/07	3974.60	52.16	53.99	1.83	3922.17
MW - 3	04/03/07	3974.60	52.14	54.06	1.92	3922.17
MW - 3	04/09/07	3974.60	52.13	54.03	1.90	3922.19
MW - 3	04/26/07	3974.60	52.13	54.06	1.93	3922.18
MW - 3	04/30/07	3974.60	52.16	53.96	1.80	3922.17
MW - 3	05/11/07	3974.60	52.13	54.00	1.87	3922.19
MW - 3	05/16/07	3974.60	52.16	53.90	1.74	3922.18
MW - 3	05/22/07	3974.60	52.14	53.93	1.79	3922.19
MW - 3	05/29/07	3974.60	52.13	53.94	1.81	3922.20
MW - 3	06/01/07	3974.60	52.12	53.96	1.84	3922.20
MW - 3	06/08/07	3974.60	52.13	53.95	1.82	3922.20
MW - 3	06/11/07	3974.60	52.18	53.80	1.62	3922.18
MW - 3	06/20/07	3974.60	52.13	53.90	1.77	3922.20
MW - 3	07/10/07	3974.60	52.12	53.90	1.78	3922.21
MW - 3	07/20/07	3974.60	52.12	53.90	1.78	3922.21
MW - 3	07/25/07	3974.60	52.12	53.84	1.72	3922.22
MW - 3	08/01/07	3974.60	52.11	53.81	1.70	3922.24
MW - 3	08/10/07	3974.60	52.12	53.86	1.74	3922.22
MW - 3	08/15/07	3974.60	52.12	53.77	1.65	3922.23

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	08/30/07	3974.60	52.12	53.83	1.71	3922.22
MW - 3	08/31/07	3974.60	52.12	53.83	1.71	3922.22
MW - 3	09/10/07	3974.60	52.11	53.81	1.70	3922.24
MW - 3	09/19/07	3974.60	52.11	53.79	1.68	3922.24
MW - 3	10/01/07	3974.60	52.22	53.36	1.14	3922.21
MW - 3	10/19/07	3974.60	52.14	53.59	1.45	3922.24
MW - 3	11/12/07	3974.60	52.15	53.52	1.37	3922.24
MW - 3	12/13/07	3974.60	52.08	53.72	1.64	3922.27
MW - 3	03/07/08	3974.60	52.06	53.62	1.56	3922.31
MW - 3	05/29/08	3974.60	52.04	53.41	1.37	3922.35
MW - 3	06/02/08	3974.60	52.04	53.35	1.31	3922.36
MW - 3	06/03/08	3974.60	52.04	53.35	1.31	3922.36
MW - 3	08/02/08	3974.60	52.05	53.45	1.40	3922.34
MW - 3	09/03/08	3974.60	52.01	53.42	1.41	3922.38
MW - 3	09/19/08	3974.60	52.13	53.38	1.25	3922.28
MW - 3	09/26/08	3974.60	52.08	53.38	1.30	3922.33
MW - 3	10/10/08	3974.60	52.01	53.34	1.33	3922.39
MW - 3	10/17/08	3974.60	52.04	53.32	1.28	3922.37
MW - 3	10/21/08	3974.60	52.06	53.33	1.27	3922.35
MW - 3	10/30/08	3974.60	52.03	53.30	1.27	3922.38
MW - 3	11/04/08	3974.60	52.03	53.26	1.23	3922.39
MW - 3	11/18/08	3974.60	52.03	53.30	1.27	3922.38
MW - 3	11/25/08	3974.60	52.06	53.33	1.27	3922.35
MW - 3	12/10/08	3974.60	52.04	53.29	1.25	3922.37
MW - 3	12/18/08	3974.60	52.02	53.31	1.29	3922.39
MW - 3	01/06/09	3974.60	52.00	53.29	1.29	3922.41
MW - 3	01/14/09	3974.60	52.03	53.31	1.28	3922.38
MW - 3	01/21/09	3974.60	52.03	53.25	1.22	3922.39
MW - 3	01/22/09	3974.60	52.02	53.02	1.00	3922.43
MW - 3	01/30/09	3974.60	52.04	53.27	1.23	3922.38
MW - 3	02/03/09	3974.60	52.03	53.20	1.17	3922.39
MW - 3	02/12/09	3974.60	52.02	53.20	1.18	3922.40
MW - 3	02/19/09	3974.60	52.02	53.17	1.15	3922.41
MW - 3	03/04/09	3974.60	52.05	53.03	0.98	3922.40
MW - 3	03/06/09	3974.60	52.01	53.05	1.04	3922.43
MW - 3	03/11/09	3974.60	52.04	53.19	1.15	3922.39
MW - 3	03/16/09	3974.60	52.08	53.06	0.98	3922.37
MW - 3	03/19/09	3974.60	52.03	53.19	1.16	3922.40
MW - 3	03/24/09	3974.60	51.99	52.92	0.93	3922.47
MW - 3	04/03/09	3974.60	51.58	52.70	1.12	3922.85
MW - 3	04/15/09	3974.60	52.01	53.10	1.09	3922.43
MW - 3	04/17/09	3974.60	52.07	53.04	0.97	3922.38
MW - 3	04/22/09	3974.60	51.97	53.06	1.09	3922.47
MW - 3	04/29/09	3974.60	52.06	53.14	1.08	3922.38

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	05/20/09	3974.60	52.00	53.09	1.09	3922.44
MW - 3	05/20/09	3974.60	52.00	53.09	1.09	3922.44
MW - 3	06/09/09	3974.60	51.99	53.14	1.15	3922.44
MW - 3	06/17/09	3974.60	52.00	53.12	1.12	3922.43
MW - 3	06/23/09	3974.60	51.95	53.08	1.13	3922.48
MW - 3	07/01/09	3974.60	52.00	53.16	1.16	3922.43
MW - 3	07/08/09	3974.60	52.02	53.14	1.12	3922.41
MW - 3	07/15/09	3974.60	52.00	53.08	1.08	3922.44
MW - 3	07/17/09	3974.60	52.04	53.05	1.01	3922.41
MW - 3	07/23/09	3974.60	52.02	53.12	1.10	3922.42
MW - 3	07/24/09	3974.60	52.05	52.87	0.82	3922.43
MW - 3	07/30/09	3974.60	52.08	53.19	1.11	3922.35
MW - 3	08/04/09	3974.60	52.00	53.02	1.02	3922.45
MW - 3	08/12/09	3974.60	52.02	53.08	1.06	3922.42
MW - 3	08/20/09	3974.60	52.00	53.08	1.08	3922.44
MW - 3	08/26/09	3974.60	51.98	52.73	0.75	3922.51
MW - 3	09/02/09	3974.60	51.99	53.11	1.12	3922.44
MW - 3	09/09/09	3974.60	52.02	53.11	1.09	3922.42
MW - 3	09/14/09	3974.60	52.01	53.06	1.05	3922.43
MW - 3	09/21/09	3974.60	52.01	53.10	1.09	3922.43
MW - 3	10/01/09	3974.60	52.02	53.09	1.07	3922.42
MW - 3	10/08/09	3974.60	52.02	53.12	1.10	3922.42
MW - 3	10/08/09	3974.60	52.02	53.12	1.10	3922.42
MW - 3	10/14/09	3974.60	52.02	53.09	1.07	3922.42
MW - 3	10/21/09	3974.60	52.02	53.15	1.13	3922.41
MW - 3	10/28/09	3974.60	52.97	53.09	0.12	3921.61
MW - 3	11/04/09	3974.60	51.99	53.02	1.03	3922.46
MW - 3	11/11/09	3974.60	51.99	53.00	1.01	3922.46
MW - 3	11/18/09	3974.60	52.03	53.10	1.07	3922.41
MW - 3	11/25/09	3974.60	51.99	53.09	1.10	3922.45
MW - 3	12/02/09	3974.60	52.02	53.09	1.07	3922.42
MW - 3	12/10/09	3974.60	52.00	53.03	1.03	3922.45
MW - 3	12/17/09	3974.60	52.06	53.05	0.99	3922.39
MW - 3	12/21/09	3974.60	52.02	52.72	0.70	3922.48
MW - 3	12/30/09	3974.60	52.11	52.99	0.88	3922.36
MW - 3	01/07/10	3974.60	52.06	52.72	0.66	3922.44
MW - 3	01/18/10	3974.60	52.08	52.64	0.56	3922.44
MW - 3	02/02/10	3974.60	52.02	52.93	0.91	3922.44
MW - 3	02/11/10	3974.60	51.97	52.91	0.94	3922.49
MW - 3	02/18/10	3974.60	51.98	51.99	0.01	3922.62
MW - 3	02/25/10	3974.60	52.04	53.00	0.96	3922.42
MW - 3	03/02/10	3974.60	52.05	52.95	0.90	3922.42
MW - 3	03/04/10	3974.60	52.00	52.83	0.83	3922.48
MW - 3	03/10/10	3974.60	51.98	52.93	0.95	3922.48

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	03/12/10	3974.60	52.07	52.84	0.77	3922.41
MW - 3	03/15/10	3974.60	52.03	52.77	0.74	3922.46
MW - 3	03/18/10	3974.60	52.06	52.77	0.71	3922.43
MW - 3	03/22/10	3974.60	52.10	52.80	0.70	3922.40
MW - 3	03/24/10	3974.60	52.12	52.73	0.61	3922.39
MW - 3	03/30/10	3974.60	52.08	52.74	0.66	3922.42
MW - 3	04/07/10	3974.60	52.10	52.74	0.64	3922.40
MW - 3	04/12/10	3974.60	52.00	52.72	0.72	3922.49
MW - 3	04/16/10	3974.60	52.39	54.08	1.69	3921.96
MW - 3	04/20/10	3974.60	52.34	53.61	1.27	3922.07
MW - 3	04/27/10	3974.60	52.42	53.74	1.32	3921.98
MW - 3	04/30/10	3974.60	52.32	53.31	0.99	3922.13
MW - 3	05/12/10	3974.60	52.36	53.78	1.42	3922.03
MW - 3	05/14/10	3974.60	52.33	53.33	1.00	3922.12
MW - 3	05/17/10	3974.60	52.52	53.74	1.22	3921.90
MW - 3	05/20/10	3974.60	52.37	53.78	1.41	3922.02
MW - 3	05/25/10	3974.60	52.26	53.13	0.87	3922.21
MW - 3	06/01/10	3974.60	52.25	53.14	0.89	3922.22
MW - 3	06/09/10	3974.60	52.27	53.11	0.84	3922.20
MW - 3	06/16/10	3974.60	52.28	52.96	0.68	3922.22
MW - 3	06/28/10	3974.60	52.32	53.37	1.05	3922.12
MW - 3	07/09/10	3974.60	52.29	52.94	0.65	3922.21
MW - 3	07/23/10	3974.60	51.99	52.67	0.68	3922.51
MW - 3	07/29/10	3974.60	51.99	52.68	0.69	3922.51
MW - 3	08/05/10	3974.60	51.98	52.70	0.72	3922.51
MW - 3	08/12/10	3974.60	51.98	52.73	0.75	3922.51
MW - 3	08/16/10	3974.60	51.98	52.73	0.75	3922.51
MW - 3	08/18/10	3974.60	51.98	52.75	0.77	3922.50
MW - 3	08/26/10	3974.60	52.11	53.04	0.93	3922.35
MW - 3	09/02/10	3974.60	52.19	53.40	1.21	3922.23
MW - 3	09/09/10	3974.60	51.96	52.71	0.75	3922.53
MW - 3	09/30/10	3974.60	52.04	52.58	0.54	3922.48
MW - 3	10/07/10	3974.60	52.04	52.65	0.61	3922.47
MW - 3	10/14/10	3974.60	52.30	53.90	1.60	3922.06
MW - 3	10/21/10	3974.60	52.28	53.89	1.61	3922.08
MW - 3	11/04/10	3974.60	52.18	53.24	1.06	3922.26
MW - 3	11/10/10	3974.60	52.29	53.87	1.58	3922.07
MW - 3	12/01/10	3974.60	51.96	52.81	0.85	3922.51
MW - 3	12/08/10	3974.60	52.09	53.16	1.07	3922.35
MW - 3	01/26/11	3974.60	52.00	52.75	0.75	3922.49
MW - 3	02/28/11	3974.60	52.27	53.87	1.60	3922.09
MW - 3	03/04/11	3974.60	52.08	52.88	0.80	3922.40
MW - 3	03/09/11	3974.60	52.07	53.57	1.50	3922.31
MW - 3	04/28/11	3974.60	52.11	53.12	1.01	3922.34

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	05/04/11	3974.60	52.09	52.12	0.03	3922.51
MW - 3	05/11/11	3974.60	52.14	53.11	0.97	3922.31
MW - 3	05/12/11	3974.60	52.10	53.06	0.96	3922.36
MW - 3	05/18/11	3974.60	52.13	53.18	1.05	3922.31
MW - 3	05/23/11	3974.60	52.07	53.02	0.95	3922.39
MW - 3	06/08/11	3974.60	52.11	53.19	1.08	3922.33
MW - 3	06/16/11	3974.60	52.09	53.05	0.96	3922.37
MW - 3	06/22/11	3974.60	52.11	53.10	0.99	3922.34
MW - 3	06/30/11	3974.60	52.05	53.52	1.47	3922.33
MW - 3	07/06/11	3974.60	51.98	53.15	1.17	3922.44
MW - 3	07/13/11	3974.60	52.08	53.25	1.17	3922.34
MW - 3	07/15/11	3974.60	52.10	53.50	1.40	3922.29
MW - 3	07/19/11	3974.60	52.15	53.08	0.93	3922.31
MW - 3	07/21/11	3974.60	52.02	53.04	1.02	3922.43
MW - 3	07/26/11	3974.60	52.15	53.05	0.90	3922.32
MW - 3	07/28/11	3974.60	52.12	53.06	0.94	3922.34
MW - 3	08/02/11	3974.60	52.25	53.76	1.51	3922.12
MW - 3	08/09/11	3974.60	52.20	53.68	1.48	3922.18
MW - 3	08/12/11	3974.60	52.13	53.38	1.25	3922.28
MW - 3	08/15/11	3974.60	52.13	53.38	1.25	3922.28
MW - 3	08/16/11	3974.60	52.12	53.80	1.68	3922.23
MW - 3	08/19/11	3974.60	52.13	53.71	1.58	3922.23
MW - 3	08/23/11	3974.60	52.16	53.30	1.14	3922.27
MW - 3	08/26/11	3974.60	52.21	53.25	1.04	3922.23
MW - 3	08/30/11	3974.60	52.02	52.69	0.67	3922.48
MW - 3	09/01/11	3974.60	52.05	52.42	0.37	3922.49
MW - 3	09/08/11	3974.60	52.14	53.89	1.75	3922.20
MW - 3	09/13/11	3974.60	52.10	53.49	1.39	3922.29
MW - 3	09/15/11	3974.60	52.22	52.28	0.06	3922.37
MW - 3	09/22/11	3974.60	52.03	52.75	0.72	3922.46
MW - 3	10/06/11	3974.60	52.04	52.92	0.88	3922.43
MW - 3	10/11/11	3974.60	52.17	53.19	1.02	3922.28
MW - 3	10/13/11	3974.60	52.19	53.91	1.72	3922.15
MW - 3	10/26/11	3974.60	51.13	53.36	2.23	3923.14
MW - 3	11/22/11	3974.60	52.17	53.24	1.07	3922.27
MW - 3	12/02/11	3974.60	52.01	52.94	0.93	3922.45
MW - 3	12/29/11	3974.60	51.99	52.86	0.87	3922.48
MW - 3	01/26/12	3974.60	52.04	53.28	1.24	3922.37
MW - 3	01/31/12	3974.60	52.08	53.40	1.32	3922.32
MW - 3	02/15/12	3974.60	52.01	52.83	0.82	3922.47
MW - 3	02/28/12	3974.60	52.04	53.24	1.20	3922.38
MW - 3	03/20/12	3974.60	52.07	53.42	1.35	3922.33
MW - 3	03/27/12	3974.60	52.57	53.37	0.80	3921.91
MW - 3	04/10/12	3974.60	52.13	53.36	1.23	3922.29

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 3	04/19/12	3974.60	52.09	53.43	1.34	3922.31
MW - 3	04/26/12	3974.60	52.00	52.75	0.75	3922.49
MW - 3	05/08/12	3974.60	52.01	52.76	0.75	3922.48
MW - 3	05/15/12	3974.60	51.98	53.01	1.03	3922.47
MW - 3	05/17/12	3974.60	51.96	53.02	1.06	3922.48
MW - 3	06/05/12	3974.60	52.03	53.40	1.37	3922.36
MW - 3	06/21/12	3974.60	52.02	53.51	1.49	3922.36
MW - 3	06/28/12	3974.60	52.02	53.57	1.55	3922.35
MW - 3	07/17/12	3974.60	52.00	53.23	1.23	3922.42
MW - 3	08/01/12	3974.60	52.08	53.13	1.05	3922.36
MW - 3	10/02/12	3974.60	52.08	53.48	1.40	3922.31
MW - 3	10/09/12	3974.60	52.04	53.89	1.85	3922.28
MW - 3	10/16/12	3974.60	52.10	53.32	1.22	3922.32
MW - 3	10/25/12	3974.60	52.09	53.50	1.41	3922.30
MW - 3	10/30/12	3974.60	52.08	53.51	1.43	3922.31
MW - 3	11/29/12	3974.60	52.05	54.10	2.05	3922.24
MW - 3	12/14/12	3974.60	52.10	53.63	1.53	3922.27
MW - 3	02/11/13	3974.60	52.12	53.29	1.17	3922.30
MW - 3	03/18/13	3974.60	52.29	52.48	0.19	3922.28
MW - 3	04/11/13	3974.60	52.58	52.65	0.07	3922.01
MW - 3	05/06/13	3974.60	52.17	53.08	0.91	3922.29
MW - 3	05/29/13	3974.60	52.55	52.69	0.14	3922.03
MW - 3	06/26/13	3974.60	52.63	52.68	0.05	3921.96
MW - 3	07/31/13	3974.60	52.46	52.49	0.03	3922.14
MW - 3	08/06/13	3974.60	52.46	52.48	0.02	3922.14
MW - 3	09/30/13	3974.60	52.50	52.60	0.10	3922.09
MW - 3	11/18/13	3974.60	52.32	53.19	0.87	3922.15
MW - 4	03/02/00	3974.53	52.58	54.30	1.72	3921.69
MW - 4	04/25/00	3974.53	52.59	54.38	1.79	3921.67
MW - 4	09/06/00	3974.53	52.44	55.11	2.67	3921.69
MW - 4	11/28/00	3974.53	52.48	55.25	2.77	3921.63
MW - 4	02/21/01	3974.53	52.38	55.15	2.77	3921.73
MW - 4	05/31/01	3974.53	52.43	55.22	2.79	3921.68
MW - 4	08/23/01	3974.53	52.38	55.24	2.86	3921.72
MW - 4	11/21/01	3974.53	52.37	55.15	2.78	3921.74
MW - 4	02/13/02	3974.53	52.42	55.21	2.79	3921.69
MW - 4	06/12/02	3974.53	52.31	55.44	3.13	3921.75
MW - 4	08/26/02	3974.53	52.33	55.50	3.17	3921.72
MW - 4	11/08/02	3974.53	52.94	53.18	0.24	3921.55
MW - 4	11/21/02	3974.53	52.61	54.63	2.02	3921.62
MW - 4	12/27/02	3974.53	52.53	54.86	2.33	3921.65
MW - 4	01/06/03	3974.53	52.74	53.93	1.19	3921.61
MW - 4	01/08/03	3974.53	52.77	53.81	1.04	3921.60

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	01/10/03	3974.53	52.86	53.31	0.45	3921.60
MW - 4	01/13/03	3974.53	52.87	53.26	0.39	3921.60
MW - 4	02/05/03	3974.53	52.91	52.99	0.08	3921.61
MW - 4	02/26/03	3974.53	52.72	53.86	1.14	3921.64
MW - 4	03/04/03	3974.53	52.70	53.86	1.16	3921.66
MW - 4	03/12/03	3974.53	52.78	53.69	0.91	3921.61
MW - 4	03/18/03	3974.53	52.91	53.30	0.39	3921.56
MW - 4	03/25/03	3974.53	52.85	53.32	0.47	3921.61
MW - 4	03/31/03	3974.53	52.82	53.41	0.59	3921.62
MW - 4	04/09/03	3974.53	52.81	53.33	0.52	3921.64
MW - 4	04/14/03	3974.53	52.79	53.48	0.69	3921.64
MW - 4	05/07/03	3974.53	52.50	54.57	2.07	3921.72
MW - 4	05/08/03	3974.53	52.58	54.67	2.09	3921.64
MW - 4	05/13/03	3974.53	52.57	54.66	2.09	3921.65
MW - 4	05/21/03	3974.53	52.58	54.71	2.13	3921.63
MW - 4	05/27/03	3974.53	52.73	53.62	0.89	3921.67
MW - 4	05/28/03	3974.53	52.82	53.65	0.83	3921.59
MW - 4	06/03/03	3974.53	52.68	54.35	1.67	3921.60
MW - 4	06/10/03	3974.53	52.82	53.60	0.78	3921.59
MW - 4	07/01/03	3974.53	52.91	53.66	0.75	3921.51
MW - 4	07/08/03	3974.53	52.77	54.30	1.53	3921.53
MW - 4	07/29/03	3974.53	52.57	54.38	1.81	3921.69
MW - 4	08/04/03	3974.53	52.85	54.17	1.32	3921.48
MW - 4	08/18/03	3974.53	52.84	53.39	0.55	3921.61
MW - 4	08/25/03	3974.53	52.85	54.86	2.01	3921.38
MW - 4	10/06/03	3974.53	52.91	53.17	0.26	3921.58
MW - 4	10/08/03	3974.53	53.12	53.98	0.86	3921.28
MW - 4	10/15/03	3974.53	53.14	53.88	0.74	3921.28
MW - 4	11/12/03	3974.53	53.14	54.94	1.80	3921.12
MW - 4	11/19/03	3974.53	53.10	54.58	1.48	3921.21
MW - 4	12/01/03	3974.53	53.29	53.70	0.41	3921.18
MW - 4	12/10/03	3974.53	52.96	53.50	0.54	3921.49
MW - 4	02/05/04	3974.53	53.32	53.78	0.46	3921.14
MW - 4	02/17/04	3974.53	53.87	54.28	0.41	3920.60
MW - 4	02/25/04	3974.53	53.28	53.80	0.52	3921.17
MW - 4	03/09/04	3974.53	52.84	54.59	1.75	3921.43
MW - 4	03/16/04	3974.53	52.85	54.56	1.71	3921.42
MW - 4	03/22/04	3974.53	52.84	53.14	0.30	3921.65
MW - 4	04/07/04	3974.53	52.90	53.37	0.47	3921.56
MW - 4	04/12/04	3974.53	52.83	54.74	1.91	3921.41
MW - 4	04/19/04	3974.53	52.87	52.99	0.12	3921.64
MW - 4	05/05/04	3974.53	52.82	54.83	2.01	3921.41
MW - 4	05/11/04	3974.53	53.00	54.74	1.74	3921.27
MW - 4	06/07/04	3974.53	52.58	54.57	1.99	3921.65

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	06/15/04	3974.53	52.60	54.49	1.89	3921.65
MW - 4	06/20/04	3974.53	52.60	54.49	1.89	3921.65
MW - 4	06/21/04	3974.53	52.56	54.55	1.99	3921.67
MW - 4	06/28/04	3974.53	52.57	54.51	1.94	3921.67
MW - 4	07/08/04	3974.53	52.55	54.53	1.98	3921.68
MW - 4	07/12/04	3974.53	52.54	54.52	1.98	3921.69
MW - 4	08/06/04	3974.53	52.58	54.51	1.93	3921.66
MW - 4	08/12/04	3974.53	52.60	54.59	1.99	3921.63
MW - 4	08/17/04	3974.53	52.64	54.72	2.08	3921.58
MW - 4	08/26/04	3974.53	52.60	54.79	2.19	3921.60
MW - 4	09/01/04	3974.53	52.67	54.40	1.73	3921.60
MW - 4	09/03/04	3974.53	52.67	54.45	1.78	3921.59
MW - 4	09/08/04	3974.53	52.66	54.63	1.97	3921.57
MW - 4	09/14/04	3974.53	52.69	54.46	1.77	3921.57
MW - 4	09/22/04	3974.53	52.81	54.39	1.58	3921.48
MW - 4	10/01/04	3974.53	52.67	54.62	1.95	3921.57
MW - 4	10/08/04	3974.53	52.69	54.44	1.75	3921.58
MW - 4	10/15/04	3974.53	52.60	54.30	1.70	3921.68
MW - 4	10/22/04	3974.53	52.62	54.56	1.94	3921.62
MW - 4	11/12/04	3974.53	52.68	53.69	1.01	3921.70
MW - 4	11/26/04	3974.53	52.65	54.55	1.90	3921.60
MW - 4	12/02/04	3974.53	52.70	54.50	1.80	3921.56
MW - 4	12/06/04	3974.53	52.77	54.21	1.44	3921.54
MW - 4	12/13/04	3974.53	52.72	54.40	1.68	3921.56
MW - 4	12/15/04	3974.53	52.72	54.40	1.68	3921.56
MW - 4	12/27/04	3974.53	52.65	54.47	1.82	3921.61
MW - 4	01/10/05	3974.53	52.14	54.40	2.26	3922.05
MW - 4	01/18/05	3974.53	52.59	54.15	1.56	3921.71
MW - 4	01/18/05	3974.53	52.68	53.51	0.83	3921.73
MW - 4	01/25/05	3974.53	52.54	54.10	1.56	3921.76
MW - 4	01/27/05	3974.53	52.55	53.90	1.35	3921.78
MW - 4	02/01/05	3974.53	52.56	53.93	1.37	3921.76
MW - 4	02/07/05	3974.53	52.50	54.01	1.51	3921.80
MW - 4	02/11/05	3974.53	52.50	53.98	1.48	3921.81
MW - 4	02/15/05	3974.53	52.53	53.96	1.43	3921.79
MW - 4	02/22/05	3974.53	52.47	54.10	1.63	3921.82
MW - 4	02/24/05	3974.53	52.50	54.15	1.65	3921.78
MW - 4	03/03/05	3974.53	52.46	54.13	1.67	3921.82
MW - 4	03/09/05	3974.53	52.46	54.92	2.46	3921.70
MW - 4	03/22/05	3974.53	52.45	54.05	1.60	3921.84
MW - 4	03/24/05	3974.53	52.45	54.05	1.60	3921.84
MW - 4	03/31/05	3974.53	52.47	54.03	1.56	3921.83
MW - 4	06/22/05	3974.53	52.36	54.10	1.74	3921.91
MW - 4	07/21/05	3974.53	52.89	53.64	0.75	3921.53

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	08/03/05	3974.53	52.33	52.80	0.47	3922.13
MW - 4	08/12/05	3974.53	52.32	53.40	1.08	3922.05
MW - 4	08/15/05	3974.53	52.35	53.60	1.25	3921.99
MW - 4	08/22/05	3974.53	52.34	53.66	1.32	3921.99
MW - 4	08/30/05	3974.53	52.32	53.70	1.38	3922.00
MW - 4	09/07/05	3974.53	52.32	53.92	1.60	3921.97
MW - 4	09/14/05	3974.53	52.30	53.68	1.38	3922.02
MW - 4	09/20/05	3974.53	52.33	53.59	1.26	3922.01
MW - 4	09/21/05	3974.53	52.33	53.69	1.36	3922.00
MW - 4	09/28/05	3974.53	52.30	53.70	1.40	3922.02
MW - 4	10/06/05	3974.53	52.27	53.85	1.58	3922.02
MW - 4	10/13/05	3974.53	52.28	53.81	1.53	3922.02
MW - 4	10/20/05	3974.53	52.30	53.75	1.45	3922.01
MW - 4	10/26/05	3974.53	52.28	53.75	1.47	3922.03
MW - 4	11/03/05	3974.53	52.25	53.75	1.50	3922.06
MW - 4	11/10/05	3974.53	52.24	53.75	1.51	3922.06
MW - 4	11/16/05	3974.53	52.27	53.72	1.45	3922.04
MW - 4	11/23/05	3974.53	52.30	53.68	1.38	3922.02
MW - 4	11/28/05	3974.53	52.23	53.75	1.52	3922.07
MW - 4	12/05/05	3974.53	52.28	53.65	1.37	3922.04
MW - 4	12/12/05	3974.53	52.27	53.68	1.41	3922.05
MW - 4	12/16/05	3974.53	52.40	53.04	0.64	3922.03
MW - 4	12/19/05	3974.53	52.30	53.60	1.30	3922.04
MW - 4	12/29/05	3974.53	52.25	53.71	1.46	3922.06
MW - 4	01/04/06	3974.53	52.38	53.70	1.32	3921.95
MW - 4	01/10/06	3974.53	52.25	53.70	1.45	3922.06
MW - 4	01/17/06	3974.53	52.26	53.65	1.39	3922.06
MW - 4	01/26/06	3974.53	52.23	53.63	1.40	3922.09
MW - 4	01/31/06	3974.53	52.25	53.60	1.35	3922.08
MW - 4	02/07/06	3974.53	52.25	53.56	1.31	3922.08
MW - 4	02/09/06	3974.53	52.27	53.65	1.38	3922.05
MW - 4	02/13/06	3974.53	52.29	53.55	1.26	3922.05
MW - 4	02/22/06	3974.53	52.25	53.71	1.46	3922.06
MW - 4	02/28/06	3974.53	52.29	53.68	1.39	3922.03
MW - 4	03/07/06	3974.53	52.30	53.63	1.33	3922.03
MW - 4	03/15/06	3974.53	52.23	53.55	1.32	3922.10
MW - 4	03/20/06	3974.53	52.22	53.46	1.24	3922.12
MW - 4	03/22/06	3974.53	52.52	52.54	0.02	3922.01
MW - 4	03/29/06	3974.53	52.25	53.32	1.07	3922.12
MW - 4	04/11/06	3974.53	52.22	53.39	1.17	3922.13
MW - 4	04/18/06	3974.53	52.22	53.40	1.18	3922.13
MW - 4	04/25/06	3974.53	52.29	53.14	0.85	3922.11
MW - 4	05/02/06	3974.53	52.22	53.34	1.12	3922.14
MW - 4	05/09/06	3974.53	52.21	53.30	1.09	3922.16

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	05/16/06	3974.53	52.23	52.31	0.08	3922.29
MW - 4	05/23/06	3974.53	52.23	53.29	1.06	3922.14
MW - 4	05/31/06	3974.53	52.20	53.36	1.16	3922.16
MW - 4	06/06/06	3974.53	52.22	53.26	1.04	3922.15
MW - 4	06/13/06	3974.53	52.23	53.29	1.06	3922.14
MW - 4	06/20/06	3974.53	52.20	53.28	1.08	3922.17
MW - 4	06/21/06	3974.53	52.30	52.90	0.60	3922.14
MW - 4	07/06/06	3974.53	52.21	53.30	1.09	3922.16
MW - 4	07/12/06	3974.53	52.23	53.17	0.94	3922.16
MW - 4	07/20/06	3974.53	52.23	53.12	0.89	3922.17
MW - 4	07/25/06	3974.53	52.25	53.11	0.86	3922.15
MW - 4	08/01/06	3974.53	52.24	53.15	0.91	3922.15
MW - 4	08/16/06	3974.53	52.33	52.81	0.48	3922.13
MW - 4	08/23/06	3974.53	52.27	53.00	0.73	3922.15
MW - 4	08/28/06	3974.53	52.27	53.00	0.73	3922.15
MW - 4	09/12/06	3974.53	52.25	53.06	0.81	3922.16
MW - 4	09/22/06	3974.53	52.25	53.15	0.90	3922.15
MW - 4	09/27/06	3974.53	52.27	53.04	0.77	3922.14
MW - 4	10/06/06	3974.53	52.21	53.24	1.03	3922.17
MW - 4	10/10/06	3974.53	52.24	53.16	0.92	3922.15
MW - 4	10/16/06	3974.53	52.23	53.30	1.07	3922.14
MW - 4	10/26/06	3974.53	52.21	53.20	0.99	3922.17
MW - 4	11/03/06	3974.53	52.22	53.18	0.96	3922.17
MW - 4	11/09/06	3974.53	52.20	53.15	0.95	3922.19
MW - 4	11/16/06	3974.53	52.22	53.18	0.96	3922.17
MW - 4	11/22/06	3974.53	52.22	53.11	0.89	3922.18
MW - 4	12/04/06	3974.53	52.21	53.12	0.91	3922.18
MW - 4	12/08/06	3974.53	52.21	53.17	0.96	3922.18
MW - 4	12/15/06	3974.53	52.19	53.12	0.93	3922.20
MW - 4	01/05/07	3974.53	52.18	53.18	1.00	3922.20
MW - 4	01/12/07	3974.53	52.20	53.13	0.93	3922.19
MW - 4	01/18/07	3974.53	52.20	53.14	0.94	3922.19
MW - 4	01/24/07	3974.53	52.20	53.10	0.90	3922.20
MW - 4	01/29/07	3974.53	52.18	53.06	0.88	3922.22
MW - 4	02/09/07	3974.53	52.16	53.04	0.88	3922.24
MW - 4	02/16/07	3974.53	52.20	53.07	0.87	3922.20
MW - 4	02/23/07	3974.53	52.15	53.03	0.88	3922.25
MW - 4	03/02/07	3974.53	52.20	53.10	0.90	3922.20
MW - 4	03/14/07	3974.53	52.19	52.80	0.61	3922.25
MW - 4	03/26/07	3974.53	52.17	52.94	0.77	3922.24
MW - 4	04/03/07	3974.53	52.14	52.98	0.84	3922.26
MW - 4	04/09/07	3974.53	52.16	52.95	0.79	3922.25
MW - 4	04/26/07	3974.53	52.16	52.96	0.80	3922.25
MW - 4	04/30/07	3974.53	52.12	52.94	0.82	3922.29

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	05/11/07	3974.53	52.15	52.94	0.79	3922.26
MW - 4	05/16/07	3974.53	52.17	52.88	0.71	3922.25
MW - 4	05/22/07	3974.53	52.15	52.87	0.72	3922.27
MW - 4	05/29/07	3974.53	52.14	52.90	0.76	3922.28
MW - 4	06/01/07	3974.53	52.15	52.90	0.75	3922.27
MW - 4	06/08/07	3974.53	52.15	52.90	0.75	3922.27
MW - 4	06/11/07	3974.53	52.18	52.81	0.63	3922.26
MW - 4	06/20/07	3974.53	52.15	52.90	0.75	3922.27
MW - 4	07/10/07	3974.53	52.13	52.85	0.72	3922.29
MW - 4	07/20/07	3974.53	52.14	52.83	0.69	3922.29
MW - 4	07/25/07	3974.53	52.14	52.78	0.64	3922.29
MW - 4	08/01/07	3974.53	52.12	52.81	0.69	3922.31
MW - 4	08/10/07	3974.53	52.14	52.81	0.67	3922.29
MW - 4	08/15/07	3974.53	52.13	52.76	0.63	3922.31
MW - 4	08/30/07	3974.53	52.13	52.80	0.67	3922.30
MW - 4	08/31/07	3974.53	52.13	52.80	0.67	3922.30
MW - 4	09/10/07	3974.53	52.13	52.77	0.64	3922.30
MW - 4	09/19/07	3974.53	52.12	52.76	0.64	3922.31
MW - 4	09/27/07	3974.53	52.12	52.72	0.60	3922.32
MW - 4	10/01/07	3974.53	52.12	52.67	0.55	3922.33
MW - 4	10/19/07	3974.53	52.10	52.75	0.65	3922.33
MW - 4	10/26/07	3974.53	52.12	52.68	0.56	3922.33
MW - 4	11/12/07	3974.53	52.14	52.46	0.32	3922.34
MW - 4	11/16/07	3974.53	52.16	52.47	0.31	3922.32
MW - 4	11/29/07	3974.53	59.18	59.88	0.70	3915.25
MW - 4	12/13/07	3974.53	52.10	52.63	0.53	3922.35
MW - 4	01/10/08	3974.53	52.05	52.60	0.55	3922.40
MW - 4	01/17/08	3974.53	52.09	52.60	0.51	3922.36
MW - 4	01/22/08	3974.53	52.08	52.58	0.50	3922.38
MW - 4	2/6/08 #1	3974.53	52.09	52.55	0.46	3922.37
MW - 4	02/06/08 #2	3974.53	52.15	52.25	0.10	3922.37
MW - 4	2/12/08 #1	3974.53	52.09	52.56	0.47	3922.37
MW - 4	2/12/08 #2	3974.53	52.16	52.24	0.08	3922.36
MW - 4	2/20/08 #1	3974.53	52.07	52.25	0.18	3922.43
MW - 4	2/20/08 #2	3974.53	52.14	52.25	0.11	3922.37
MW - 4	2/27/08 #1	3974.53	52.08	52.51	0.43	3922.39
MW - 4	2/27/08 #2	3974.53	52.12	52.25	0.13	3922.39
MW - 4	03/07/08	3974.53	52.05	52.48	0.43	3922.42
MW - 4	3/12/2008 #1	3974.53	52.05	52.48	0.43	3922.42
MW - 4	3/12/08 #2	3974.53	52.11	52.21	0.10	3922.41
MW - 4	3/20/2008 #1	3974.53	52.06	52.47	0.41	3922.41
MW - 4	3/20/08 #2	3974.53	52.11	52.13	0.02	3922.42
MW - 4	3/23/08 #1	3974.53	52.06	52.47	0.41	3922.41
MW - 4	3/23/08 #2	3974.53	52.11	52.22	0.11	3922.40

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	4/2/08 #1	3974.53	52.07	52.45	0.38	3922.40
MW - 4	4/2/08 #2	3974.53	52.09	52.26	0.17	3922.41
MW - 4	4/9/08 #1	3974.53	52.05	52.45	0.40	3922.42
MW - 4	4/9/08 #2	3974.53	52.09	52.26	0.17	3922.41
MW - 4	04/16/08	3974.53	52.06	52.42	0.36	3922.42
MW - 4	04/23/08	3974.53	52.05	52.45	0.40	3922.42
MW - 4	04/30/08	3974.53	52.05	52.41	0.36	3922.43
MW - 4	05/29/08	3974.53	52.05	52.38	0.33	3922.43
MW - 4	06/02/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	06/03/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	06/11/08	3974.53	52.03	52.38	0.35	3922.45
MW - 4	06/18/08	3974.53	52.04	52.38	0.34	3922.44
MW - 4	06/23/08	3974.53	52.03	52.36	0.33	3922.45
MW - 4	07/01/08	3974.53	52.05	52.38	0.33	3922.43
MW - 4	07/09/08	3974.53	52.05	52.39	0.34	3922.43
MW - 4	07/15/08	3974.53	52.03	52.37	0.34	3922.45
MW - 4	07/22/08	3974.53	52.03	52.35	0.32	3922.45
MW - 4	08/02/08	3974.53	52.02	52.38	0.36	3922.46
MW - 4	08/13/08	3974.53	52.02	52.55	0.53	3922.43
MW - 4	09/03/08	3974.53	52.02	52.38	0.36	3922.46
MW - 4	09/11/08	3974.53	52.03	52.38	0.35	3922.45
MW - 4	09/19/08	3974.53	52.01	52.33	0.32	3922.47
MW - 4	09/26/08	3974.53	52.02	52.33	0.31	3922.46
MW - 4	10/10/08	3974.53	52.02	52.33	0.31	3922.46
MW - 4	10/17/08	3974.53	52.02	52.29	0.27	3922.47
MW - 4	10/21/08	3974.53	52.04	52.30	0.26	3922.45
MW - 4	10/30/08	3974.53	52.02	52.30	0.28	3922.47
MW - 4	11/04/08	3974.53	52.02	52.32	0.30	3922.47
MW - 4	11/18/08	3974.53	52.04	52.30	0.26	3922.45
MW - 4	11/25/08	3974.53	52.05	52.29	0.24	3922.44
MW - 4	12/10/08	3974.53	52.03	52.32	0.29	3922.46
MW - 4	12/18/08	3974.53	52.03	52.30	0.27	3922.46
MW - 4	01/06/09	3974.53	52.03	52.35	0.32	3922.45
MW - 4	01/14/09	3974.53	52.09	52.29	0.20	3922.41
MW - 4	01/21/09	3974.53	52.08	52.25	0.17	3922.42
MW - 4	01/22/09	3974.53	52.03	53.33	1.30	3922.31
MW - 4	01/30/09	3974.53	52.01	52.25	0.24	3922.48
MW - 4	02/03/09	3974.53	52.00	52.25	0.25	3922.49
MW - 4	02/12/09	3974.53	51.99	52.30	0.31	3922.49
MW - 4	02/19/09	3974.53	52.00	52.29	0.29	3922.49
MW - 4	03/04/09	3974.53	52.07	52.33	0.26	3922.42
MW - 4	03/06/09	3974.53	52.01	52.28	0.27	3922.48
MW - 4	03/11/09	3974.53	52.02	52.28	0.26	3922.47
MW - 4	03/16/09	3974.53	52.11	52.35	0.24	3922.38

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	03/19/09	3974.53	52.01	52.26	0.25	3922.48
MW - 4	03/24/09	3974.53	51.98	52.05	0.07	3922.54
MW - 4	04/03/09	3974.53	51.99	52.20	0.21	3922.51
MW - 4	04/15/09	3974.53	52.02	52.12	0.10	3922.50
MW - 4	04/17/09	3974.53	52.03	52.11	0.08	3922.49
MW - 4	04/21/09	3974.53	51.96	52.19	0.23	3922.54
MW - 4	04/29/09	3974.53	52.01	52.12	0.11	3922.50
MW - 4	05/20/09	3974.53	51.99	52.11	0.12	3922.52
MW - 4	05/20/09	3974.53	51.99	52.11	0.12	3922.52
MW - 4	06/09/09	3974.53	51.98	52.11	0.13	3922.53
MW - 4	06/17/09	3974.53	51.98	52.12	0.14	3922.53
MW - 4	06/23/09	3974.53	51.95	52.17	0.22	3922.55
MW - 4	07/01/09	3974.53	51.98	52.11	0.13	3922.53
MW - 4	07/08/09	3974.53	sheen	52.12	0.00	3922.41
MW - 4	07/15/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	07/17/09	3974.53	sheen	52.05	0.00	3922.48
MW - 4	07/23/09	3974.53	52.00	52.11	0.11	3922.51
MW - 4	07/24/09	3974.53	52.00	52.10	0.10	3922.52
MW - 4	07/30/09	3974.53	52.00	52.14	0.14	3922.51
MW - 4	08/04/09	3974.53	51.98	52.10	0.12	3922.53
MW - 4	08/12/09	3974.53	51.98	52.12	0.14	3922.53
MW - 4	08/20/09	3974.53	51.99	52.10	0.11	3922.52
MW - 4	08/26/09	3974.53	sheen	52.13	0.00	3922.40
MW - 4	09/02/09	3974.53	sheen	52.01	0.00	3922.52
MW - 4	09/09/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	09/14/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	09/21/09	3974.53	sheen	52.03	0.00	3922.50
MW - 4	10/01/09	3974.53	sheen	52.04	0.00	3922.49
MW - 4	10/08/09	3974.53	sheen	52.04	0.00	3922.49
MW - 4	10/14/09	3974.53	sheen	52.03	0.00	3922.50
MW - 4	10/21/09	3974.53	sheen	52.05	0.00	3922.48
MW - 4	10/28/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	11/04/09	3974.53	sheen	52.01	0.00	3922.52
MW - 4	11/11/09	3974.53	sheen	52.00	0.00	3922.53
MW - 4	11/18/09	3974.53	sheen	52.00	0.00	3922.53
MW - 4	11/25/09	3974.53	sheen	52.01	0.00	3922.52
MW - 4	12/02/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	12/10/09	3974.53	sheen	52.02	0.00	3922.51
MW - 4	12/17/09	3974.53	sheen	52.06	0.00	3922.47
MW - 4	12/21/09	3974.53	sheen	51.99	0.00	3922.54
MW - 4	12/30/09	3974.53	sheen	52.09	0.00	3922.44
MW - 4	01/07/10	3974.53	sheen	52.00	0.00	3922.53
MW - 4	01/18/10	3974.53	sheen	52.02	0.00	3922.51
MW - 4	02/02/10	3974.53	sheen	52.02	0.00	3922.51

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	02/11/10	3974.53	sheen	52.01	0.00	3922.52
MW - 4	02/18/10	3974.53	sheen	51.99	0.00	3922.54
MW - 4	02/25/10	3974.53	sheen	52.02	0.00	3922.51
MW - 4	03/02/10	3974.53	sheen	52.09	0.00	3922.44
MW - 4	03/04/10	3974.53	sheen	51.92	0.00	3922.61
MW - 4	03/10/10	3974.53	sheen	51.99	0.00	3922.54
MW - 4	03/12/10	3974.53	sheen	52.05	0.00	3922.48
MW - 4	03/15/10	3974.53	sheen	51.99	0.00	3922.54
MW - 4	03/18/10	3974.53	sheen	52.00	0.00	3922.53
MW - 4	03/22/10	3974.53	-	52.05	0.00	3922.48
MW - 4	03/24/10	3974.53	-	52.08	0.00	3922.45
MW - 4	03/30/10	3974.53	sheen	52.04	0.00	3922.49
MW - 4	04/07/10	3974.53	sheen	52.07	0.00	3922.46
MW - 4	04/12/10	3974.53	sheen	51.98	0.00	3922.55
MW - 4	04/16/10	3974.53	sheen	52.29	0.00	3922.24
MW - 4	04/20/10	3974.53	-	52.18	0.00	3922.35
MW - 4	04/27/10	3974.53	sheen	52.24	0.00	3922.29
MW - 4	04/30/10	3974.53	-	52.17	0.00	3922.36
MW - 4	05/12/10	3974.53	sheen	52.23	0.00	3922.30
MW - 4	05/14/10	3974.53	-	52.18	0.00	3922.35
MW - 4	05/17/10	3974.53	-	52.37	0.00	3922.16
MW - 4	05/20/10	3974.53	sheen	52.25	0.00	3922.28
MW - 4	05/25/10	3974.53	sheen	52.10	0.00	3922.43
MW - 4	06/01/10	3974.53	sheen	52.09	0.00	3922.44
MW - 4	06/09/10	3974.53	sheen	52.07	0.00	3922.46
MW - 4	06/16/10	3974.53	sheen	52.05	0.00	3922.48
MW - 4	06/28/10	3974.53	52.15	52.16	0.01	3922.38
MW - 4	07/09/10	3974.53	sheen	52.07	0.00	3922.46
MW - 4	07/14/10	3974.53	sheen	51.96	0.00	3922.57
MW - 4	07/23/10	3974.53	sheen	51.95	0.00	3922.58
MW - 4	07/29/10	3974.53	sheen	51.94	0.00	3922.59
MW - 4	08/05/10	3974.53	sheen	51.95	0.00	3922.58
MW - 4	08/12/10	3974.53	sheen	51.97	0.00	3922.56
MW - 4	08/16/10	3974.53	sheen	51.97	0.00	3922.56
MW - 4	08/18/10	3974.53	sheen	51.95	0.00	3922.58
MW - 4	08/25/10	3974.53	sheen	52.03	0.00	3922.50
MW - 4	09/09/10	3974.53	sheen	51.95	0.00	3922.58
MW - 4	09/30/10	3974.53	sheen	51.95	0.00	3922.58
MW - 4	10/07/10	3974.53	sheen	52.00	0.00	3922.53
MW - 4	10/14/10	3974.53	sheen	52.19	0.00	3922.34
MW - 4	10/21/10	3974.53	sheen	52.21	0.00	3922.32
MW - 4	11/04/10	3974.53	sheen	52.02	0.00	3922.51
MW - 4	11/10/10	3974.53	sheen	52.27	0.00	3922.26
MW - 4	12/01/10	3974.53	sheen	51.99	0.00	3922.54

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	12/08/10	3974.53	sheen	52.13	0.00	3922.40
MW - 4	01/26/11	3974.53	-	51.99	0.00	3922.54
MW - 4	02/28/11	3974.53	-	52.24	0.00	3922.29
MW - 4	03/04/11	3974.53	-	52.00	0.00	3922.53
MW - 4	03/09/11	3974.53	52.09	52.11	0.02	3922.44
MW - 4	04/28/11	3974.53	-	52.03	0.00	3922.50
MW - 4	05/04/11	3974.53	-	52.02	0.00	3922.51
MW - 4	05/11/11	3974.53	-	52.10	0.00	3922.43
MW - 4	05/12/11	3974.53	-	51.97	0.00	3922.56
MW - 4	05/18/11	3974.53	-	52.02	0.00	3922.51
MW - 4	05/23/11	3974.53	-	52.07	0.00	3922.46
MW - 4	06/08/11	3974.53	-	52.07	0.00	3922.46
MW - 4	06/16/11	3974.53	-	52.05	0.00	3922.48
MW - 4	06/22/11	3974.53	-	52.03	0.00	3922.50
MW - 4	06/30/11	3974.53	-	52.02	0.00	3922.51
MW - 4	07/06/11	3974.53	-	51.97	0.00	3922.56
MW - 4	07/13/11	3974.53	-	52.14	0.00	3922.39
MW - 4	07/15/11	3974.53	-	52.02	0.00	3922.51
MW - 4	07/19/11	3974.53	-	52.01	0.00	3922.52
MW - 4	07/21/11	3974.53	-	51.96	0.00	3922.57
MW - 4	07/26/11	3974.53	-	51.98	0.00	3922.55
MW - 4	07/28/11	3974.53	-	51.95	0.00	3922.58
MW - 4	08/02/11	3974.53	-	52.12	0.00	3922.41
MW - 4	08/09/11	3974.53	-	51.93	0.00	3922.60
MW - 4	08/12/11	3974.53	-	51.99	0.00	3922.54
MW - 4	08/15/11	3974.53	-	51.99	0.00	3922.54
MW - 4	08/16/11	3974.53	-	52.10	0.00	3922.43
MW - 4	08/19/11	3974.53	-	52.12	0.00	3922.41
MW - 4	08/23/11	3974.53	-	52.09	0.00	3922.44
MW - 4	08/26/11	3974.53	-	52.12	0.00	3922.41
MW - 4	08/30/11	3974.53	-	52.06	0.00	3922.47
MW - 4	09/01/11	3974.53	-	52.09	0.00	3922.44
MW - 4	09/08/11	3974.53	-	52.14	0.00	3922.39
MW - 4	09/13/11	3974.53	-	52.09	0.00	3922.44
MW - 4	09/15/11	3974.53	-	52.14	0.00	3922.39
MW - 4	09/22/11	3974.53	-	51.98	0.00	3922.55
MW - 4	10/06/11	3974.53	-	51.98	0.00	3922.55
MW - 4	10/11/11	3974.53	-	52.06	0.00	3922.47
MW - 4	10/13/11	3974.53	-	52.16	0.00	3922.37
MW - 4	10/26/11	3974.53	-	52.09	0.00	3922.44
MW - 4	11/22/11	3974.53	-	52.12	0.00	3922.41
MW - 4	12/02/11	3974.53	-	52.03	0.00	3922.50
MW - 4	12/29/11	3974.53	-	51.98	0.00	3922.55
MW - 4	01/26/12	3974.53	-	52.06	0.00	3922.47

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	01/31/12	3974.53	-	52.72	0.00	3921.81
MW - 4	02/15/12	3974.53	-	51.97	0.00	3922.56
MW - 4	02/28/12	3974.53	-	52.02	0.00	3922.51
MW - 4	03/20/12	3974.53	52.03	52.11	0.08	3922.49
MW - 4	03/27/12	3974.53	52.03	52.05	0.02	3922.50
MW - 4	04/10/12	3974.53	52.04	52.13	0.09	3922.48
MW - 4	04/19/12	3974.53	-	52.06	0.00	3922.47
MW - 4	04/26/12	3974.53	-	51.98	0.00	3922.55
MW - 4	05/08/12	3974.53	-	51.99	0.00	3922.54
MW - 4	05/15/12	3974.53	-	51.99	0.00	3922.54
MW - 4	05/17/12	3974.53	-	51.97	0.00	3922.56
MW - 4	06/05/12	3974.53	-	52.07	0.00	3922.46
MW - 4	06/21/12	3974.53	-	52.18	0.00	3922.35
MW - 4	06/28/12	3974.53	-	52.24	0.00	3922.29
MW - 4	07/17/12	3974.53	-	53.08	0.00	3921.45
MW - 4	08/01/12	3974.53	-	52.08	0.00	3922.45
MW - 4	10/02/12	3974.53	52.14	52.19	0.05	3922.38
MW - 4	10/09/12	3974.53	-	52.16	0.00	3922.37
MW - 4	10/16/12	3974.53	52.12	52.13	0.01	3922.41
MW - 4	10/25/12	3974.53	-	52.16	0.00	3922.37
MW - 4	10/30/12	3974.53	-	52.14	0.00	3922.39
MW - 4	11/29/12	3974.53	-	52.22	0.00	3922.31
MW - 4	12/14/12	3974.53	52.18	52.19	0.01	3922.35
MW - 4	02/11/13	3974.53	-	52.15	0.00	3922.38
MW - 4	04/11/13	3974.53	-	52.35	0.00	3922.18
MW - 4	04/15/13	3974.53	-	52.32	0.00	3922.21
MW - 4	04/22/13	3974.53	52.13	52.15	0.02	3922.40
MW - 4	05/06/13	3974.53	52.15	52.18	0.03	3922.38
MW - 4	05/09/13	3974.53	-	52.15	0.00	3922.38
MW - 4	05/20/13	3974.53	-	52.17	0.00	3922.36
MW - 4	05/24/13	3974.53	-	52.31	0.00	3922.22
MW - 4	05/29/13	3974.53	-	52.35	0.00	3922.18
MW - 4	05/31/13	3974.53	-	52.24	0.00	3922.29
MW - 4	06/07/13	3974.53	52.39	52.40	0.01	3922.14
MW - 4	06/12/13	3974.53	-	52.36	0.00	3922.17
MW - 4	06/14/13	3974.53	-	52.33	0.00	3922.20
MW - 4	06/19/13	3974.53	-	52.45	0.00	3922.08
MW - 4	06/21/13	3974.53	-	52.39	0.00	3922.14
MW - 4	06/25/13	3974.53	-	52.16	0.00	3922.37
MW - 4	06/26/13	3974.53	-	52.34	0.00	3922.19
MW - 4	07/03/13	3974.53	52.38	52.39	0.01	3922.15
MW - 4	07/09/13	3974.53	52.39	52.43	0.04	3922.13
MW - 4	07/11/13	3974.53	-	52.38	0.00	3922.15
MW - 4	07/24/13	3974.53	-	52.35	0.00	3922.18

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 4	07/26/13	3974.53	-	52.34	0.00	3922.19
MW - 4	07/31/13	3974.53	-	52.25	0.00	3922.28
MW - 4	08/02/13	3974.53	-	52.33	0.00	3922.20
MW - 4	08/06/13	3974.53	-	52.26	0.00	3922.27
MW - 4	08/14/13	3974.53	-	52.28	0.00	3922.25
MW - 4	08/21/13	3974.53	-	52.37	0.00	3922.16
MW - 4	08/26/13	3974.53	-	52.36	0.00	3922.17
MW - 4	09/06/13	3974.53	-	52.35	0.00	3922.18
MW - 4	08/30/13	3974.53	-	52.30	0.00	3922.23
MW - 4	09/13/13	3974.53	-	52.30	0.00	3922.23
MW - 4	09/27/13	3974.53	-	52.36	0.00	3922.17
MW - 4	09/30/13	3974.53	-	52.35	0.00	3922.18
MW - 4	10/02/13	3974.53	-	52.44	0.00	3922.09
MW - 4	10/03/13	3974.53	-	52.33	0.00	3922.20
MW - 4	10/11/13	3974.53	-	52.26	0.00	3922.27
MW - 4	10/17/13	3974.53	-	52.28	0.00	3922.25
MW - 4	10/22/13	3974.53	-	52.28	0.00	3922.25
MW - 4	10/24/13	3974.53	-	52.41	0.00	3922.12
MW - 4	10/30/13	3974.53	-	52.36	0.00	3922.17
MW - 4	11/01/13	3974.53	-	52.27	0.00	3922.26
MW - 4	11/04/13	3974.53	-	52.30	0.00	3922.23
MW - 4	11/08/13	3974.53	-	52.40	0.00	3922.13
MW - 4	11/13/13	3974.53	-	52.28	0.00	3922.25
MW - 4	11/15/13	3974.53	-	52.28	0.00	3922.25
MW - 4	11/19/13	3974.53	-	52.33	0.00	3922.20
MW - 4	12/08/13	3974.53	52.28	52.31	0.03	3922.25
MW - 4	12/12/13	3974.53	-	52.30	0.00	3922.23
MW - 4	12/16/13	3974.53	52.31	52.32	0.01	3922.22
MW - 4	12/18/13	3974.53	-	52.35	0.00	3922.18
MW - 4	12/23/13	3974.53	-	52.35	0.00	3922.18
MW - 4	12/30/13	3974.53	-	52.33	0.00	3922.20
MW - 5	03/02/00	3974.28	52.09	55.50	3.41	3921.68
MW - 5	04/25/00	3974.28	52.04	55.59	3.55	3921.71
MW - 5	09/06/00	3974.28	52.11	55.48	3.37	3921.66
MW - 5	11/28/00	3974.28	52.21	55.46	3.25	3921.58
MW - 5	02/21/01	3974.28	52.07	55.40	3.33	3921.71
MW - 5	05/31/01	3974.28	52.11	55.48	3.37	3921.66
MW - 5	08/23/01	3974.28	52.08	55.45	3.37	3921.69
MW - 5	11/21/01	3974.28	52.20	55.43	3.23	3921.60
MW - 5	02/13/02	3974.28	52.14	55.43	3.29	3921.65
MW - 5	06/12/02	3974.28	52.04	55.65	3.61	3921.70
MW - 5	08/26/02	3974.28	52.04	55.68	3.64	3921.69
MW - 5	11/08/02	3974.28	52.71	52.97	0.26	3921.53

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	11/21/02	3974.28	52.73	53.01	0.28	3921.51
MW - 5	12/27/02	3974.28	52.24	55.09	2.85	3921.61
MW - 5	01/06/03	3974.28	52.30	54.80	2.50	3921.61
MW - 5	01/08/03	3974.28	52.41	54.24	1.83	3921.60
MW - 5	01/10/03	3974.28	52.71	52.96	0.25	3921.53
MW - 5	01/13/03	3974.28	52.69	52.93	0.24	3921.55
MW - 5	02/05/03	3974.28	52.68	52.94	0.26	3921.56
MW - 5	02/26/03	3974.28	52.20	56.05	3.85	3921.50
MW - 5	03/04/03	3974.28	52.19	56.07	3.88	3921.51
MW - 5	03/12/03	3974.28	52.22	55.12	2.90	3921.63
MW - 5	03/18/03	3974.28	52.74	52.96	0.22	3921.51
MW - 5	03/25/03	3974.28	52.68	53.04	0.36	3921.55
MW - 5	03/31/03	3974.28	52.64	53.12	0.48	3921.57
MW - 5	04/09/03	3974.28	52.68	52.91	0.23	3921.57
MW - 5	04/14/03	3974.28	52.71	52.79	0.08	3921.56
MW - 5	05/07/03	3974.28	52.17	54.47	2.30	3921.77
MW - 5	05/08/03	3974.28	52.25	55.04	2.79	3921.61
MW - 5	05/13/03	3974.28	52.32	55.04	2.72	3921.55
MW - 5	05/21/03	3974.27	52.25	55.14	2.89	3921.59
MW - 5	05/27/03	3974.27	52.22	54.96	2.74	3921.64
MW - 5	05/28/03	3974.27	52.27	55.11	2.84	3921.57
MW - 5	06/03/03	3974.27	52.77	52.84	0.07	3921.49
MW - 5	06/10/03	3974.27	52.72	52.90	0.18	3921.52
MW - 5	07/01/03	3974.27	52.79	52.93	0.14	3921.46
MW - 5	07/08/03	3974.27	52.37	54.92	2.55	3921.52
MW - 5	07/29/03	3974.27	52.25	54.83	2.58	3921.63
MW - 5	08/04/03	3974.27	52.61	54.25	1.64	3921.41
MW - 5	08/18/03	3974.27	52.47	53.81	1.34	3921.60
MW - 5	08/25/03	3974.27	52.51	55.32	2.81	3921.34
MW - 5	10/01/03	3974.27	52.72	53.19	0.47	3921.48
MW - 5	10/06/03	3974.27	52.70	52.97	0.27	3921.53
MW - 5	10/08/03	3974.27	52.72	54.74	2.02	3921.25
MW - 5	10/15/03	3974.27	52.73	54.42	1.69	3921.29
MW - 5	11/12/03	3974.27	52.75	55.30	2.55	3921.14
MW - 5	11/19/03	3974.27	52.71	55.27	2.56	3921.18
MW - 5	12/01/03	3974.27	53.19	53.32	0.13	3921.06
MW - 5	12/10/03	3974.27	52.41	54.94	2.53	3921.48
MW - 5	02/05/04	3974.27	53.17	53.26	0.09	3921.09
MW - 5	02/17/04	3974.27	52.44	53.69	1.25	3921.64
MW - 5	02/25/04	3974.27	53.17	53.29	0.12	3921.08
MW - 5	03/09/04	3974.27	52.53	55.09	2.56	3921.36
MW - 5	03/16/04	3974.27	52.41	55.20	2.79	3921.44
MW - 5	03/22/04	3974.27	53.00	53.68	0.68	3921.17
MW - 5	04/07/04	3974.27	52.94	53.11	0.17	3921.30

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	04/12/04	3974.27	52.55	55.00	2.45	3921.35
MW - 5	04/19/04	3974.27	52.90	53.00	0.10	3921.36
MW - 5	05/05/04	3974.27	52.52	55.11	2.59	3921.36
MW - 5	05/11/04	3974.27	52.64	55.29	2.65	3921.23
MW - 5	06/07/04	3974.27	52.25	54.97	2.72	3921.61
MW - 5	06/15/04	3974.27	52.27	54.93	2.66	3921.60
MW - 5	06/20/04	3974.27	52.27	54.93	2.66	3921.60
MW - 5	06/21/04	3974.27	52.23	54.95	2.72	3921.63
MW - 5	06/28/04	3974.27	52.25	54.97	2.72	3921.61
MW - 5	07/08/04	3974.27	52.24	54.96	2.72	3921.62
MW - 5	07/12/04	3974.27	52.23	54.97	2.74	3921.63
MW - 5	08/12/04	3974.27	52.22	54.22	2.00	3921.75
MW - 5	08/17/04	3974.27	52.25	55.25	3.00	3921.57
MW - 5	08/26/04	3974.27	52.25	55.23	2.98	3921.57
MW - 5	09/01/04	3974.27	52.27	55.20	2.93	3921.56
MW - 5	09/03/04	3974.27	52.30	55.16	2.86	3921.54
MW - 5	09/08/04	3974.27	52.27	55.24	2.97	3921.55
MW - 5	09/14/04	3974.27	52.27	55.20	2.93	3921.56
MW - 5	09/22/04	3974.27	52.33	55.10	2.77	3921.52
MW - 5	10/01/04	3974.27	52.27	55.22	2.95	3921.56
MW - 5	10/08/04	3974.27	52.28	55.20	2.92	3921.55
MW - 5	10/15/04	3974.27	52.23	54.91	2.68	3921.64
MW - 5	10/22/04	3974.27	52.21	55.16	2.95	3921.62
MW - 5	11/12/04	3974.27	52.41	53.24	0.83	3921.74
MW - 5	11/26/04	3974.27	52.34	54.80	2.46	3921.56
MW - 5	12/02/04	3974.27	52.39	54.80	2.41	3921.52
MW - 5	12/06/04	3974.27	52.55	53.97	1.42	3921.51
MW - 5	12/13/04	3974.27	52.87	53.35	0.48	3921.33
MW - 5	12/15/04	3974.27	52.87	53.35	0.48	3921.33
MW - 5	12/27/04	3974.27	52.69	53.20	0.51	3921.50
MW - 5	01/10/05	3974.27	52.20	54.68	2.48	3921.70
MW - 5	01/18/05	3974.27	52.26	54.65	2.39	3921.65
MW - 5	01/18/05	3974.27	sheen	52.40	0.00	3921.87
MW - 5	01/25/05	3974.27	52.17	54.70	2.53	3921.72
MW - 5	01/27/05	3974.27	52.18	54.57	2.39	3921.73
MW - 5	02/01/05	3974.27	52.14	54.71	2.57	3921.74
MW - 5	02/07/05	3974.27	52.10	54.67	2.57	3921.78
MW - 5	02/11/05	3974.27	52.11	54.65	2.54	3921.78
MW - 5	02/15/05	3974.27	52.09	54.63	2.54	3921.80
MW - 5	02/22/05	3974.27	52.10	54.60	2.50	3921.80
MW - 5	02/24/05	3974.27	52.08	54.58	2.50	3921.82
MW - 5	03/03/05	3974.27	52.02	54.89	2.87	3921.82
MW - 5	03/09/05	3974.27	52.03	54.89	2.86	3921.81
MW - 5	03/22/05	3974.27	52.05	54.25	2.20	3921.89

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	03/24/05	3974.27	52.05	54.25	2.20	3921.89
MW - 5	03/31/05	3974.27	52.08	54.21	2.13	3921.87
MW - 5	06/22/05	3974.27	52.02	54.80	2.78	3921.83
MW - 5	07/21/05	3974.27	51.94	54.57	2.63	3921.94
MW - 5	08/03/05	3974.27	51.97	54.44	2.47	3921.93
MW - 5	08/30/05	3974.27	51.96	54.45	2.49	3921.94
MW - 5	09/20/05	3974.27	51.94	54.39	2.45	3921.96
MW - 5	09/28/05	3974.27	51.92	54.39	2.47	3921.98
MW - 5	10/06/05	3974.27	51.86	54.64	2.78	3921.99
MW - 5	10/13/05	3974.27	51.89	54.63	2.74	3921.97
MW - 5	10/20/05	3974.27	51.89	54.60	2.71	3921.97
MW - 5	10/26/05	3974.27	51.88	54.89	3.01	3921.94
MW - 5	11/16/05	3974.27	51.86	54.58	2.72	3922.00
MW - 5	11/23/05	3974.27	51.93	54.55	2.62	3921.95
MW - 5	12/12/05	3974.27	51.83	54.54	2.71	3922.03
MW - 5	12/16/05	3974.27	51.99	53.20	1.21	3922.10
MW - 5	12/19/05	3974.27	51.89	54.80	2.91	3921.94
MW - 5	12/29/05	3974.27	51.94	54.57	2.63	3921.94
MW - 5	01/04/06	3974.27	51.99	54.50	2.51	3921.90
MW - 5	01/10/06	3974.27	51.90	54.52	2.62	3921.98
MW - 5	01/17/06	3974.27	51.85	54.50	2.65	3922.02
MW - 5	01/26/06	3974.27	51.83	54.47	2.64	3922.04
MW - 5	01/31/06	3974.27	51.86	54.51	2.65	3922.01
MW - 5	02/07/06	3974.27	51.83	54.45	2.62	3922.05
MW - 5	02/09/06	3974.27	51.86	54.40	2.54	3922.03
MW - 5	02/13/06	3974.27	51.89	54.49	2.60	3921.99
MW - 5	02/22/06	3974.27	51.81	54.45	2.64	3922.06
MW - 5	02/28/06	3974.27	51.83	54.44	2.61	3922.05
MW - 5	03/07/06	3974.27	51.89	54.40	2.51	3922.00
MW - 5	03/15/06	3974.27	51.81	54.40	2.59	3922.07
MW - 5	03/20/06	3974.27	51.77	54.34	2.57	3922.11
MW - 5	03/22/06	3974.27	52.12	53.31	1.19	3921.97
MW - 5	03/29/06	3974.27	51.79	54.30	2.51	3922.10
MW - 5	04/11/06	3974.27	51.76	54.30	2.54	3922.13
MW - 5	04/18/06	3974.27	51.76	54.31	2.55	3922.13
MW - 5	04/25/06	3974.27	51.84	54.25	2.41	3922.07
MW - 5	05/02/06	3974.27	51.76	54.33	2.57	3922.12
MW - 5	05/09/06	3974.27	51.76	54.33	2.57	3922.12
MW - 5	05/16/06	3974.27	51.78	54.30	2.52	3922.11
MW - 5	05/23/06	3974.27	51.76	54.28	2.52	3922.13
MW - 5	05/31/06	3974.27	51.76	54.30	2.54	3922.13
MW - 5	06/06/06	3974.27	51.76	54.34	2.58	3922.12
MW - 5	06/13/06	3974.27	51.77	54.26	2.49	3922.13
MW - 5	06/20/06	3974.27	51.76	54.27	2.51	3922.13

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	06/21/06	3974.27	51.82	53.96	2.14	3922.13
MW - 5	07/06/06	3974.27	51.75	54.21	2.46	3922.15
MW - 5	07/12/06	3974.27	51.81	53.91	2.10	3922.15
MW - 5	07/20/06	3974.27	51.82	52.16	0.34	3922.40
MW - 5	07/25/06	3974.27	51.87	53.84	1.97	3922.10
MW - 5	08/01/06	3974.27	51.81	54.02	2.21	3922.13
MW - 5	08/16/06	3974.27	52.13	52.70	0.57	3922.05
MW - 5	08/23/06	3974.27	51.89	53.53	1.64	3922.13
MW - 5	08/28/06	3974.27	51.86	53.75	1.89	3922.13
MW - 5	09/12/06	3974.27	51.84	53.80	1.96	3922.14
MW - 5	09/22/06	3974.27	51.84	53.80	1.96	3922.14
MW - 5	09/27/06	3974.27	51.81	53.90	2.09	3922.15
MW - 5	10/06/06	3974.27	51.82	53.84	2.02	3922.15
MW - 5	10/10/06	3974.27	51.90	53.86	1.96	3922.08
MW - 5	10/16/06	3974.27	51.87	53.84	1.97	3922.10
MW - 5	10/26/06	3974.27	51.85	53.85	2.00	3922.12
MW - 5	11/03/06	3974.27	51.83	53.82	1.99	3922.14
MW - 5	11/09/06	3974.27	51.83	53.74	1.91	3922.15
MW - 5	11/16/06	3974.27	51.89	53.78	1.89	3922.10
MW - 5	11/22/06	3974.27	51.81	53.87	2.06	3922.15
MW - 5	12/04/06	3974.27	51.84	53.75	1.91	3922.14
MW - 5	12/08/06	3974.27	51.85	53.78	1.93	3922.13
MW - 5	12/15/06	3974.27	51.74	54.05	2.31	3922.18
MW - 5	01/05/07	3974.27	51.77	54.04	2.27	3922.16
MW - 5	01/12/07	3974.27	51.75	54.04	2.29	3922.18
MW - 5	01/18/07	3974.27	51.74	54.03	2.29	3922.19
MW - 5	01/24/07	3974.27	51.76	54.06	2.30	3922.17
MW - 5	01/29/07	3974.27	51.71	53.97	2.26	3922.22
MW - 5	02/09/07	3974.27	51.73	53.98	2.25	3922.20
MW - 5	02/16/07	3974.27	51.73	53.98	2.25	3922.20
MW - 5	02/23/07	3974.27	51.71	53.96	2.25	3922.22
MW - 5	03/02/07	3974.27	51.79	54.05	2.26	3922.14
MW - 5	03/14/07	3974.27	51.78	53.77	1.99	3922.19
MW - 5	03/26/07	3974.27	51.72	53.93	2.21	3922.22
MW - 5	04/03/07	3974.27	51.72	53.93	2.21	3922.22
MW - 5	04/09/07	3974.27	51.71	53.91	2.20	3922.23
MW - 5	04/26/07	3974.27	51.71	53.88	2.17	3922.23
MW - 5	04/30/07	3974.27	51.72	53.84	2.12	3922.23
MW - 5	05/11/07	3974.27	51.73	53.84	2.11	3922.22
MW - 5	05/16/07	3974.27	51.71	53.83	2.12	3922.24
MW - 5	05/22/07	3974.27	51.70	53.82	2.12	3922.25
MW - 5	05/29/07	3974.27	51.69	53.82	2.13	3922.26
MW - 5	06/01/07	3974.27	51.71	53.86	2.15	3922.24
MW - 5	06/08/07	3974.27	51.70	53.82	2.12	3922.25

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	06/11/07	3974.27	51.71	53.80	2.09	3922.25
MW - 5	06/20/07	3974.27	51.70	53.80	2.10	3922.26
MW - 5	07/10/07	3974.27	51.69	53.78	2.09	3922.27
MW - 5	07/20/07	3974.27	51.69	53.76	2.07	3922.27
MW - 5	07/25/07	3974.27	51.68	53.75	2.07	3922.28
MW - 5	08/01/07	3974.27	51.68	53.71	2.03	3922.29
MW - 5	08/10/07	3974.27	51.69	53.74	2.05	3922.27
MW - 5	08/15/07	3974.27	51.68	53.71	2.03	3922.29
MW - 5	08/30/07	3974.27	51.69	53.71	2.02	3922.28
MW - 5	08/31/07	3974.27	51.69	53.71	2.02	3922.28
MW - 5	09/10/07	3974.27	51.69	53.70	2.01	3922.28
MW - 5	09/19/07	3974.27	51.67	53.68	2.01	3922.30
MW - 5	10/01/07	3974.27	52.03	52.32	0.29	3922.20
MW - 5	10/19/07	3974.27	51.89	53.04	1.15	3922.21
MW - 5	11/12/07	3974.27	51.84	52.93	1.09	3922.27
MW - 5	12/13/07	3974.27	51.93	52.74	0.81	3922.22
MW - 5	03/07/08	3974.27	51.77	52.82	1.05	3922.34
MW - 5	3/12/08 #1	3974.27	51.77	52.82	1.05	3922.34
MW - 5	3/12/08 #2	3974.27	51.82	52.50	0.68	3922.35
MW - 5	3/20/2008 #1	3974.27	51.78	52.83	1.05	3922.33
MW - 5	3/20/08 #2	3974.27	51.81	52.57	0.76	3922.35
MW - 5	3/23/08 #1	3974.27	51.84	52.88	1.04	3922.27
MW - 5	3/23/08 #2	3974.27	51.82	52.39	0.57	3922.36
MW - 5	4/2/08 #1	3974.27	51.79	52.99	1.20	3922.30
MW - 5	4/2/08 #2	3974.27	51.76	52.62	0.86	3922.38
MW - 5	4/9/08 #1	3974.27	51.71	53.11	1.40	3922.35
MW - 5	4/9/08 #2	3974.27	51.79	52.65	0.86	3922.35
MW - 5	04/16/08	3974.27	51.73	52.82	1.09	3922.38
MW - 5	04/30/08	3974.27	51.78	52.97	1.19	3922.31
MW - 5	05/29/08	3974.27	51.63	53.27	1.64	3922.39
MW - 5	06/02/08	3974.27	51.63	53.22	1.59	3922.40
MW - 5	06/03/08	3974.27	51.63	53.22	1.59	3922.40
MW - 5	06/11/08	3974.27	51.62	53.25	1.63	3922.41
MW - 5	06/18/08	3974.27	51.62	53.26	1.64	3922.40
MW - 5	06/23/08	3974.27	51.63	53.23	1.60	3922.40
MW - 5	07/01/08	3974.27	51.61	53.22	1.61	3922.42
MW - 5	07/09/08	3974.27	51.65	53.26	1.61	3922.38
MW - 5	07/15/08	3974.27	51.60	53.22	1.62	3922.43
MW - 5	07/22/08	3974.27	51.63	53.21	1.58	3922.40
MW - 5	08/02/08	3974.27	51.62	53.22	1.60	3922.41
MW - 5	08/13/08	3974.27	51.62	53.21	1.59	3922.41
MW - 5	09/03/08	3974.27	51.61	53.21	1.60	3922.42
MW - 5	09/11/08	3974.27	51.61	53.20	1.59	3922.42
MW - 5	09/19/08	3974.27	51.60	53.16	1.56	3922.44

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	09/26/08	3974.27	51.60	53.16	1.56	3922.44
MW - 5	10/10/08	3974.27	51.61	53.18	1.57	3922.42
MW - 5	10/17/08	3974.27	51.61	53.13	1.52	3922.43
MW - 5	10/21/08	3974.27	51.89	53.26	1.37	3922.17
MW - 5	10/30/08	3974.27	51.60	53.11	1.51	3922.44
MW - 5	11/04/08	3974.27	51.61	53.13	1.52	3922.43
MW - 5	11/18/08	3974.27	51.61	53.10	1.49	3922.44
MW - 5	11/25/08	3974.27	51.61	53.12	1.51	3922.43
MW - 5	12/10/08	3974.27	51.59	53.13	1.54	3922.45
MW - 5	12/18/08	3974.27	51.60	53.11	1.51	3922.44
MW - 5	01/07/09	3974.27	51.62	53.16	1.54	3922.42
MW - 5	01/14/09	3974.27	51.61	53.15	1.54	3922.43
MW - 5	01/21/09	3974.27	51.98	52.05	0.07	3922.28
MW - 5	01/22/09	3974.27	51.59	53.09	1.50	3922.46
MW - 5	01/30/09	3974.27	51.60	53.05	1.45	3922.45
MW - 5	02/03/09	3974.27	51.60	53.02	1.42	3922.46
MW - 5	02/12/09	3974.27	51.58	52.02	0.44	3922.62
MW - 5	02/19/09	3974.27	52.59	52.96	0.37	3921.62
MW - 5	03/04/09	3974.27	52.65	53.02	0.37	3921.56
MW - 5	03/06/09	3974.27	51.60	53.04	1.44	3922.45
MW - 5	03/11/09	3974.27	51.60	53.02	1.42	3922.46
MW - 5	03/16/09	3974.27	52.68	53.06	0.38	3921.53
MW - 5	03/19/09	3974.27	51.60	53.01	1.41	3922.46
MW - 5	03/24/09	3974.27	51.55	52.89	1.34	3922.52
MW - 5	04/03/09	3974.27	51.58	52.70	1.12	3922.52
MW - 5	04/15/09	3974.27	51.59	52.91	1.32	3922.48
MW - 5	04/17/09	3974.27	51.61	52.83	1.22	3922.48
MW - 5	04/22/09	3974.27	51.60	52.68	1.08	3922.51
MW - 5	04/29/09	3974.27	51.61	52.96	1.35	3922.46
MW - 5	05/20/09	3974.27	51.58	52.91	1.33	3922.49
MW - 5	05/20/09	3974.27	51.58	52.91	1.33	3922.49
MW - 5	06/09/09	3974.27	51.58	52.95	1.37	3922.48
MW - 5	06/17/09	3974.27	51.59	52.97	1.38	3922.47
MW - 5	06/23/09	3974.27	51.61	52.66	1.05	3922.50
MW - 5	07/01/09	3974.27	51.58	52.96	1.38	3922.48
MW - 5	07/08/09	3974.27	51.58	52.98	1.40	3922.48
MW - 5	07/15/09	3974.27	51.58	52.92	1.34	3922.49
MW - 5	07/17/09	3974.27	51.61	52.89	1.28	3922.47
MW - 5	07/23/09	3974.27	51.59	52.95	1.36	3922.48
MW - 5	07/24/09	3974.27	51.61	52.82	1.21	3922.48
MW - 5	07/30/09	3974.27	51.59	52.95	1.36	3922.48
MW - 5	08/04/09	3974.27	51.58	52.93	1.35	3922.49
MW - 5	08/12/09	3974.27	51.58	52.94	1.36	3922.49
MW - 5	08/20/09	3974.27	51.58	52.93	1.35	3922.49

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	08/26/09	3974.27	51.55	51.92	0.37	3922.66
MW - 5	09/02/09	3974.27	51.56	52.92	1.36	3922.51
MW - 5	09/09/09	3974.27	51.72	52.92	1.20	3922.37
MW - 5	09/14/09	3974.27	51.74	53.92	2.18	3922.20
MW - 5	09/21/09	3974.27	51.92	52.98	1.06	3922.19
MW - 5	10/01/09	3974.27	51.60	52.95	1.35	3922.47
MW - 5	10/08/09	3974.27	51.60	52.94	1.34	3922.47
MW - 5	10/14/09	3974.27	51.92	52.96	1.04	3922.19
MW - 5	10/21/09	3974.27	51.57	52.89	1.32	3922.50
MW - 5	10/28/09	3974.27	51.83	52.90	1.07	3922.28
MW - 5	11/04/09	3974.27	51.56	52.86	1.30	3922.52
MW - 5	11/11/09	3974.27	51.56	52.85	1.29	3922.52
MW - 5	11/18/09	3974.27	51.55	52.86	1.31	3922.52
MW - 5	11/25/09	3974.27	51.58	52.87	1.29	3922.50
MW - 5	12/02/09	3974.27	51.57	52.88	1.31	3922.50
MW - 5	12/10/09	3974.27	51.58	52.87	1.29	3922.50
MW - 5	12/17/09	3974.27	51.62	52.89	1.27	3922.46
MW - 5	12/21/09	3974.27	52.06	52.83	0.77	3922.09
MW - 5	12/30/09	3974.27	51.66	52.84	1.18	3922.43
MW - 5	01/07/10	3974.27	51.65	52.66	1.01	3922.47
MW - 5	01/18/10	3974.27	51.57	52.66	1.09	3922.54
MW - 5	02/02/10	3974.27	51.58	52.74	1.16	3922.52
MW - 5	02/11/10	3974.27	51.56	52.73	1.17	3922.53
MW - 5	02/18/10	3974.27	51.55	52.74	1.19	3922.54
MW - 5	02/25/10	3974.27	51.60	52.80	1.20	3922.49
MW - 5	03/02/10	3974.27	51.64	52.82	1.18	3922.45
MW - 5	03/04/10	3974.27	51.57	52.09	0.52	3922.62
MW - 5	03/10/10	3974.27	51.59	52.78	1.19	3922.50
MW - 5	03/12/10	3974.27	51.61	52.86	1.25	3922.47
MW - 5	03/15/10	3974.27	51.60	52.73	1.13	3922.50
MW - 5	03/18/10	3974.27	51.59	52.73	1.14	3922.51
MW - 5	03/22/10	3974.27	51.62	52.78	1.16	3922.48
MW - 5	03/24/10	3974.27	51.63	52.76	1.13	3922.47
MW - 5	03/30/10	3974.27	51.61	52.79	1.18	3922.48
MW - 5	04/07/10	3974.27	51.64	52.79	1.15	3922.46
MW - 5	04/12/10	3974.27	51.53	52.70	1.17	3922.56
MW - 5	04/16/10	3974.27	51.96	53.95	1.99	3922.01
MW - 5	04/20/10	3974.27	51.85	53.52	1.67	3922.17
MW - 5	04/27/10	3974.27	51.98	53.60	1.62	3922.05
MW - 5	04/30/10	3974.27	51.91	53.39	1.48	3922.14
MW - 5	05/12/10	3974.27	51.91	53.50	1.59	3922.12
MW - 5	05/14/10	3974.27	51.93	53.38	1.45	3922.12
MW - 5	05/17/10	3974.27	52.08	53.39	1.31	3921.99
MW - 5	05/20/10	3974.27	51.90	53.51	1.61	3922.13

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	05/25/10	3974.27	51.86	53.12	1.26	3922.22
MW - 5	06/01/10	3974.27	51.88	53.11	1.23	3922.21
MW - 5	06/09/10	3974.27	51.88	53.12	1.24	3922.20
MW - 5	06/16/10	3974.27	51.85	52.92	1.07	3922.26
MW - 5	06/28/10	3974.27	51.63	53.78	2.15	3922.32
MW - 5	07/09/10	3974.27	51.87	52.91	1.04	3922.24
MW - 5	07/14/10	3974.27	51.58	52.40	0.82	3922.57
MW - 5	07/23/10	3974.27	51.60	52.49	0.89	3922.54
MW - 5	07/29/10	3974.27	51.59	52.40	0.81	3922.56
MW - 5	08/05/10	3974.27	51.61	52.40	0.79	3922.54
MW - 5	08/12/10	3974.27	51.62	52.42	0.80	3922.53
MW - 5	08/16/10	3974.27	51.62	52.42	0.80	3922.53
MW - 5	08/18/10	3974.27	51.59	52.45	0.86	3922.55
MW - 5	08/25/10	3974.27	51.81	52.84	1.03	3922.31
MW - 5	09/02/10	3974.27	51.81	52.88	1.07	3922.30
MW - 5	09/09/10	3974.27	51.62	52.41	0.79	3922.53
MW - 5	09/30/10	3974.27	51.61	52.36	0.75	3922.55
MW - 5	10/07/10	3974.27	51.64	52.35	0.71	3922.52
MW - 5	10/14/10	3974.27	51.88	53.49	1.61	3922.15
MW - 5	10/21/10	3974.27	51.88	53.46	1.58	3922.15
MW - 5	11/04/10	3974.27	51.86	52.77	0.91	3922.27
MW - 5	11/10/10	3974.27	51.88	53.43	1.55	3922.16
MW - 5	12/01/10	3974.27	51.70	52.44	0.74	3922.46
MW - 5	12/08/10	3974.27	51.85	52.77	0.92	3922.28
MW - 5	01/26/11	3974.27	51.59	52.51	0.92	3922.54
MW - 5	02/28/11	3974.27	51.86	53.46	1.60	3922.17
MW - 5	03/04/11	3974.27	51.66	52.44	0.78	3922.49
MW - 5	03/09/11	3974.27	51.75	53.12	1.37	3922.31
MW - 5	04/28/11	3974.27	51.74	52.91	1.17	3922.35
MW - 5	05/04/11	3974.27	51.70	52.90	1.20	3922.39
MW - 5	05/11/11	3974.27	51.69	52.82	1.13	3922.41
MW - 5	05/12/11	3974.27	51.62	52.61	0.99	3922.50
MW - 5	05/18/11	3974.27	51.64	52.75	1.11	3922.46
MW - 5	05/23/11	3974.27	51.76	52.88	1.12	3922.34
MW - 5	06/08/11	3974.27	51.72	53.19	1.47	3922.33
MW - 5	06/16/11	3974.27	51.73	53.02	1.29	3922.35
MW - 5	06/22/11	3974.27	51.68	52.88	1.20	3922.41
MW - 5	06/30/11	3974.27	51.64	53.20	1.56	3922.40
MW - 5	07/06/11	3974.27	51.57	52.79	1.22	3922.52
MW - 5	07/13/11	3974.27	51.68	53.12	1.44	3922.37
MW - 5	07/15/11	3974.27	51.75	53.20	1.45	3922.30
MW - 5	07/19/11	3974.27	51.60	52.53	0.93	3922.53
MW - 5	07/21/11	3974.27	51.61	52.80	1.19	3922.48
MW - 5	07/26/11	3974.27	51.76	52.68	0.92	3922.37

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	07/28/11	3974.27	51.73	52.97	1.24	3922.35
MW - 5	08/02/11	3974.27	51.88	53.58	1.70	3922.14
MW - 5	08/09/11	3974.27	51.82	53.30	1.48	3922.23
MW - 5	08/12/11	3974.27	51.84	52.96	1.12	3922.26
MW - 5	08/15/11	3974.27	51.84	52.96	1.12	3922.26
MW - 5	08/16/11	3974.27	51.66	52.63	0.97	3922.46
MW - 5	08/19/11	3974.27	51.73	52.55	0.82	3922.42
MW - 5	08/23/11	3974.27	51.74	52.75	1.01	3922.38
MW - 5	08/26/11	3974.27	51.78	53.05	1.27	3922.30
MW - 5	08/30/11	3974.27	51.60	52.50	0.90	3922.54
MW - 5	09/01/11	3974.27	51.65	52.16	0.51	3922.54
MW - 5	09/08/11	3974.27	51.80	53.37	1.57	3922.23
MW - 5	09/13/11	3974.27	51.72	53.04	1.32	3922.35
MW - 5	09/15/11	3974.27	51.81	53.17	1.36	3922.26
MW - 5	09/22/11	3974.27	51.61	52.40	0.79	3922.54
MW - 5	10/06/11	3974.27	51.72	52.82	1.10	3922.39
MW - 5	10/11/11	3974.27	51.81	52.96	1.15	3922.29
MW - 5	10/13/11	3974.27	51.87	53.61	1.74	3922.14
MW - 5	10/26/11	3974.27	51.81	53.23	1.42	3922.25
MW - 5	11/22/11	3974.27	51.76	52.83	1.07	3922.35
MW - 5	12/02/11	3974.27	51.59	52.56	0.97	3922.53
MW - 5	12/29/11	3974.27	51.59	52.59	1.00	3922.53
MW - 5	01/26/12	3974.27	51.65	52.82	1.17	3922.44
MW - 5	01/31/12	3974.27	51.68	52.87	1.19	3922.41
MW - 5	02/15/12	3974.27	51.59	52.57	0.98	3922.53
MW - 5	02/28/12	3974.27	51.63	52.70	1.07	3922.48
MW - 5	03/20/12	3974.27	51.72	53.18	1.46	3922.33
MW - 5	03/27/12	3974.27	51.67	53.00	1.33	3922.40
MW - 5	04/10/12	3974.27	51.74	53.11	1.37	3922.32
MW - 5	04/19/12	3974.27	51.67	52.96	1.29	3922.41
MW - 5	04/26/12	3974.27	51.69	52.40	0.71	3922.47
MW - 5	05/08/12	3974.27	51.69	52.40	0.71	3922.47
MW - 5	05/15/12	3974.27	51.58	52.71	1.13	3922.52
MW - 5	05/17/12	3974.27	51.56	52.70	1.14	3922.54
MW - 5	06/05/12	3974.27	51.68	53.12	1.44	3922.37
MW - 5	06/21/12	3974.27	51.68	53.24	1.56	3922.36
MW - 5	06/28/12	3974.27	51.67	53.29	1.62	3922.36
MW - 5	07/17/12	3974.27	51.90	52.61	0.71	3922.26
MW - 5	08/01/12	3974.27	51.68	52.81	1.13	3922.42
MW - 5	10/02/12	3974.27	51.69	53.16	1.47	3922.36
MW - 5	10/09/12	3974.27	51.67	53.20	1.53	3922.37
MW - 5	10/16/12	3974.27	51.67	53.09	1.42	3922.39
MW - 5	10/25/12	3974.27	51.67	53.21	1.54	3922.37
MW - 5	10/30/12	3974.27	51.68	53.20	1.52	3922.36

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	11/29/12	3974.27	51.69	53.54	1.85	3922.30
MW - 5	12/14/12	3974.27	51.70	53.26	1.56	3922.34
MW - 5	02/11/13	3974.27	51.67	53.02	1.35	3922.40
MW - 5	04/11/13	3974.27	51.82	53.84	2.02	3922.15
MW - 5	04/15/13	3974.27	51.85	53.78	1.93	3922.13
MW - 5	04/22/13	3974.27	51.65	53.14	1.49	3922.40
MW - 5	05/06/13	3974.27	51.68	53.16	1.48	3922.37
MW - 5	05/09/13	3974.27	51.67	53.18	1.51	3922.37
MW - 5	05/20/13	3974.27	51.67	53.23	1.56	3922.37
MW - 5	05/24/13	3974.27	51.74	53.86	2.12	3922.21
MW - 5	05/29/13	3974.27	51.66	53.25	1.59	3922.37
MW - 5	05/31/13	3974.27	51.74	53.40	1.66	3922.28
MW - 5	06/07/13	3974.27	51.98	53.99	2.01	3921.99
MW - 5	06/12/13	3974.27	51.93	53.88	1.95	3922.05
MW - 5	06/14/13	3974.27	51.42	53.62	2.20	3922.52
MW - 5	06/19/13	3974.27	51.96	53.88	1.92	3922.02
MW - 5	06/21/13	3974.27	52.01	53.76	1.75	3922.00
MW - 5	06/25/13	3974.27	51.73	52.71	0.98	3922.39
MW - 5	06/26/13	3974.27	51.85	53.57	1.72	3922.16
MW - 5	07/03/13	3974.27	52.03	53.89	1.86	3921.96
MW - 5	07/09/13	3974.27	52.00	54.19	2.19	3921.94
MW - 5	07/11/13	3974.27	51.98	54.00	2.02	3921.99
MW - 5	07/24/13	3974.27	51.95	52.87	0.92	3922.18
MW - 5	07/26/13	3974.27	51.89	53.65	1.76	3922.12
MW - 5	07/31/13	3974.27	51.73	53.38	1.65	3922.29
MW - 5	08/02/13	3974.27	51.93	53.71	1.78	3922.07
MW - 5	08/06/13	3974.27	51.76	53.33	1.57	3922.27
MW - 5	08/14/13	3974.27	51.78	53.42	1.64	3922.24
MW - 5	08/21/13	3974.27	51.92	53.75	1.83	3922.08
MW - 5	08/26/13	3974.27	51.89	53.56	1.67	3922.13
MW - 5	09/06/13	3974.27	51.91	53.75	1.84	3922.08
MW - 5	08/30/13	3974.27	51.77	53.32	1.55	3922.27
MW - 5	09/13/13	3974.27	51.83	53.27	1.44	3922.22
MW - 5	09/27/13	3974.27	51.86	53.67	1.81	3922.14
MW - 5	09/30/13	3974.27	51.80	53.52	1.72	3922.21
MW - 5	10/02/13	3974.27	51.94	53.85	1.91	3922.04
MW - 5	10/03/13	3974.27	51.89	53.15	1.26	3922.19
MW - 5	10/11/13	3974.27	51.77	53.33	1.56	3922.27
MW - 5	10/17/13	3974.27	51.77	53.39	1.62	3922.26
MW - 5	10/22/13	3974.27	51.76	53.41	1.65	3922.26
MW - 5	10/24/13	3974.27	51.88	53.71	1.83	3922.12
MW - 5	11/01/13	3974.27	51.80	53.25	1.45	3922.25
MW - 5	11/04/13	3974.27	51.80	53.36	1.56	3922.24
MW - 5	11/08/13	3974.27	51.95	54.00	2.05	3922.01

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 5	11/13/13	3974.27	51.77	53.35	1.58	3922.26
MW - 5	11/15/13	3974.27	51.76	53.36	1.60	3922.27
MW - 5	11/18/13	3974.27	51.79	53.45	1.66	3922.23
MW - 5	12/12/13	3974.27	51.80	53.55	1.75	3922.21
MW - 5	12/16/13	3974.27	51.80	53.53	1.73	3922.21
MW - 5	12/18/13	3974.27	51.81	53.54	1.73	3922.20
MW - 5	12/23/13	3974.27	51.84	53.58	1.74	3922.17
MW - 5	12/30/13	3974.27	51.81	53.45	1.64	3922.21
MW - 6	03/02/00	3974.72	53.10	53.84	0.74	3921.51
MW - 6	04/25/00	3974.72	53.14	53.91	0.77	3921.46
MW - 6	09/06/00	3974.72	52.81	55.87	3.06	3921.45
MW - 6	11/28/00	3974.72	52.91	55.62	2.71	3921.40
MW - 6	02/21/01	3974.72	52.79	55.42	2.63	3921.54
MW - 6	05/31/01	3974.72	52.95	54.83	1.88	3921.49
MW - 6	08/23/01	3974.72	52.69	55.95	3.26	3921.54
MW - 6	11/21/01	3974.72	53.42	55.42	2.00	3921.00
MW - 6	02/13/02	3974.72	52.74	56.04	3.30	3921.49
MW - 6	06/12/02	3974.72	52.63	56.16	3.53	3921.56
MW - 6	08/26/02	3974.72	52.67	56.24	3.57	3921.51
MW - 6	11/08/02	3974.72	53.03	55.06	2.03	3921.39
MW - 6	11/21/02	3974.72	53.10	54.57	1.47	3921.40
MW - 6	12/27/02	3974.72	52.95	54.97	2.02	3921.47
MW - 6	01/06/03	3974.72	52.90	55.38	2.48	3921.45
MW - 6	01/08/03	3974.72	52.88	55.42	2.54	3921.46
MW - 6	01/10/03	3974.72	52.86	55.86	3.00	3921.41
MW - 6	01/13/03	3974.72	52.85	55.55	2.70	3921.47
MW - 6	02/05/03	3974.72	52.80	55.81	3.01	3921.47
MW - 6	02/26/03	3974.72	52.71	56.09	3.38	3921.50
MW - 6	03/04/03	3974.72	52.72	56.09	3.37	3921.49
MW - 6	03/12/03	3974.72	52.73	56.18	3.45	3921.47
MW - 6	03/18/03	3974.72	52.71	56.25	3.54	3921.48
MW - 6	03/25/03	3974.72	52.71	56.18	3.47	3921.49
MW - 6	03/31/03	3974.72	52.69	56.21	3.52	3921.50
MW - 6	04/09/03	3974.72	52.73	53.02	0.29	3921.95
MW - 6	04/14/03	3974.72	52.61	53.00	0.39	3922.05
MW - 6	05/07/03	3974.72	52.92	56.21	3.29	3921.31
MW - 6	05/08/03	3974.72	52.75	56.04	3.29	3921.48
MW - 6	05/13/03	3974.72	52.80	59.21	6.41	3920.96
MW - 6	05/21/03	3974.72	52.73	56.11	3.38	3921.48
MW - 6	05/27/03	3974.72	53.12	56.50	3.38	3921.09
MW - 6	05/28/03	3974.72	53.20	56.65	3.45	3921.00
MW - 6	06/03/03	3974.72	53.19	56.68	3.49	3921.01
MW - 6	06/10/03	3974.72	52.73	56.25	3.52	3921.46

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	07/01/03	3974.72	52.77	56.31	3.54	3921.42
MW - 6	07/08/03	3974.72	52.77	56.40	3.63	3921.41
MW - 6	07/30/03	3974.72	52.62	56.23	3.61	3921.56
MW - 6	08/04/03	3974.72	52.40	56.45	4.05	3921.71
MW - 6	08/18/03	3974.72	52.97	54.18	1.21	3921.57
MW - 6	08/25/03	3974.72	53.40	57.02	3.62	3920.78
MW - 6	10/01/03	3974.72	52.77	54.90	2.13	3921.63
MW - 6	10/06/03	3974.72	52.72	56.26	3.54	3921.47
MW - 6	10/08/03	3974.72	53.05	56.62	3.57	3921.13
MW - 6	10/15/03	3974.72	53.47	57.10	3.63	3920.71
MW - 6	11/12/03	3974.72	53.11	55.91	2.80	3921.19
MW - 6	11/19/03	3974.72	53.12	56.70	3.58	3921.06
MW - 6	12/01/03	3974.72	53.08	56.70	3.62	3921.10
MW - 6	12/10/03	3974.72	52.82	56.33	3.51	3921.37
MW - 6	02/05/04	3974.72	53.63	57.18	3.55	3920.56
MW - 6	02/17/04	3974.72	52.89	56.34	3.45	3921.31
MW - 6	02/25/04	3974.72	53.60	57.13	3.53	3920.59
MW - 6	03/09/04	3974.72	52.91	56.40	3.49	3921.29
MW - 6	03/16/04	3974.72	53.14	54.19	1.05	3921.42
MW - 6	03/22/04	3974.72	53.04	55.22	2.18	3921.35
MW - 6	04/07/04	3974.72	53.14	53.69	0.55	3921.50
MW - 6	04/12/04	3974.72	53.50	56.43	2.93	3920.78
MW - 6	04/19/04	3974.72	53.10	53.49	0.39	3921.56
MW - 6	05/05/04	3974.72	53.04	56.06	3.02	3921.23
MW - 6	05/11/04	3974.72	52.19	56.21	4.02	3921.93
MW - 6	06/07/04	3974.72	52.77	55.87	3.10	3921.49
MW - 6	06/15/04	3974.72	52.78	55.90	3.12	3921.47
MW - 6	06/20/04	3974.72	52.78	55.90	3.12	3921.47
MW - 6	06/21/04	3974.72	52.77	55.77	3.00	3921.50
MW - 6	06/28/04	3974.72	52.77	55.91	3.14	3921.48
MW - 6	07/08/04	3974.72	52.75	55.87	3.12	3921.50
MW - 6	07/12/04	3974.72	52.76	55.90	3.14	3921.49
MW - 6	08/06/04	3974.72	52.83	55.80	2.97	3921.44
MW - 6	08/12/04	3974.72	52.85	55.82	2.97	3921.42
MW - 6	08/17/04	3974.72	52.77	55.94	3.17	3921.47
MW - 6	09/01/04	3974.72	53.21	54.22	1.01	3921.36
MW - 6	09/03/04	3974.72	53.31	54.02	0.71	3921.30
MW - 6	09/08/04	3974.72	52.16	53.52	1.36	3922.36
MW - 6	09/14/04	3974.72	53.20	54.26	1.06	3921.36
MW - 6	09/22/04	3974.72	53.22	54.14	0.92	3921.36
MW - 6	10/01/04	3974.72	53.10	54.89	1.79	3921.35
MW - 6	10/08/04	3974.72	53.25	54.05	0.80	3921.35
MW - 6	10/15/04	3974.72	53.11	53.88	0.77	3921.49
MW - 6	10/22/04	3974.72	53.05	54.55	1.50	3921.45

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	11/12/04	3974.72	53.22	54.16	0.94	3921.36
MW - 6	11/26/04	3974.72	53.11	54.55	1.44	3921.39
MW - 6	12/02/04	3974.72	53.79	55.20	1.41	3920.72
MW - 6	12/06/04	3974.72	53.87	54.96	1.09	3920.69
MW - 6	12/13/04	3974.72	53.51	54.51	1.00	3921.06
MW - 6	12/15/04	3974.72	53.51	54.51	1.00	3921.06
MW - 6	12/27/04	3974.72	53.85	55.60	1.75	3920.61
MW - 6	01/10/05	3974.72	53.02	54.20	1.18	3921.52
MW - 6	01/18/05	3974.72	52.96	54.49	1.53	3921.53
MW - 6	01/18/05	3974.72	53.14	53.52	0.38	3921.52
MW - 6	01/25/05	3974.72	53.08	53.78	0.70	3921.54
MW - 6	01/27/05	3974.72	53.21	53.42	0.21	3921.48
MW - 6	02/01/05	3974.72	53.19	53.51	0.32	3921.48
MW - 6	02/07/05	3974.72	53.14	53.54	0.40	3921.52
MW - 6	02/11/05	3974.72	53.15	53.55	0.40	3921.51
MW - 6	02/15/05	3974.72	53.10	53.52	0.42	3921.56
MW - 6	02/22/05	3974.72	53.09	53.58	0.49	3921.56
MW - 6	02/24/05	3974.72	53.08	53.65	0.57	3921.55
MW - 6	03/03/05	3974.72	53.02	53.61	0.59	3921.61
MW - 6	03/09/05	3974.72	53.02	53.64	0.62	3921.61
MW - 6	03/22/05	3974.72	53.57	54.20	0.63	3921.06
MW - 6	03/24/05	3974.72	53.57	54.20	0.63	3921.06
MW - 6	03/31/05	3974.72	53.60	54.20	0.60	3921.03
MW - 6	06/22/05	3974.72	52.91	53.92	1.01	3921.66
MW - 6	07/21/05	3974.72	52.80	53.80	1.00	3921.77
MW - 6	08/03/05	3974.72	52.82	53.70	0.88	3921.77
MW - 6	08/12/05	3974.72	52.87	53.62	0.75	3921.74
MW - 6	08/15/05	3974.72	52.91	53.30	0.39	3921.75
MW - 6	08/22/05	3974.72	52.70	53.69	0.99	3921.87
MW - 6	08/30/05	3974.72	DID NOT GAUGE	-	-	-
MW - 6	09/07/05	3974.72	52.67	54.31	1.64	3921.80
MW - 6	09/14/05	3974.72	52.78	53.31	0.53	3921.86
MW - 6	09/20/05	3974.72	52.75	53.91	1.16	3921.80
MW - 6	09/21/05	3974.72	52.76	53.54	0.78	3921.84
MW - 6	09/28/05	3974.72	52.70	54.00	1.30	3921.83
MW - 6	10/06/05	3974.72	52.80	53.66	0.86	3921.79
MW - 6	10/13/05	3974.72	52.80	53.51	0.71	3921.81
MW - 6	10/20/05	3974.72	52.84	53.81	0.97	3921.73
MW - 6	10/26/05	3974.72	52.83	53.42	0.59	3921.80
MW - 6	11/03/05	3974.72	52.73	53.70	0.97	3921.84
MW - 6	11/10/05	3974.72	52.68	53.99	1.31	3921.84
MW - 6	11/16/05	3974.72	52.79	53.50	0.71	3921.82
MW - 6	11/23/05	3974.72	52.80	53.45	0.65	3921.82
MW - 6	11/28/05	3974.72	52.69	53.76	1.07	3921.87

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	12/05/05	3974.72	52.80	53.53	0.73	3921.81
MW - 6	12/12/05	3974.72	52.76	53.56	0.80	3921.84
MW - 6	12/16/05	3974.72	52.97	53.56	0.59	3921.66
MW - 6	12/19/05	3974.72	52.81	53.48	0.67	3921.81
MW - 6	12/29/05	3974.72	52.79	53.53	0.74	3921.82
MW - 6	01/04/06	3974.72	52.81	53.50	0.69	3921.81
MW - 6	01/10/06	3974.72	52.72	53.50	0.78	3921.88
MW - 6	01/17/06	3974.72	52.69	53.81	1.12	3921.86
MW - 6	01/26/06	3974.72	52.68	53.83	1.15	3921.87
MW - 6	01/31/06	3974.72	52.70	53.73	1.03	3921.87
MW - 6	02/07/06	3974.72	52.73	53.60	0.87	3921.86
MW - 6	02/09/06	3974.72	52.87	53.13	0.26	3921.81
MW - 6	02/13/06	3974.72	52.73	53.51	0.78	3921.87
MW - 6	02/22/06	3974.72	52.76	53.29	0.53	3921.88
MW - 6	02/28/06	3974.72	52.75	53.28	0.53	3921.89
MW - 6	03/07/06	3974.72	52.79	53.25	0.46	3921.86
MW - 6	03/15/06	3974.72	52.72	53.37	0.65	3921.90
MW - 6	03/20/06	3974.72	52.71	53.30	0.59	3921.92
MW - 6	03/22/06	3974.72	52.94	52.95	0.01	3921.78
MW - 6	03/29/06	3974.72	52.78	52.99	0.21	3921.91
MW - 6	04/11/06	3974.72	52.72	53.17	0.45	3921.93
MW - 6	04/18/06	3974.72	52.72	53.15	0.43	3921.94
MW - 6	04/25/06	3974.72	52.79	52.93	0.14	3921.91
MW - 6	05/02/06	3974.72	52.74	53.10	0.36	3921.93
MW - 6	05/09/06	3974.72	52.72	53.03	0.31	3921.95
MW - 6	05/16/06	3974.72	52.72	53.20	0.48	3921.93
MW - 6	05/23/06	3974.72	52.74	53.15	0.41	3921.92
MW - 6	05/31/06	3974.72	52.71	53.13	0.42	3921.95
MW - 6	06/06/06	3974.72	52.71	53.10	0.39	3921.95
MW - 6	06/13/06	3974.72	52.70	53.11	0.41	3921.96
MW - 6	06/20/06	3974.72	52.71	53.13	0.42	3921.95
MW - 6	06/21/06	3974.72	52.75	53.07	0.32	3921.92
MW - 6	07/06/06	3974.72	52.68	53.31	0.63	3921.95
MW - 6	07/12/06	3974.72	52.66	53.46	0.80	3921.94
MW - 6	07/20/06	3974.72	52.65	53.27	0.62	3921.98
MW - 6	07/25/06	3974.72	52.65	53.40	0.75	3921.96
MW - 6	08/01/06	3974.72	52.68	53.34	0.66	3921.94
MW - 6	08/16/06	3974.72	52.65	53.54	0.89	3921.94
MW - 6	08/23/06	3974.72	52.67	53.42	0.75	3921.94
MW - 6	08/28/06	3974.72	52.73	53.23	0.50	3921.92
MW - 6	09/12/06	3974.72	52.25	53.52	1.27	3922.28
MW - 6	09/22/06	3974.72	53.15	54.00	0.85	3921.44
MW - 6	09/27/06	3974.72	52.67	53.18	0.51	3921.97
MW - 6	10/06/06	3974.72	52.61	53.54	0.93	3921.97

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	10/10/06	3974.72	52.70	53.20	0.50	3921.95
MW - 6	10/16/06	3974.72	52.69	53.21	0.52	3921.95
MW - 6	10/26/06	3974.72	52.65	53.40	0.75	3921.96
MW - 6	11/03/06	3974.72	52.64	53.30	0.66	3921.98
MW - 6	11/09/06	3974.72	52.65	53.25	0.60	3921.98
MW - 6	11/16/06	3974.72	52.68	53.21	0.53	3921.96
MW - 6	11/22/06	3974.72	52.67	53.17	0.50	3921.98
MW - 6	12/04/06	3974.72	52.63	53.39	0.76	3921.98
MW - 6	12/08/06	3974.72	52.59	53.49	0.90	3922.00
MW - 6	12/15/06	3974.72	52.64	53.23	0.59	3921.99
MW - 6	01/05/07	3974.72	52.53	53.63	1.10	3922.03
MW - 6	01/12/07	3974.72	52.63	53.23	0.60	3922.00
MW - 6	01/18/07	3974.72	52.66	53.19	0.53	3921.98
MW - 6	01/24/07	3974.72	52.65	53.17	0.52	3921.99
MW - 6	01/29/07	3974.72	52.65	53.14	0.49	3922.00
MW - 6	02/09/07	3974.72	52.61	53.28	0.67	3922.01
MW - 6	02/16/07	3974.72	52.62	53.24	0.62	3922.01
MW - 6	02/23/07	3974.72	52.60	53.13	0.53	3922.04
MW - 6	03/02/07	3974.72	52.57	53.40	0.83	3922.03
MW - 6	03/14/07	3974.72	52.60	53.16	0.56	3922.04
MW - 6	03/26/07	3974.72	52.57	53.33	0.76	3922.04
MW - 6	04/03/07	3974.72	52.55	53.42	0.87	3922.04
MW - 6	04/09/07	3974.72	52.60	53.21	0.61	3922.03
MW - 6	04/26/07	3974.72	52.51	53.52	1.01	3922.06
MW - 6	04/30/07	3974.72	52.61	54.03	1.42	3921.90
MW - 6	05/11/07	3974.72	52.55	53.26	0.71	3922.06
MW - 6	05/16/07	3974.72	52.62	53.00	0.38	3922.04
MW - 6	05/22/07	3974.72	52.60	53.09	0.49	3922.05
MW - 6	05/29/07	3974.72	52.57	53.14	0.57	3922.06
MW - 6	06/01/07	3974.72	52.56	53.26	0.70	3922.06
MW - 6	06/08/07	3974.72	52.56	53.11	0.55	3922.08
MW - 6	06/11/07	3974.72	52.57	52.95	0.38	3922.09
MW - 6	06/20/07	3974.72	52.55	53.20	0.65	3922.07
MW - 6	07/10/07	3974.72	52.51	53.31	0.80	3922.09
MW - 6	07/11/07	3974.72	52.14	53.50	1.36	3922.38
MW - 6	07/25/07	3974.72	52.52	53.25	0.73	3922.09
MW - 6	08/01/07	3974.72	52.54	53.14	0.60	3922.09
MW - 6	08/10/07	3974.72	52.54	53.14	0.60	3922.09
MW - 6	08/15/07	3974.72	52.56	53.00	0.44	3922.09
MW - 6	08/30/07	3974.72	52.49	53.32	0.83	3922.11
MW - 6	08/31/07	3974.72	52.49	53.22	0.73	3922.12
MW - 6	09/10/07	3974.72	52.45	53.60	1.15	3922.10
MW - 6	09/19/07	3974.72	52.43	53.60	1.17	3922.11
MW - 6	10/01/07	3974.72	52.53	53.29	0.76	3922.08

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	10/19/07	3974.72	52.45	53.60	1.15	3922.10
MW - 6	11/12/07	3974.72	52.41	53.50	1.09	3922.15
MW - 6	03/07/08	3974.72	52.36	53.65	1.29	3922.17
MW - 6	3/12/08 #1	3974.72	52.36	53.65	1.29	3922.17
MW - 6	3/12/08#2	3974.72	52.50	52.67	0.17	3922.19
MW - 6	3/20/2008 #1	3974.72	52.45	53.09	0.64	3922.17
MW - 6	3/20/08#2	3974.72	52.42	53.12	0.70	3922.20
MW - 6	3/23/08 #1	3974.72	52.43	53.02	0.59	3922.20
MW - 6	3/23/08 #2	3974.72	52.51	52.61	0.10	3922.20
MW - 6	4/2/08 #1	3974.72	52.50	52.98	0.48	3922.15
MW - 6	4/2/08 #2	3974.72	52.49	52.72	0.23	3922.20
MW - 6	4/9/08 #1	3974.72	52.41	52.95	0.54	3922.23
MW - 6	4/9/08 #2	3974.72	52.48	52.65	0.17	3922.21
MW - 6	04/16/08	3974.72	52.42	52.97	0.55	3922.22
MW - 6	04/23/08	3974.72	52.44	52.91	0.47	3922.21
MW - 6	04/30/08	3974.72	52.42	52.93	0.51	3922.22
MW - 6	05/29/08	3974.72	52.39	52.96	0.57	3922.24
MW - 6	06/02/08	3974.72	52.42	52.82	0.40	3922.24
MW - 6	06/03/08	3974.72	52.42	52.82	0.40	3922.24
MW - 6	06/11/08	3974.72	52.40	52.99	0.59	3922.23
MW - 6	06/18/08	3974.72	52.43	52.89	0.46	3922.22
MW - 6	06/23/08	3974.72	52.42	52.79	0.37	3922.24
MW - 6	07/01/08	3974.72	52.41	52.97	0.56	3922.23
MW - 6	07/09/08	3974.72	52.42	52.95	0.53	3922.22
MW - 6	07/15/08	3974.72	52.42	52.85	0.43	3922.24
MW - 6	07/22/08	3974.72	52.38	53.00	0.62	3922.25
MW - 6	08/02/08	3974.72	52.36	53.10	0.74	3922.25
MW - 6	08/13/08	3974.72	52.36	53.18	0.82	3922.24
MW - 6	09/03/08	3974.72	52.29	53.47	1.18	3922.25
MW - 6	09/11/08	3974.72	52.41	52.91	0.50	3922.24
MW - 6	09/19/08	3974.72	52.40	52.89	0.49	3922.25
MW - 6	09/26/08	3974.72	52.38	52.92	0.54	3922.26
MW - 6	10/10/08	3974.72	52.39	52.91	0.52	3922.25
MW - 6	10/17/08	3974.72	52.41	52.81	0.40	3922.25
MW - 6	10/21/08	3974.72	52.42	52.74	0.32	3922.25
MW - 6	10/30/08	3974.72	52.38	52.90	0.52	3922.26
MW - 6	11/04/08	3974.72	52.42	52.78	0.36	3922.25
MW - 6	11/18/08	3974.72	52.37	53.05	0.68	3922.25
MW - 6	11/25/08	3974.72	52.40	52.87	0.47	3922.25
MW - 6	11/25/08	3974.72	-	52.80	0.00	3921.92
MW - 6	12/10/08	3974.72	52.33	53.09	0.76	3922.28
MW - 6	12/18/08	3974.72	52.31	53.19	0.88	3922.28
MW - 6	01/06/09	3974.72	52.32	53.17	0.85	3922.27
MW - 6	01/14/09	3974.72	52.41	52.97	0.56	3922.23

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	01/21/09	3974.72	52.41	52.79	0.38	3922.25
MW - 6	01/22/09	3974.72	52.38	52.73	0.35	3922.29
MW - 6	01/30/09	3974.72	52.38	52.82	0.44	3922.27
MW - 6	02/03/09	3974.72	52.40	52.71	0.31	3922.27
MW - 6	02/12/09	3974.72	52.39	52.90	0.51	3922.25
MW - 6	02/19/09	3974.72	52.39	52.94	0.55	3922.25
MW - 6	03/04/09	3974.72	52.42	52.96	0.54	3922.22
MW - 6	03/06/09	3974.72	52.31	53.03	0.72	3922.30
MW - 6	03/11/09	3974.72	52.37	52.82	0.45	3922.28
MW - 6	03/16/09	3974.72	52.45	53.00	0.55	3922.19
MW - 6	03/19/09	3974.72	52.37	52.79	0.42	3922.29
MW - 6	03/24/09	3974.72	52.29	52.81	0.52	3922.35
MW - 6	04/03/09	3974.72	52.31	53.01	0.70	3922.31
MW - 6	04/15/09	3974.72	52.28	53.12	0.84	3922.31
MW - 6	04/17/09	3974.72	52.39	52.63	0.24	3922.29
MW - 6	04/22/09	3974.72	52.31	53.00	0.69	3922.31
MW - 6	04/29/09	3974.72	52.34	52.82	0.48	3922.31
MW - 6	05/20/09	3974.72	52.32	52.95	0.63	3922.31
MW - 6	05/20/09	3974.72	52.32	52.95	0.63	3922.31
MW - 6	06/09/09	3974.72	52.29	52.95	0.66	3922.33
MW - 6	06/17/09	3974.72	52.35	52.80	0.45	3922.30
MW - 6	06/23/09	3974.72	52.32	53.00	0.68	3922.30
MW - 6	07/01/09	3974.72	52.33	52.82	0.49	3922.32
MW - 6	07/08/09	3974.72	52.38	52.67	0.29	3922.30
MW - 6	07/15/09	3974.72	52.35	52.68	0.33	3922.32
MW - 6	07/17/09	3974.72	52.39	52.65	0.26	3922.29
MW - 6	07/23/09	3974.72	52.38	52.65	0.27	3922.30
MW - 6	07/24/09	3974.72	52.40	52.50	0.10	3922.31
MW - 6	07/30/09	3974.72	52.36	52.61	0.25	3922.32
MW - 6	08/04/09	3974.72	52.38	52.62	0.24	3922.30
MW - 6	08/12/09	3974.72	52.35	52.73	0.38	3922.31
MW - 6	08/20/09	3974.72	52.30	52.83	0.53	3922.34
MW - 6	08/26/09	3974.72	52.31	52.96	0.65	3922.31
MW - 6	09/02/09	3974.72	52.35	52.72	0.37	3922.31
MW - 6	09/09/09	3974.72	52.36	52.64	0.28	3922.32
MW - 6	09/14/09	3974.72	52.37	52.63	0.26	3922.31
MW - 6	09/21/09	3974.72	52.36	52.69	0.33	3922.31
MW - 6	10/01/09	3974.72	52.38	52.75	0.37	3922.28
MW - 6	10/08/09	3974.72	52.38	52.75	0.37	3922.28
MW - 6	10/14/09	3974.72	52.38	52.67	0.29	3922.30
MW - 6	10/21/09	3974.72	52.31	52.88	0.57	3922.32
MW - 6	10/28/09	3974.72	52.34	52.67	0.33	3922.33
MW - 6	11/04/09	3974.72	52.36	52.62	0.26	3922.32
MW - 6	11/11/09	3974.72	52.32	52.60	0.28	3922.36

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	11/18/09	3974.72	52.35	52.65	0.30	3922.33
MW - 6	11/25/09	3974.72	52.36	52.68	0.32	3922.31
MW - 6	12/02/09	3974.72	52.36	52.65	0.29	3922.32
MW - 6	12/10/09	3974.72	52.35	52.66	0.31	3922.32
MW - 6	12/17/09	3974.72	52.41	52.68	0.27	3922.27
MW - 6	12/21/09	3974.72	52.36	52.54	0.18	3922.33
MW - 6	12/30/09	3974.72	52.40	52.79	0.39	3922.26
MW - 6	01/07/10	3974.72	52.35	52.55	0.20	3922.34
MW - 6	01/18/10	3974.72	52.40	52.52	0.12	3922.30
MW - 6	02/02/10	3974.72	52.29	52.86	0.57	3922.34
MW - 6	02/11/10	3974.72	52.30	52.61	0.31	3922.37
MW - 6	02/18/10	3974.72	52.30	52.68	0.38	3922.36
MW - 6	02/25/10	3974.72	52.41	52.61	0.20	3922.28
MW - 6	03/02/10	3974.72	52.43	52.58	0.15	3922.27
MW - 6	03/04/10	3974.72	52.46	52.56	0.10	3922.25
MW - 6	03/10/10	3974.72	52.37	52.53	0.16	3922.33
MW - 6	03/12/10	3974.72	52.43	52.56	0.13	3922.27
MW - 6	03/15/10	3974.72	52.36	52.50	0.14	3922.34
MW - 6	03/18/10	3974.72	52.35	52.46	0.11	3922.35
MW - 6	03/22/10	3974.72	52.41	52.54	0.13	3922.29
MW - 6	03/24/10	3974.72	sheen	52.54	0.00	3922.18
MW - 6	03/30/10	3974.72	sheen	52.55	0.00	3922.17
MW - 6	04/07/10	3974.72	sheen	52.53	0.00	3922.19
MW - 6	04/12/10	3974.72	sheen	52.41	0.00	3922.31
MW - 6	04/16/10	3974.72	sheen	52.89	0.00	3921.83
MW - 6	04/20/10	3974.72	sheen	53.00	0.00	3921.72
MW - 6	04/27/10	3974.72	sheen	52.84	0.00	3921.88
MW - 6	04/30/10	3974.72	sheen	52.82	0.00	3921.90
MW - 6	05/12/10	3974.72	sheen	52.74	0.00	3921.98
MW - 6	05/14/10	3974.72	sheen	52.84	0.00	3921.88
MW - 6	05/17/10	3974.72	sheen	52.96	0.00	3921.76
MW - 6	05/20/10	3974.72	sheen	52.73	0.00	3921.99
MW - 6	05/25/10	3974.72	sheen	52.57	0.00	3922.15
MW - 6	06/01/10	3974.72	sheen	52.28	0.00	3922.44
MW - 6	06/09/10	3974.72	sheen	52.60	0.00	3922.12
MW - 6	06/16/10	3974.72	sheen	52.56	0.00	3922.16
MW - 6	06/28/10	3974.72	sheen	52.63	0.00	3922.09
MW - 6	07/09/10	3974.72	sheen	52.54	0.00	3922.18
MW - 6	07/14/10	3974.72	sheen	52.36	0.00	3922.36
MW - 6	07/23/10	3974.72	sheen	52.42	0.00	3922.30
MW - 6	07/29/10	3974.72	sheen	52.43	0.00	3922.29
MW - 6	08/05/10	3974.72	sheen	52.40	0.00	3922.32
MW - 6	08/12/10	3974.72	sheen	52.46	0.00	3922.26
MW - 6	08/16/10	3974.72	sheen	52.46	0.00	3922.26

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	08/18/10	3974.72	sheen	52.35	0.00	3922.37
MW - 6	08/25/10	3974.72	sheen	52.42	0.00	3922.30
MW - 6	09/02/10	3974.72	sheen	52.29	0.00	3922.43
MW - 6	09/08/10	3974.72	sheen	52.46	0.00	3922.26
MW - 6	09/30/10	3974.72	sheen	52.37	0.00	3922.35
MW - 6	10/07/10	3974.72	sheen	52.45	0.00	3922.27
MW - 6	10/14/10	3974.72	sheen	52.75	0.00	3921.97
MW - 6	10/21/10	3974.72	sheen	52.73	0.00	3921.99
MW - 6	11/04/10	3974.72	sheen	52.35	0.00	3922.37
MW - 6	11/10/10	3974.72	sheen	52.73	0.00	3921.99
MW - 6	12/01/10	3974.72	sheen	52.41	0.00	3922.31
MW - 6	12/08/10	3974.72	sheen	52.44	0.00	3922.28
MW - 6	01/26/11	3974.72	sheen	52.45	0.00	3922.27
MW - 6	02/28/11	3974.72	-	52.72	0.00	3922.00
MW - 6	03/04/11	3974.72	52.41	52.45	0.04	3922.30
MW - 6	03/09/11	3974.72	52.52	52.58	0.06	3922.19
MW - 6	04/28/11	3974.72	52.38	52.47	0.09	3922.33
MW - 6	05/04/11	3974.72	52.35	52.40	0.05	3922.36
MW - 6	05/11/11	3974.72	52.46	52.49	0.03	3922.26
MW - 6	05/12/11	3974.72	-	52.44	0.00	3922.28
MW - 6	05/18/11	3974.72	-	52.35	0.00	3922.37
MW - 6	05/23/11	3974.72	52.29	52.49	0.20	3922.40
MW - 6	06/08/11	3974.72	-	52.51	0.00	3922.21
MW - 6	06/16/11	3974.72	52.30	52.41	0.11	3922.40
MW - 6	06/22/11	3974.72	52.32	52.41	0.09	3922.39
MW - 6	06/30/11	3974.72	52.40	52.64	0.24	3922.28
MW - 6	07/06/11	3974.72	-	52.37	0.00	3922.35
MW - 6	07/13/11	3974.72	-	52.40	0.00	3922.32
MW - 6	07/15/11	3974.72	-	52.46	0.00	3922.26
MW - 6	07/19/11	3974.72	-	52.46	0.00	3922.26
MW - 6	07/21/11	3974.72	-	52.38	0.00	3922.34
MW - 6	07/26/11	3974.72	-	52.43	0.00	3922.29
MW - 6	07/28/11	3974.72	-	52.42	0.00	3922.30
MW - 6	08/02/11	3974.72	-	52.64	0.00	3922.08
MW - 6	08/09/11	3974.72	-	52.48	0.00	3922.24
MW - 6	08/12/11	3974.72	-	52.60	0.00	3922.12
MW - 6	08/15/11	3974.72	-	52.60	0.00	3922.12
MW - 6	08/16/11	3974.72	-	52.42	0.00	3922.30
MW - 6	08/19/11	3974.72	-	52.50	0.00	3922.22
MW - 6	08/23/11	3974.72	-	52.55	0.00	3922.17
MW - 6	08/26/11	3974.72	-	52.57	0.00	3922.15
MW - 6	08/30/11	3974.72	-	52.38	0.00	3922.34
MW - 6	09/01/11	3974.72	-	52.42	0.00	3922.30
MW - 6	09/08/11	3974.72	-	52.64	0.00	3922.08

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 6	09/13/11	3974.72	-	52.54	0.00	3922.18
MW - 6	09/15/11	3974.72	-	52.60	0.00	3922.12
MW - 6	09/22/11	3974.72	-	52.46	0.00	3922.26
MW - 6	10/06/11	3974.72	-	52.46	0.00	3922.26
MW - 6	10/11/11	3974.72	-	52.45	0.00	3922.27
MW - 6	10/13/11	3974.72	52.60	52.64	0.04	3922.11
MW - 6	10/26/11	3974.72	52.41	52.64	0.23	3922.28
MW - 6	11/22/11	3974.72	-	52.57	0.00	3922.15
MW - 6	12/02/11	3974.72	-	52.41	0.00	3922.31
MW - 6	12/29/11	3974.72	-	52.35	0.00	3922.37
MW - 6	01/26/12	3974.72	-	52.57	0.00	3922.15
MW - 6	01/31/12	3974.72	-	52.44	0.00	3922.28
MW - 6	02/15/12	3974.72	-	52.38	0.00	3922.34
MW - 6	02/28/12	3974.72	-	52.37	0.00	3922.35
MW - 6	03/20/12	3974.72	52.43	52.59	0.16	3922.27
MW - 6	03/27/12	3974.72	52.44	52.61	0.17	3922.25
MW - 6	04/10/12	3974.72	52.45	52.70	0.25	3922.23
MW - 6	04/19/12	3974.72	52.44	52.67	0.23	3922.25
MW - 6	04/26/12	3974.72	52.32	52.46	0.14	3922.38
MW - 6	05/08/12	3974.72	52.33	52.47	0.14	3922.37
MW - 6	05/15/12	3974.72	52.31	52.63	0.32	3922.36
MW - 6	05/17/12	3974.72	52.30	52.62	0.32	3922.37
MW - 6	06/05/12	3974.72	52.33	52.78	0.45	3922.32
MW - 6	06/21/12	3974.72	52.33	52.89	0.56	3922.31
MW - 6	06/28/12	3974.72	52.32	52.94	0.62	3922.31
MW - 6	07/17/12	3974.72	52.31	52.97	0.66	3922.31
MW - 6	08/01/12	3974.72	52.42	52.73	0.31	3922.25
MW - 6	10/02/12	3974.72	52.41	53.29	0.88	3922.18
MW - 6	10/09/12	3974.72	52.58	52.88	0.30	3922.10
MW - 6	10/16/12	3974.72	52.47	52.83	0.36	3922.20
MW - 6	10/25/12	3974.72	52.46	52.90	0.44	3922.19
MW - 6	10/30/12	3974.72	52.46	52.95	0.49	3922.19
MW - 6	11/29/12	3974.72	52.54	53.10	0.56	3922.10
MW - 6	12/14/12	3974.72	52.48	53.09	0.61	3922.15
MW - 6	02/11/13	3974.72	52.41	53.08	0.67	3922.21
MW - 6	03/18/13	3974.72	52.52	52.74	0.22	3922.17
MW - 6	04/11/13	3974.72	52.89	52.90	0.01	3921.83
MW - 6	05/06/13	3974.72	52.53	52.60	0.07	3922.18
MW - 6	05/29/13	3974.72	52.89	52.91	0.02	3921.83
MW - 6	06/26/13	3974.72	-	52.90	0.00	3921.82
MW - 6	07/31/13	3974.72	-	52.76	0.00	3921.96
MW - 6	08/06/13	3974.72	52.72	52.73	0.01	3922.00
MW - 6	09/30/13	3974.72	52.78	52.79	0.01	3921.94
MW - 6	11/18/13	3974.72	52.66	52.71	0.05	3922.05

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 7	03/02/00	3974.60	-	53.17	0.00	3921.43
MW - 7	04/25/00	3974.60	-	53.23	0.00	3921.37
MW - 7	09/06/00	3974.60	-	53.28	0.00	3921.32
MW - 7	11/28/00	3974.60	-	53.28	0.00	3921.32
MW - 7	02/21/01	3974.60	-	53.18	0.00	3921.42
MW - 7	05/31/01	3974.60	-	53.15	0.00	3921.45
MW - 7	08/23/01	3974.60	-	53.14	0.00	3921.46
MW - 7	11/21/01	3974.60	-	53.19	0.00	3921.41
MW - 7	02/13/02	3974.60	-	53.22	0.00	3921.38
MW - 7	06/12/02	3974.60	-	53.18	0.00	3921.42
MW - 7	08/26/02	3974.60	-	53.19	0.00	3921.41
MW - 7	11/21/02	3974.60	-	53.23	0.00	3921.37
MW - 7	02/05/03	3974.60	-	53.20	0.00	3921.40
MW - 7	05/07/03	3974.60	-	53.18	0.00	3921.42
MW - 7	08/18/03	3974.60	-	53.21	0.00	3921.39
MW - 7	12/01/03	3974.60	-	53.24	0.00	3921.36
MW - 7	02/05/04	3974.60	-	53.27	0.00	3921.33
MW - 7	05/05/04	3974.60	-	53.22	0.00	3921.38
MW - 7	09/01/04	3974.60	-	53.30	0.00	3921.30
MW - 7	12/15/04	3974.60	-	53.25	0.00	3921.35
MW - 7	03/22/05	3974.60	-	53.03	0.00	3921.57
MW - 7	06/22/05	3974.60	-	52.95	0.00	3921.65
MW - 7	09/21/05	3974.60	-	52.87	0.00	3921.73
MW - 7	12/16/05	3974.60	-	52.80	0.00	3921.80
MW - 7	03/20/06	3974.60	-	52.73	0.00	3921.87
MW - 7	06/21/06	3974.60	-	52.69	0.00	3921.91
MW - 7	09/27/06	3974.60	-	52.67	0.00	3921.93
MW - 7	12/04/06	3974.60	-	52.68	0.00	3921.92
MW - 7	03/14/07	3974.60	-	52.64	0.00	3921.96
MW - 7	05/29/07	3974.60	-	52.61	0.00	3921.99
MW - 7	08/30/07	3974.60	-	52.58	0.00	3922.02
MW - 7	11/12/07	3974.60	-	52.54	0.00	3922.06
MW - 7	03/07/08	3974.60	-	52.49	0.00	3922.11
MW - 7	06/02/08	3974.60	-	52.43	0.00	3922.17
MW - 7	09/03/08	3974.60	-	52.44	0.00	3922.16
MW - 7	12/08/08	3974.60	-	52.41	0.00	3922.19
MW - 7	02/19/09	3974.60	-	52.41	0.00	3922.19
MW - 7	05/20/09	3974.60	-	52.35	0.00	3922.25
MW - 7	08/12/09	3974.60	-	52.34	0.00	3922.26
MW - 7	11/25/09	3974.60	-	52.34	0.00	3922.26
MW - 7	01/07/10	3974.60	-	52.33	0.00	3922.27
MW - 7	02/11/10	3974.60	-	52.31	0.00	3922.29
MW - 7	05/17/10	3974.60	-	52.39	0.00	3922.21

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 7	08/16/10	3974.60	-	52.40	0.00	3922.20
MW - 7	11/10/10	3974.60	-	52.39	0.00	3922.21
MW - 7	02/28/11	3974.60	-	53.42	0.00	3921.18
MW - 7	05/12/11	3974.60	-	52.31	0.00	3922.29
MW - 7	08/15/11	3974.60	-	52.42	0.00	3922.18
MW - 7	11/22/11	3974.60	-	52.37	0.00	3922.23
MW - 7	02/28/12	3974.60	-	52.35	0.00	3922.25
MW - 7	05/17/12	3974.60	-	52.28	0.00	3922.32
MW - 7	08/01/12	3974.60	-	52.39	0.00	3922.21
MW - 7	10/25/12	3974.60	-	52.47	0.00	3922.13
MW - 7	11/29/12	3974.60	-	52.56	0.00	3922.04
MW - 7	02/11/13	3974.60	-	52.44	0.00	3922.16
MW - 7	04/11/13	3974.60	-	52.76	0.00	3921.84
MW - 7	05/06/13	3974.60	-	52.46	0.00	3922.14
MW - 7	05/29/13	3974.60	-	52.71	0.00	3921.89
MW - 7	06/26/13	3974.60	-	52.68	0.00	3921.92
MW - 7	07/31/13	3974.60	-	52.62	0.00	3921.98
MW - 7	08/06/13	3974.60	-	52.62	0.00	3921.98
MW - 7	09/30/13	3974.60	-	52.65	0.00	3921.95
MW - 7	11/19/13	3974.60	-	52.65	0.00	3921.95
MW - 7	12/08/13	3974.60	-	52.60	0.00	3922.00
MW - 8	03/02/00	3974.48	-	52.89	0.00	3921.59
MW - 8	04/25/00	3974.48	-	52.96	0.00	3921.52
MW - 8	09/06/00	3974.48	-	53.00	0.00	3921.48
MW - 8	11/28/00	3974.48	-	53.00	0.00	3921.48
MW - 8	02/21/01	3974.48	-	52.90	0.00	3921.58
MW - 8	05/31/01	3974.48	-	52.85	0.00	3921.63
MW - 8	08/23/01	3974.48	-	52.87	0.00	3921.61
MW - 8	11/21/01	3974.48	-	52.92	0.00	3921.56
MW - 8	02/13/02	3974.48	-	52.96	0.00	3921.52
MW - 8	06/12/02	3974.48	-	52.93	0.00	3921.55
MW - 8	08/26/02	3974.48	-	52.92	0.00	3921.56
MW - 8	11/21/02	3974.48	-	52.98	0.00	3921.50
MW - 8	02/05/03	3974.48	-	52.90	0.00	3921.58
MW - 8	05/07/03	3974.48	-	52.89	0.00	3921.59
MW - 8	08/18/03	3974.48	-	52.96	0.00	3921.52
MW - 8	12/01/03	3974.48	-	53.00	0.00	3921.48
MW - 8	02/05/04	3974.48	-	52.99	0.00	3921.49
MW - 8	05/05/04	3974.48	-	52.98	0.00	3921.50
MW - 8	09/01/04	3974.48	-	53.05	0.00	3921.43
MW - 8	12/15/04	3974.48	-	53.00	0.00	3921.48
MW - 8	03/22/05	3974.48	-	52.80	0.00	3921.68
MW - 8	06/22/05	3974.48	-	52.68	0.00	3921.80

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 8	09/14/05	PLUGGED & ABANDONED				
MW - 9	03/02/00	3975.06	53.07	54.26	1.19	3921.81
MW - 9	04/25/00	3975.06	53.11	54.34	1.23	3921.77
MW - 9	09/06/00	3975.06	53.04	55.02	1.98	3921.72
MW - 9	11/28/00	3975.06	53.13	54.90	1.77	3921.66
MW - 9	02/02/01	3975.06	53.14	54.19	1.05	3921.76
MW - 9	05/31/01	3975.06	53.08	54.81	1.73	3921.72
MW - 9	08/23/01	3975.06	52.88	55.30	2.42	3921.82
MW - 9	11/21/01	3975.06	53.15	54.20	1.05	3921.75
MW - 9	02/13/02	3975.06	52.86	55.73	2.87	3921.77
MW - 9	06/12/02	3975.06	52.82	55.67	2.85	3921.81
MW - 9	08/26/02	3975.06	52.83	55.70	2.87	3921.80
MW - 9	11/08/02	3975.06	52.90	55.81	2.91	3921.72
MW - 9	11/21/02	3975.06	52.90	55.77	2.87	3921.73
MW - 9	12/27/02	3975.06	53.13	54.68	1.55	3921.70
MW - 9	01/06/03	3975.06	53.07	54.97	1.90	3921.71
MW - 9	01/08/03	3975.06	53.04	55.02	1.98	3921.72
MW - 9	01/10/03	3975.06	53.03	55.09	2.06	3921.72
MW - 9	01/13/03	3975.06	53.03	55.09	2.06	3921.72
MW - 9	02/05/03	3975.06	52.96	55.30	2.34	3921.75
MW - 9	02/26/03	3975.06	52.96	55.52	2.56	3921.72
MW - 9	03/04/03	3975.06	52.96	55.56	2.60	3921.71
MW - 9	03/12/03	3975.06	52.94	55.46	2.52	3921.74
MW - 9	03/18/03	3975.06	53.02	57.71	4.69	3921.34
MW - 9	03/25/03	3975.06	53.37	53.40	0.03	3921.69
MW - 9	03/31/03	3975.06	53.36	53.39	0.03	3921.70
MW - 9	04/09/03	3975.06	53.31	53.72	0.41	3921.69
MW - 9	04/14/03	3975.06	53.28	53.40	0.12	3921.76
MW - 9	05/07/03	3975.06	53.07	54.49	1.42	3921.78
MW - 9	05/08/03	3975.06	53.04	54.59	1.55	3921.79
MW - 9	05/13/03	3975.06	53.18	54.84	1.66	3921.63
MW - 9	05/21/03	3975.06	53.08	54.97	1.89	3921.70
MW - 9	05/27/03	3975.06	53.07	55.10	2.03	3921.69
MW - 9	05/28/03	3975.06	53.11	55.35	2.24	3921.61
MW - 9	06/03/03	3975.06	53.34	54.20	0.86	3921.59
MW - 9	06/10/03	3975.06	53.40	53.46	0.06	3921.65
MW - 9	07/01/03	3975.06	53.48	53.97	0.49	3921.51
MW - 9	07/08/03	3975.06	53.38	53.94	0.56	3921.60
MW - 9	07/29/03	3975.06	53.12	54.49	1.37	3921.73
MW - 9	08/04/03	3975.06	53.32	54.96	1.64	3921.49
MW - 9	08/18/03	3975.06	53.31	54.09	0.78	3921.63
MW - 9	08/25/03	3975.06	53.29	55.42	2.13	3921.45
MW - 9	10/01/03	3975.06	53.18	53.41	0.23	3921.85

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	10/06/03	3975.06	53.30	53.86	0.56	3921.68
MW - 9	10/08/03	3975.06	53.60	54.33	0.73	3921.35
MW - 9	10/15/03	3975.06	53.64	54.02	0.38	3921.36
MW - 9	11/12/03	3975.06	53.61	54.98	1.37	3921.24
MW - 9	11/19/03	3975.06	53.51	55.20	1.69	3921.30
MW - 9	12/01/03	3975.06	53.54	55.31	1.77	3921.25
MW - 9	12/10/03	3975.06	53.21	54.93	1.72	3921.59
MW - 9	02/05/04	3975.06	53.60	55.27	1.67	3921.21
MW - 9	02/17/04	3975.06	53.33	54.62	1.29	3921.54
MW - 9	02/25/04	3975.06	53.62	55.29	1.67	3921.19
MW - 9	03/09/04	3975.06	53.41	55.55	2.14	3921.33
MW - 9	03/16/04	3975.06	53.28	55.11	1.83	3921.51
MW - 9	03/22/04	3975.06	53.41	53.89	0.48	3921.58
MW - 9	04/07/04	3975.06	53.73	53.81	0.08	3921.32
MW - 9	04/12/04	3975.06	53.55	53.96	0.41	3921.45
MW - 9	04/19/04	3975.06	53.69	53.86	0.17	3921.34
MW - 9	05/05/04	3975.06	53.50	54.22	0.72	3921.45
MW - 9	05/11/04	3975.06	53.60	54.98	1.38	3921.25
MW - 9	06/07/04	3975.06	53.10	54.64	1.54	3921.73
MW - 9	06/15/04	3975.06	53.11	54.69	1.58	3921.71
MW - 9	06/20/04	3975.06	53.11	54.69	1.58	3921.71
MW - 9	06/21/04	3975.06	53.08	54.57	1.49	3921.76
MW - 9	06/28/04	3975.06	53.08	54.86	1.78	3921.71
MW - 9	07/08/04	3975.06	53.09	54.79	1.70	3921.72
MW - 9	07/12/04	3975.06	53.10	54.81	1.71	3921.70
MW - 9	08/12/04	3975.06	53.26	54.66	1.40	3921.59
MW - 9	08/17/04	3975.06	53.27	54.85	1.58	3921.55
MW - 9	08/26/04	3975.06	53.38	54.30	0.92	3921.54
MW - 9	09/01/04	3975.06	53.44	54.08	0.64	3921.52
MW - 9	09/03/04	3975.06	53.44	53.99	0.55	3921.54
MW - 9	09/08/04	3975.06	53.38	54.40	1.02	3921.53
MW - 9	09/14/04	3975.06	53.44	54.13	0.69	3921.52
MW - 9	09/22/04	3975.06	53.51	54.20	0.69	3921.45
MW - 9	10/01/04	3975.06	53.36	54.50	1.14	3921.53
MW - 9	10/08/04	3975.06	53.53	54.11	0.58	3921.44
MW - 9	10/15/04	3975.06	53.35	54.36	1.01	3921.56
MW - 9	10/22/04	3975.06	53.50	54.19	0.69	3921.46
MW - 9	11/12/04	3975.06	53.62	54.40	0.78	3921.32
MW - 9	11/26/04	3975.06	53.45	54.50	1.05	3921.45
MW - 9	12/02/04	3975.06	53.43	54.39	0.96	3921.49
MW - 9	12/06/04	3975.06	53.42	54.10	0.68	3921.54
MW - 9	12/13/04	3975.06	53.43	54.00	0.57	3921.54
MW - 9	12/15/04	3975.06	53.43	54.00	0.57	3921.54
MW - 9	12/27/04	3975.06	53.40	54.30	0.90	3921.53

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	01/10/05	3975.06	53.34	53.81	0.47	3921.65
MW - 9	01/18/05	3975.06	53.30	53.90	0.60	3921.67
MW - 9	01/25/05	3975.06	53.25	54.05	0.80	3921.69
MW - 9	01/27/05	3975.06	53.33	53.51	0.18	3921.70
MW - 9	02/01/05	3975.06	53.22	53.66	0.44	3921.77
MW - 9	02/07/05	3975.06	53.19	53.60	0.41	3921.81
MW - 9	02/11/05	3975.06	53.20	53.59	0.39	3921.80
MW - 9	02/15/05	3975.06	53.05	53.55	0.50	3921.94
MW - 9	02/22/05	3975.06	53.20	53.59	0.39	3921.80
MW - 9	02/24/05	3975.06	53.05	53.70	0.65	3921.91
MW - 9	03/03/05	3975.06	53.13	53.78	0.65	3921.83
MW - 9	03/09/05	3975.06	53.13	53.78	0.65	3921.83
MW - 9	03/22/05	3975.06	52.90	53.85	0.95	3922.02
MW - 9	03/24/05	3975.06	52.90	53.85	0.95	3922.02
MW - 9	03/31/05	3975.06	52.92	53.76	0.84	3922.01
MW - 9	06/22/05	3975.06	53.82	54.18	0.36	3921.19
MW - 9	07/21/05	3975.06	52.94	53.55	0.61	3922.03
MW - 9	08/03/05	3975.06	52.87	53.86	0.99	3922.04
MW - 9	08/12/05	3975.06	52.92	53.63	0.71	3922.03
MW - 9	08/15/05	3975.06	52.92	53.48	0.56	3922.06
MW - 9	08/22/05	3975.06	52.87	53.64	0.77	3922.07
MW - 9	08/30/05	3975.06	52.80	53.97	1.17	3922.08
MW - 9	09/07/05	3975.06	52.83	53.74	0.91	3922.09
MW - 9	09/14/05	3975.06	52.85	53.40	0.55	3922.13
MW - 9	09/20/05	3975.06	52.80	53.90	1.10	3922.10
MW - 9	09/21/05	3975.06	52.86	53.62	0.76	3922.09
MW - 9	09/28/05	3975.06	52.78	54.02	1.24	3922.09
MW - 9	10/06/05	3975.06	52.83	53.70	0.87	3922.10
MW - 9	10/13/05	3975.06	52.86	53.64	0.78	3922.08
MW - 9	10/20/05	3975.06	52.81	53.50	0.69	3922.15
MW - 9	10/26/05	3975.06	52.87	53.60	0.73	3922.08
MW - 9	11/03/05	3975.06	52.77	53.88	1.11	3922.12
MW - 9	11/10/05	3975.06	52.76	53.83	1.07	3922.14
MW - 9	11/16/05	3975.06	52.84	53.59	0.75	3922.11
MW - 9	11/23/05	3975.06	52.90	53.51	0.61	3922.07
MW - 9	11/28/05	3975.06	52.75	53.80	1.05	3922.15
MW - 9	12/05/05	3975.06	52.85	53.48	0.63	3922.12
MW - 9	12/12/05	3975.06	52.84	53.50	0.66	3922.12
MW - 9	12/16/05	3975.06	53.00	53.41	0.41	3922.00
MW - 9	12/19/05	3975.06	52.89	53.51	0.62	3922.08
MW - 9	12/29/05	3975.06	52.73	53.55	0.82	3922.21
MW - 9	01/04/06	3975.06	52.76	53.51	0.75	3922.19
MW - 9	01/10/06	3975.06	52.68	53.51	0.83	3922.26
MW - 9	01/17/06	3975.06	52.77	53.85	1.08	3922.13

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	01/26/06	3975.06	52.75	53.80	1.05	3922.15
MW - 9	01/31/06	3975.06	52.79	53.75	0.96	3922.13
MW - 9	02/07/06	3975.06	52.79	53.70	0.91	3922.13
MW - 9	02/09/06	3975.06	52.90	53.10	0.20	3922.13
MW - 9	02/13/06	3975.06	52.76	53.58	0.82	3922.18
MW - 9	02/22/06	3975.06	52.79	53.60	0.81	3922.15
MW - 9	02/28/06	3975.06	52.77	53.60	0.83	3922.17
MW - 9	03/07/06	3975.06	52.76	53.58	0.82	3922.18
MW - 9	03/15/06	3975.06	52.75	53.60	0.85	3922.18
MW - 9	03/20/06	3975.06	52.75	53.52	0.77	3922.19
MW - 9	03/22/06	3975.06	52.96	52.98	0.02	3922.10
MW - 9	03/29/06	3975.06	52.80	53.21	0.41	3922.20
MW - 9	04/11/06	3975.06	52.74	53.42	0.68	3922.22
MW - 9	04/18/06	3975.06	52.75	53.41	0.66	3922.21
MW - 9	04/25/06	3975.06	52.83	53.07	0.24	3922.19
MW - 9	05/02/06	3975.06	52.74	53.34	0.60	3922.23
MW - 9	05/09/06	3975.06	52.73	53.34	0.61	3922.24
MW - 9	05/16/06	3975.06	52.74	53.43	0.69	3922.22
MW - 9	05/23/06	3975.06	52.71	53.48	0.77	3922.23
MW - 9	05/31/06	3975.06	52.71	53.54	0.83	3922.23
MW - 9	06/06/06	3975.06	52.73	53.88	1.15	3922.16
MW - 9	06/13/06	3975.06	52.72	53.38	0.66	3922.24
MW - 9	06/20/06	3975.06	52.72	53.38	0.66	3922.24
MW - 9	06/21/06	3975.06	52.79	53.07	0.28	3922.23
MW - 9	07/06/06	3975.06	52.69	53.52	0.83	3922.25
MW - 9	07/12/06	3975.06	52.66	53.66	1.00	3922.25
MW - 9	07/20/06	3975.06	52.63	53.61	0.98	3922.28
MW - 9	07/25/06	3975.06	52.75	53.70	0.95	3922.17
MW - 9	08/01/06	3975.06	52.70	53.49	0.79	3922.24
MW - 9	08/16/06	3975.06	52.68	53.69	1.01	3922.23
MW - 9	08/23/06	3975.06	52.70	53.47	0.77	3922.24
MW - 9	08/28/06	3975.06	52.72	53.36	0.64	3922.24
MW - 9	09/12/06	3975.06	52.67	53.65	0.98	3922.24
MW - 9	09/22/06	3975.06	52.65	53.60	0.95	3922.27
MW - 9	09/27/06	3975.06	52.70	53.38	0.68	3922.26
MW - 9	10/06/06	3975.06	52.64	53.64	1.00	3922.27
MW - 9	10/10/06	3975.06	52.71	53.30	0.59	3922.26
MW - 9	10/16/06	3975.06	52.74	53.39	0.65	3922.22
MW - 9	10/26/06	3975.06	52.68	53.49	0.81	3922.26
MW - 9	11/03/06	3975.06	52.69	53.39	0.70	3922.27
MW - 9	11/09/06	3975.06	52.70	53.35	0.65	3922.26
MW - 9	11/16/06	3975.06	52.70	53.35	0.65	3922.26
MW - 9	11/22/06	3975.06	52.71	53.29	0.58	3922.26
MW - 9	12/04/06	3975.06	52.66	53.45	0.79	3922.28

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	12/08/06	3975.06	52.65	53.55	0.90	3922.28
MW - 9	12/15/06	3975.06	52.67	53.32	0.65	3922.29
MW - 9	01/05/07	3975.06	52.61	53.62	1.01	3922.30
MW - 9	01/12/07	3975.06	52.66	53.37	0.71	3922.29
MW - 9	01/18/07	3975.06	52.68	53.30	0.62	3922.29
MW - 9	01/24/07	3975.06	52.69	53.28	0.59	3922.28
MW - 9	01/29/07	3975.06	52.67	53.20	0.53	3922.31
MW - 9	02/09/07	3975.06	52.63	53.36	0.73	3922.32
MW - 9	02/16/07	3975.06	52.65	53.34	0.69	3922.31
MW - 9	02/23/07	3975.06	52.63	53.29	0.66	3922.33
MW - 9	03/02/07	3975.06	52.62	53.45	0.83	3922.32
MW - 9	03/14/07	3975.06	52.66	53.09	0.43	3922.34
MW - 9	03/26/07	3975.06	52.63	53.26	0.63	3922.34
MW - 9	04/03/07	3975.06	52.60	53.38	0.78	3922.34
MW - 9	04/09/07	3975.06	52.61	53.27	0.66	3922.35
MW - 9	04/26/07	3975.06	52.58	53.44	0.86	3922.35
MW - 9	04/30/07	3975.06	52.22	53.26	1.04	3922.68
MW - 9	05/11/07	3975.06	52.59	53.65	1.06	3922.31
MW - 9	05/16/07	3975.06	52.64	53.11	0.47	3922.35
MW - 9	05/22/07	3975.06	52.64	53.14	0.50	3922.35
MW - 9	05/29/07	3975.06	52.61	53.16	0.55	3922.37
MW - 9	06/01/07	3975.06	52.59	53.23	0.64	3922.37
MW - 9	06/08/07	3975.06	52.61	53.20	0.59	3922.36
MW - 9	06/11/07	3975.06	52.65	53.01	0.36	3922.36
MW - 9	06/20/07	3975.06	52.60	53.23	0.63	3922.37
MW - 9	07/10/07	3975.06	52.56	53.35	0.79	3922.38
MW - 9	07/20/07	3975.06	52.56	53.33	0.77	3922.38
MW - 9	07/25/07	3975.06	52.69	53.16	0.47	3922.30
MW - 9	08/01/07	3975.06	52.58	53.14	0.56	3922.40
MW - 9	08/10/07	3975.06	52.29	53.16	0.87	3922.64
MW - 9	08/15/07	3975.06	52.60	53.05	0.45	3922.39
MW - 9	08/30/07	3975.06	52.56	53.26	0.70	3922.40
MW - 9	08/31/07	3975.06	52.56	53.26	0.70	3922.40
MW - 9	09/10/07	3975.06	52.53	53.34	0.81	3922.41
MW - 9	09/19/07	3975.06	52.53	53.30	0.77	3922.41
MW - 9	09/27/07	3975.06	52.55	53.15	0.60	3922.42
MW - 9	10/01/07	3975.06	52.58	52.99	0.41	3922.42
MW - 9	10/19/07	3975.06	52.50	53.35	0.85	3922.43
MW - 9	10/26/07	3975.06	52.53	53.15	0.62	3922.44
MW - 9	11/12/07	3975.06	52.73	53.16	0.43	3922.27
MW - 9	11/16/07	3975.06	52.62	52.83	0.21	3922.41
MW - 9	11/29/07	3975.06	52.66	53.01	0.35	3922.35
MW - 9	12/13/07	3975.06	52.51	53.20	0.69	3922.45
MW - 9	01/10/08	3975.06	52.49	53.18	0.69	3922.47

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	01/17/08	3975.06	52.50	53.13	0.63	3922.47
MW - 9	01/22/08	3975.06	52.49	53.12	0.63	3922.48
MW - 9	2/6/2008 #1	3975.06	52.53	52.97	0.44	3922.46
MW - 9	02/06/08 #2	3975.06	52.50	52.66	0.16	3922.54
MW - 9	2/12/08 #1	3975.06	52.54	52.90	0.36	3922.47
MW - 9	2/12/08 #2	3975.06	52.60	52.63	0.03	3922.46
MW - 9	2/20/08 #1	3975.06	52.52	52.93	0.41	3922.48
MW - 9	2/20/08 #2	3975.06	52.58	52.68	0.10	3922.47
MW - 9	2/27/08 #1	3975.06	52.52	52.91	0.39	3922.48
MW - 9	2/27/08 #2	3975.06	52.57	52.66	0.09	3922.48
MW - 9	03/07/08	3975.06	52.52	53.00	0.48	3922.47
MW - 9	3/12/08 #1	3975.06	52.52	53.00	0.48	3922.47
MW - 9	3/12/08 #2	3975.06	52.56	52.66	0.10	3922.49
MW - 9	3/20/08 #1	3975.06	52.50	52.92	0.42	3922.50
MW - 9	3/20/08#2	3975.06	52.54	52.70	0.16	3922.50
MW - 9	3/23/08 #1	3975.06	52.49	52.89	0.40	3922.51
MW - 9	3/23/08 #2	3975.06	52.55	52.63	0.08	3922.50
MW - 9	4/2/08 #1	3975.06	52.51	52.86	0.35	3922.50
MW - 9	4/2/08 #2	3975.06	52.54	52.68	0.14	3922.50
MW - 9	4/9/08 #1	3975.06	52.48	52.87	0.39	3922.52
MW - 9	4/9/08 #2	3975.06	52.53	52.72	0.19	3922.50
MW - 9	04/16/08	3975.06	52.48	52.89	0.41	3922.52
MW - 9	04/23/08	3975.06	52.49	52.86	0.37	3922.51
MW - 9	04/30/08	3975.06	52.47	52.90	0.43	3922.53
MW - 9	05/29/08	3975.06	52.48	52.85	0.37	3922.52
MW - 9	06/02/08	3975.06	52.48	52.77	0.29	3922.54
MW - 9	06/03/08	3975.06	52.48	52.77	0.29	3922.54
MW - 9	06/11/08	3975.06	52.47	52.87	0.40	3922.53
MW - 9	06/18/08	3975.06	52.47	52.89	0.42	3922.53
MW - 9	06/23/08	3975.06	52.49	52.78	0.29	3922.53
MW - 9	07/01/08	3975.06	52.48	52.86	0.38	3922.52
MW - 9	07/09/08	3975.06	52.59	52.86	0.27	3922.43
MW - 9	07/15/08	3975.06	52.48	52.80	0.32	3922.53
MW - 9	07/22/08	3975.06	52.47	52.85	0.38	3922.53
MW - 9	08/02/08	3975.06	52.46	52.90	0.44	3922.53
MW - 9	08/13/08	3975.06	52.45	52.88	0.43	3922.55
MW - 9	09/03/08	3975.06	52.42	52.98	0.56	3922.56
MW - 9	09/11/08	3975.06	52.46	52.85	0.39	3922.54
MW - 9	09/19/08	3975.06	52.44	52.82	0.38	3922.56
MW - 9	09/26/08	3975.06	52.46	52.81	0.35	3922.55
MW - 9	10/10/08	3975.06	52.44	52.81	0.37	3922.56
MW - 9	10/17/08	3975.06	52.47	52.78	0.31	3922.54
MW - 9	10/21/08	3975.06	52.46	52.70	0.24	3922.56
MW - 9	10/30/08	3975.06	52.45	52.78	0.33	3922.56

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	11/04/08	3975.06	52.46	52.75	0.29	3922.56
MW - 9	11/18/08	3975.06	52.46	52.84	0.38	3922.54
MW - 9	11/25/08	3975.06	52.46	52.76	0.30	3922.56
MW - 9	12/10/08	3975.06	52.42	52.84	0.42	3922.58
MW - 9	12/18/08	3975.06	52.43	52.80	0.37	3922.57
MW - 9	01/06/09	3975.06	52.43	52.89	0.46	3922.56
MW - 9	01/14/09	3975.06	52.45	52.89	0.44	3922.54
MW - 9	01/21/09	3975.06	47.11	47.60	0.49	3927.88
MW - 9	01/22/09	3975.06	52.42	52.75	0.33	3922.59
MW - 9	01/30/09	3975.06	52.43	52.76	0.33	3922.58
MW - 9	02/03/09	3975.06	52.44	52.69	0.25	3922.58
MW - 9	02/12/09	3975.06	52.43	52.79	0.36	3922.58
MW - 9	02/19/09	3975.06	52.44	52.82	0.38	3922.56
MW - 9	03/04/09	3975.06	52.49	52.89	0.40	3922.51
MW - 9	03/06/09	3975.06	52.40	52.84	0.44	3922.59
MW - 9	03/11/09	3975.06	52.44	52.78	0.34	3922.57
MW - 9	03/16/09	3975.06	52.53	52.92	0.39	3922.47
MW - 9	03/19/09	3975.06	52.43	52.74	0.31	3922.58
MW - 9	03/24/09	3975.06	52.39	52.74	0.35	3922.62
MW - 9	04/03/09	3975.06	52.73	52.82	0.09	3922.32
MW - 9	04/15/09	3975.06	52.40	52.75	0.35	3922.61
MW - 9	04/17/09	3975.06	52.43	52.61	0.18	3922.60
MW - 9	04/22/09	3975.06	52.38	52.81	0.43	3922.62
MW - 9	04/29/09	3975.06	52.39	52.74	0.35	3922.62
MW - 9	05/20/09	3975.06	52.39	52.76	0.37	3922.61
MW - 9	05/20/09	3975.06	52.39	52.76	0.37	3922.61
MW - 9	06/09/09	3975.06	52.38	52.78	0.40	3922.62
MW - 9	06/17/09	3975.06	52.40	52.22	-0.18	3922.69
MW - 9	06/23/09	3975.06	52.36	52.83	0.47	3922.63
MW - 9	07/01/09	3975.06	52.39	52.25	-0.14	3922.69
MW - 9	07/08/09	3975.06	52.40	52.68	0.28	3922.62
MW - 9	07/15/09	3975.06	52.38	52.66	0.28	3922.64
MW - 9	07/17/09	3975.06	52.41	52.63	0.22	3922.62
MW - 9	07/23/09	3975.06	52.41	52.66	0.25	3922.61
MW - 9	07/24/09	3975.06	52.46	52.56	0.10	3922.59
MW - 9	07/30/09	3975.06	52.41	52.65	0.24	3922.61
MW - 9	08/04/09	3975.06	52.04	52.62	0.58	3922.93
MW - 9	08/12/09	3975.06	52.40	52.69	0.29	3922.62
MW - 9	08/20/09	3975.06	52.38	52.74	0.36	3922.63
MW - 9	08/26/09	3975.06	52.31	52.83	0.52	3922.67
MW - 9	09/02/09	3975.06	52.40	52.69	0.29	3922.62
MW - 9	09/09/09	3975.06	52.39	52.72	0.33	3922.62
MW - 9	09/14/09	3975.06	52.40	52.65	0.25	3922.62
MW - 9	09/21/09	3975.06	52.39	52.69	0.30	3922.63

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	10/01/09	3975.06	52.41	52.72	0.31	3922.60
MW - 9	10/08/09	3975.06	52.43	52.76	0.33	3922.58
MW - 9	10/14/09	3975.06	52.39	52.68	0.29	3922.63
MW - 9	10/21/09	3975.06	52.37	52.73	0.36	3922.64
MW - 9	10/28/09	3975.06	52.38	52.67	0.29	3922.64
MW - 9	11/04/09	3975.06	52.39	52.64	0.25	3922.63
MW - 9	11/11/09	3975.06	52.38	52.63	0.25	3922.64
MW - 9	11/18/09	3975.06	52.38	52.65	0.27	3922.64
MW - 9	11/25/09	3975.06	52.39	52.64	0.25	3922.63
MW - 9	12/02/09	3975.06	52.39	52.68	0.29	3922.63
MW - 9	12/10/09	3975.06	52.39	52.65	0.26	3922.63
MW - 9	12/17/09	3975.06	52.45	52.63	0.18	3922.58
MW - 9	12/21/09	3975.06	52.41	52.65	0.24	3922.61
MW - 9	12/30/09	3975.06	52.45	52.73	0.28	3922.57
MW - 9	01/07/10	3975.06	52.39	52.61	0.22	3922.64
MW - 9	01/18/10	3975.06	52.36	52.69	0.33	3922.65
MW - 9	02/02/10	3975.06	52.36	52.70	0.34	3922.65
MW - 9	02/11/10	3975.06	52.35	52.62	0.27	3922.67
MW - 9	02/18/10	3975.06	52.34	52.66	0.32	3922.67
MW - 9	02/25/10	3975.06	52.44	52.70	0.26	3922.58
MW - 9	03/02/10	3975.06	52.45	52.68	0.23	3922.58
MW - 9	03/04/10	3975.06	52.34	52.58	0.24	3922.68
MW - 9	03/10/10	3975.06	52.36	52.60	0.24	3922.66
MW - 9	03/12/10	3975.06	52.48	52.64	0.16	3922.56
MW - 9	03/15/10	3975.06	52.38	52.58	0.20	3922.65
MW - 9	03/18/10	3975.06	52.37	52.56	0.19	3922.66
MW - 9	03/22/10	3975.06	52.43	52.64	0.21	3922.60
MW - 9	03/24/10	3975.06	52.47	52.60	0.13	3922.57
MW - 9	03/30/10	3975.06	52.44	52.64	0.20	3922.59
MW - 9	04/07/10	3975.06	52.45	52.71	0.26	3922.57
MW - 9	04/12/10	3975.06	52.34	52.52	0.18	3922.69
MW - 9	04/16/10	3975.06	52.51	52.69	0.18	3922.52
MW - 9	04/20/10	3975.06	52.41	52.53	0.12	3922.63
MW - 9	04/27/10	3975.06	52.41	52.50	0.09	3922.64
MW - 9	04/30/10	3975.06	52.39	52.49	0.10	3922.66
MW - 9	05/12/10	3975.06	52.27	52.33	0.06	3922.78
MW - 9	05/14/10	3975.06	52.41	52.51	0.10	3922.64
MW - 9	05/17/10	3975.06	52.38	52.42	0.04	3922.67
MW - 9	05/20/10	3975.06	52.29	52.32	0.03	3922.77
MW - 9	05/25/10	3975.06	52.27	52.34	0.07	3922.78
MW - 9	06/01/10	3975.06	52.28	52.33	0.05	3922.77
MW - 9	06/09/10	3975.06	52.30	52.34	0.04	3922.75
MW - 9	06/16/10	3975.06	52.40	52.50	0.10	3922.65
MW - 9	06/28/10	3975.06	52.39	52.49	0.10	3922.66

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	07/09/10	3975.06	52.42	52.50	0.08	3922.63
MW - 9	07/14/10	3975.06	52.34	52.50	0.16	3922.70
MW - 9	07/23/10	3975.06	52.35	52.51	0.16	3922.69
MW - 9	07/29/10	3975.06	52.35	52.52	0.17	3922.68
MW - 9	08/05/10	3975.06	52.35	52.60	0.25	3922.67
MW - 9	08/12/10	3975.06	52.35	52.54	0.19	3922.68
MW - 9	08/16/10	3975.06	52.35	52.54	0.19	3922.68
MW - 9	08/18/10	3975.06	52.35	52.54	0.19	3922.68
MW - 9	08/25/10	3975.06	52.41	52.63	0.22	3922.62
MW - 9	09/02/10	3975.06	52.35	52.51	0.16	3922.69
MW - 9	09/08/10	3975.06	52.37	52.52	0.15	3922.67
MW - 9	09/30/10	3975.06	52.35	52.53	0.18	3922.68
MW - 9	10/07/10	3975.06	52.36	52.52	0.16	3922.68
MW - 9	10/14/10	3975.06	52.37	52.54	0.17	3922.66
MW - 9	10/21/10	3975.06	52.39	52.52	0.13	3922.65
MW - 9	11/04/10	3975.06	52.35	52.53	0.18	3922.68
MW - 9	11/10/10	3975.06	52.41	52.49	0.08	3922.64
MW - 9	12/01/10	3975.06	52.31	52.56	0.25	3922.71
MW - 9	12/08/10	3975.06	52.39	52.54	0.15	3922.65
MW - 9	01/26/11	3975.06	52.31	52.64	0.33	3922.70
MW - 9	02/28/11	3975.06	52.40	52.53	0.13	3922.64
MW - 9	03/04/11	3975.06	52.28	52.54	0.26	3922.74
MW - 9	03/09/11	3975.06	52.32	52.54	0.22	3922.71
MW - 9	04/28/11	3975.06	52.27	52.51	0.24	3922.75
MW - 9	05/04/11	3975.06	52.21	52.51	0.30	3922.81
MW - 9	05/11/11	3975.06	52.34	52.54	0.20	3922.69
MW - 9	05/12/11	3975.06	52.25	52.48	0.23	3922.78
MW - 9	05/18/11	3975.06	52.23	52.41	0.18	3922.80
MW - 9	05/23/11	3975.06	52.20	52.48	0.28	3922.82
MW - 9	06/08/11	3975.06	52.41	52.73	0.32	3922.60
MW - 9	06/16/11	3975.06	52.32	52.62	0.30	3922.70
MW - 9	06/22/11	3975.06	52.21	52.54	0.33	3922.80
MW - 9	06/30/11	3975.06	52.39	52.65	0.26	3922.63
MW - 9	07/06/11	3975.06	52.34	52.52	0.18	3922.69
MW - 9	07/13/11	3975.06	52.36	52.59	0.23	3922.67
MW - 9	07/15/11	3975.06	52.35	52.58	0.23	3922.68
MW - 9	07/19/11	3975.06	52.34	52.54	0.20	3922.69
MW - 9	07/21/11	3975.06	52.33	52.43	0.10	3922.72
MW - 9	07/26/11	3975.06	52.35	52.49	0.14	3922.69
MW - 9	07/28/11	3975.06	52.30	52.46	0.16	3922.74
MW - 9	08/02/11	3975.06	52.34	52.65	0.31	3922.67
MW - 9	08/09/11	3975.06	52.30	52.47	0.17	3922.73
MW - 9	08/12/11	3975.06	52.36	52.52	0.16	3922.68
MW - 9	08/15/11	3975.06	52.33	52.52	0.19	3922.70

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	08/16/11	3975.06	52.37	52.54	0.17	3922.66
MW - 9	08/19/11	3975.06	52.37	52.48	0.11	3922.67
MW - 9	08/23/11	3975.06	52.33	52.45	0.12	3922.71
MW - 9	08/26/11	3975.06	52.35	52.56	0.21	3922.68
MW - 9	08/30/11	3975.06	52.21	52.47	0.26	3922.81
MW - 9	09/01/11	3975.06	52.40	52.47	0.07	3922.65
MW - 9	09/08/11	3975.06	-	52.45	0.00	3922.61
MW - 9	09/13/11	3975.06	-	52.36	0.00	3922.70
MW - 9	09/15/11	3975.06	-	52.53	0.00	3922.53
MW - 9	09/22/11	3975.06	-	52.37	0.00	3922.69
MW - 9	10/06/11	3975.06	-	52.46	0.00	3922.60
MW - 9	10/11/11	3975.06	-	52.46	0.00	3922.60
MW - 9	10/13/11	3975.06	-	52.48	0.00	3922.58
MW - 9	10/26/11	3975.06	-	52.51	0.00	3922.55
MW - 9	11/22/11	3975.06	52.51	52.55	0.04	3922.54
MW - 9	12/02/11	3975.06	-	52.49	0.00	3922.57
MW - 9	12/29/11	3975.06	-	52.45	0.00	3922.61
MW - 9	01/26/12	3975.06	52.42	52.45	0.03	3922.64
MW - 9	01/31/12	3975.06	-	52.35	0.00	3922.71
MW - 9	02/15/12	3975.06	52.40	52.42	0.02	3922.66
MW - 9	02/28/12	3975.06	52.38	52.39	0.01	3922.68
MW - 9	03/20/12	3975.06	52.35	52.47	0.12	3922.69
MW - 9	03/27/12	3975.06	52.35	52.51	0.16	3922.69
MW - 9	04/10/12	3975.06	52.38	52.57	0.19	3922.65
MW - 9	04/19/12	3975.06	52.34	52.52	0.18	3922.69
MW - 9	04/26/12	3975.06	52.37	52.51	0.14	3922.67
MW - 9	05/08/12	3975.06	52.37	52.51	0.14	3922.67
MW - 9	05/15/12	3975.06	52.38	52.61	0.23	3922.65
MW - 9	05/17/12	3975.06	52.37	52.60	0.23	3922.66
MW - 9	06/05/12	3975.06	52.36	52.61	0.25	3922.66
MW - 9	06/21/12	3975.06	52.36	52.72	0.36	3922.65
MW - 9	06/28/12	3975.06	52.34	52.78	0.44	3922.65
MW - 9	07/17/12	3975.06	52.43	52.76	0.33	3922.58
MW - 9	08/01/12	3975.06	52.49	52.72	0.23	3922.54
MW - 9	10/02/12	3975.06	52.52	52.96	0.44	3922.47
MW - 9	10/09/12	3975.06	52.38	52.60	0.22	3922.65
MW - 9	10/16/12	3975.06	52.52	52.83	0.31	3922.49
MW - 9	10/25/12	3975.06	52.51	52.93	0.42	3922.49
MW - 9	10/30/12	3975.06	52.51	52.92	0.41	3922.49
MW - 9	11/29/12	3975.06	52.44	52.95	0.51	3922.54
MW - 9	12/14/12	3975.06	52.48	52.92	0.44	3922.51
MW - 9	02/11/13	3975.06	52.46	52.98	0.52	3922.52
MW - 9	04/11/13	3975.06	52.52	52.85	0.33	3922.49
MW - 9	04/15/13	3975.06	52.39	52.66	0.27	3922.63

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	04/22/13	3975.06	52.51	52.79	0.28	3922.51
MW - 9	05/06/13	3975.06	52.53	52.90	0.37	3922.47
MW - 9	05/09/13	3975.06	52.53	52.93	0.40	3922.47
MW - 9	05/20/13	3975.06	52.53	52.99	0.46	3922.46
MW - 9	05/24/13	3975.06	52.61	53.07	0.46	3922.38
MW - 9	05/29/13	3975.06	52.47	52.54	0.07	3922.58
MW - 9	05/31/13	3975.06	52.49	52.75	0.26	3922.53
MW - 9	06/07/13	3975.06	52.45	52.73	0.28	3922.57
MW - 9	06/12/13	3975.06	52.43	52.69	0.26	3922.59
MW - 9	06/14/13	3975.06	52.44	52.70	0.26	3922.58
MW - 9	06/19/13	3975.06	52.43	52.58	0.15	3922.61
MW - 9	06/21/13	3975.06	52.47	52.61	0.14	3922.57
MW - 9	06/25/13	3975.06	52.43	52.63	0.20	3922.60
MW - 9	06/26/13	3975.06	52.57	52.75	0.18	3922.46
MW - 9	07/03/13	3975.06	52.62	52.92	0.30	3922.40
MW - 9	07/09/13	3975.06	52.69	53.05	0.36	3922.32
MW - 9	07/11/13	3975.06	52.52	52.84	0.32	3922.49
MW - 9	07/24/13	3975.06	52.47	52.83	0.36	3922.54
MW - 9	07/26/13	3975.06	52.45	52.78	0.33	3922.56
MW - 9	07/31/13	3975.06	52.45	52.81	0.36	3922.56
MW - 9	08/02/13	3975.06	52.48	52.85	0.37	3922.52
MW - 9	08/06/13	3975.06	52.49	52.87	0.38	3922.51
MW - 9	08/14/13	3975.06	52.45	52.86	0.41	3922.55
MW - 9	08/21/13	3975.06	52.50	52.94	0.44	3922.49
MW - 9	08/26/13	3975.06	52.53	52.95	0.42	3922.47
MW - 9	09/06/13	3975.06	52.60	53.03	0.43	3922.40
MW - 9	08/30/13	3975.06	52.50	52.87	0.37	3922.50
MW - 9	09/13/13	3975.06	52.62	52.91	0.29	3922.40
MW - 9	09/27/13	3975.06	52.58	53.00	0.42	3922.42
MW - 9	09/30/13	3975.06	52.55	52.95	0.40	3922.45
MW - 9	10/02/13	3975.06	52.53	52.93	0.40	3922.47
MW - 9	10/03/13	3975.06	52.52	52.92	0.40	3922.48
MW - 9	10/11/13	3975.06	52.62	52.98	0.36	3922.39
MW - 9	10/17/13	3975.06	52.64	52.97	0.33	3922.37
MW - 9	10/22/13	3975.06	52.65	52.95	0.30	3922.37
MW - 9	10/24/13	3975.06	52.70	52.91	0.21	3922.33
MW - 9	10/30/13	3975.06	52.66	52.94	0.28	3922.36
MW - 9	11/01/13	3975.06	52.64	52.87	0.23	3922.39
MW - 9	11/04/13	3975.06	52.66	52.98	0.32	3922.35
MW - 9	11/08/13	3975.06	52.65	53.00	0.35	3922.36
MW - 9	11/13/13	3975.06	52.63	53.01	0.38	3922.37
MW - 9	11/15/13	3975.06	52.63	53.03	0.40	3922.37
MW - 9	11/18/13	3975.06	52.65	53.15	0.50	3922.34
MW - 9	12/12/13	3975.06	52.65	53.23	0.58	3922.32

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 9	12/16/13	3975.06	52.64	53.25	0.61	3922.33
MW - 9	12/18/13	3975.06	52.66	53.21	0.55	3922.32
MW - 9	12/23/13	3975.06	52.60	53.05	0.45	3922.39
MW - 9	12/30/13	3975.06	52.60	52.95	0.35	3922.41
MW - 10	03/02/00	3975.02	53.44	53.99	0.55	3921.50
MW - 10	04/25/00	3975.02	-	53.18	0.00	3921.84
MW - 10	09/06/00	3975.02	-	53.22	0.00	3921.80
MW - 10	11/28/00	3975.02	-	53.23	0.00	3921.79
MW - 10	02/21/01	3975.02	-	53.15	0.00	3921.87
MW - 10	05/31/01	3975.02	-	53.08	0.00	3921.94
MW - 10	08/23/01	3975.02	-	53.10	0.00	3921.92
MW - 10	11/21/01	3975.02	-	53.13	0.00	3921.89
MW - 10	02/13/02	3975.02	-	53.16	0.00	3921.86
MW - 10	06/12/02	3975.02	-	53.14	0.00	3921.88
MW - 10	08/26/02	3975.02	-	53.14	0.00	3921.88
MW - 10	11/21/02	3975.02	-	53.20	0.00	3921.82
MW - 10	02/05/03	3975.02	-	53.90	0.00	3921.12
MW - 10	05/07/03	3975.02	-	53.14	0.00	3921.88
MW - 10	08/18/03	3975.02	-	53.19	0.00	3921.83
MW - 10	12/01/03	3975.02	-	53.23	0.00	3921.79
MW - 10	02/05/04	3975.02	-	53.23	0.00	3921.79
MW - 10	05/05/04	3975.02	-	53.20	0.00	3921.82
MW - 10	09/01/04	3975.02	-	53.25	0.00	3921.77
MW - 10	12/15/04	3975.02	-	53.20	0.00	3921.82
MW - 10	03/22/05	3975.02	-	53.00	0.00	3922.02
MW - 10	06/22/05	3975.02	-	52.91	0.00	3922.11
MW - 10	09/21/05	3975.02	-	52.84	0.00	3922.18
MW - 10	12/16/05	3975.02	-	52.76	0.00	3922.26
MW - 10	03/20/06	3975.02	-	52.71	0.00	3922.31
MW - 10	06/21/06	3975.02	-	52.71	0.00	3922.31
MW - 10	09/27/06	3975.02	-	52.64	0.00	3922.38
MW - 10	12/04/06	3975.02	-	52.64	0.00	3922.38
MW - 10	03/14/07	3975.02	-	52.57	0.00	3922.45
MW - 10	05/29/07	3975.02	-	52.54	0.00	3922.48
MW - 10	08/30/07	3975.02	-	52.53	0.00	3922.49
MW - 10	11/12/07	3975.02	-	52.43	0.00	3922.59
MW - 10	03/07/08	3975.02	-	52.41	0.00	3922.61
MW - 10	06/02/08	3975.02	-	52.34	0.00	3922.68
MW - 10	09/03/08	3975.02	-	52.38	0.00	3922.64
MW - 10	12/08/08	3975.02	-	52.33	0.00	3922.69
MW - 10	02/19/09	3975.02	-	52.31	0.00	3922.71
MW - 10	05/20/09	3975.02	-	52.28	0.00	3922.74
MW - 10	08/12/09	3975.02	-	52.27	0.00	3922.75

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 10	11/25/09	3975.02	-	52.29	0.00	3922.73
MW - 10	01/07/10	3975.02	-	52.25	0.00	3922.77
MW - 10	02/11/10	3975.02	-	52.24	0.00	3922.78
MW - 10	05/17/10	3975.02	-	52.41	0.00	3922.61
MW - 10	08/16/10	3975.02	-	52.41	0.00	3922.61
MW - 10	11/10/10	3975.02	-	52.42	0.00	3922.60
MW - 10	02/28/11	3975.02	-	52.42	0.00	3922.60
MW - 10	05/12/11	3975.02	-	52.11	0.00	3922.91
MW - 10	08/15/11	3975.02	-	52.13	0.00	3922.89
MW - 10	11/22/11	3975.02	-	52.20	0.00	3922.82
MW - 10	02/28/12	3975.02	-	52.22	0.00	3922.80
MW - 10	05/17/12	3975.02	-	52.25	0.00	3922.77
MW - 10	08/01/12	3975.02	-	52.36	0.00	3922.66
MW - 10	10/25/12	3975.02	-	52.41	0.00	3922.61
MW - 10	11/29/12	3975.02	-	52.33	0.00	3922.69
MW - 10	02/11/13	3975.02	-	52.36	0.00	3922.66
MW - 10	04/11/13	3975.02	-	52.34	0.00	3922.68
MW - 10	05/06/13	3975.02	-	52.44	0.00	3922.58
MW - 10	05/29/13	3975.02	-	52.41	0.00	3922.61
MW - 10	06/26/13	3975.02	-	52.36	0.00	3922.66
MW - 10	07/31/13	3975.02	-	52.29	0.00	3922.73
MW - 10	08/06/13	3975.02	-	52.33	0.00	3922.69
MW - 10	09/30/13	3975.02	-	52.40	0.00	3922.62
MW - 10	11/18/13	3975.02	-	52.56	0.00	3922.46
MW - 11	03/02/00	3975.30	-	53.84	0.00	3921.46
MW - 11	04/25/00	3975.30	-	53.91	0.00	3921.39
MW - 11	09/06/00	3975.30	-	53.95	0.00	3921.35
MW - 11	11/28/00	3975.30	-	53.96	0.00	3921.34
MW - 11	02/21/01	3975.30	-	53.79	0.00	3921.51
MW - 11	05/31/01	3975.30	-	53.77	0.00	3921.53
MW - 11	08/23/01	3975.30	-	53.83	0.00	3921.47
MW - 11	11/21/01	3975.30	-	53.87	0.00	3921.43
MW - 11	02/13/02	3975.30	-	52.85	0.00	3922.45
MW - 11	06/12/02	3975.30	-	53.87	0.00	3921.43
MW - 11	08/26/02	3975.30	-	53.89	0.00	3921.41
MW - 11	11/21/02	3975.30	-	53.93	0.00	3921.37
MW - 11	02/05/03	3975.30	-	53.90	0.00	3921.40
MW - 11	05/07/03	3975.30	-	53.86	0.00	3921.44
MW - 11	08/18/03	3975.30	-	53.93	0.00	3921.37
MW - 11	12/01/03	3975.30	-	53.96	0.00	3921.34
MW - 11	02/05/04	3975.30	-	53.97	0.00	3921.33
MW - 11	05/05/04	3975.30	-	53.93	0.00	3921.37
MW - 11	09/01/04	3975.30	-	54.00	0.00	3921.30

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 11	12/15/04	3975.30	-	53.95	0.00	3921.35
MW - 11	03/22/05	3975.30	-	53.75	0.00	3921.55
MW - 11	06/22/05	3975.30	-	53.64	0.00	3921.66
MW - 11	09/21/05	3975.30	-	53.56	0.00	3921.74
MW - 11	12/16/05	3975.30	-	53.60	0.00	3921.70
MW - 11	03/20/06	3975.30	-	53.45	0.00	3921.85
MW - 11	06/21/06	3975.30	-	53.43	0.00	3921.87
MW - 11	09/27/06	3975.30	-	53.42	0.00	3921.88
MW - 11	12/04/06	3975.30	-	53.37	0.00	3921.93
MW - 11	03/14/07	3975.30	-	53.33	0.00	3921.97
MW - 11	05/29/07	3975.30	-	53.29	0.00	3922.01
MW - 11	08/30/07	3975.30	-	53.27	0.00	3922.03
MW - 11	11/12/07	3975.30	-	53.23	0.00	3922.07
MW - 11	03/07/08	3975.30	-	53.17	0.00	3922.13
MW - 11	06/02/08	3975.30	-	53.12	0.00	3922.18
MW - 11	09/03/08	3975.30	-	53.12	0.00	3922.18
MW - 11	12/08/08	3975.30	-	53.10	0.00	3922.20
MW - 11	02/19/09	3975.30	-	53.08	0.00	3922.22
MW - 11	05/20/09	3975.30	-	53.04	0.00	3922.26
MW - 11	08/12/09	3975.30	-	53.03	0.00	3922.27
MW - 11	11/25/09	3975.30	-	53.03	0.00	3922.27
MW - 11	01/07/10	3975.30	-	53.02	0.00	3922.28
MW - 11	02/11/10	3975.30	-	52.99	0.00	3922.31
MW - 11	05/17/10	3975.30	-	53.16	0.00	3922.14
MW - 11	08/16/10	3975.30	-	53.15	0.00	3922.15
MW - 11	11/10/10	3975.30	-	53.17	0.00	3922.13
MW - 11	02/28/11	3975.30	-	53.15	0.00	3922.15
MW - 11	05/12/11	3975.30	-	52.96	0.00	3922.34
MW - 11	08/15/11	3975.30	-	53.10	0.00	3922.20
MW - 11	11/22/11	3975.30	-	53.05	0.00	3922.25
MW - 11	02/28/12	3975.30	-	53.01	0.00	3922.29
MW - 11	05/17/12	3975.30	-	53.00	0.00	3922.30
MW - 11	08/01/12	3975.30	-	53.12	0.00	3922.18
MW - 11	10/25/12	3975.30	-	53.15	0.00	3922.15
MW - 11	11/29/12	3975.30	-	53.23	0.00	3922.07
MW - 11	02/11/13	3975.30	-	53.16	0.00	3922.14
MW - 11	04/11/13	3975.30	-	53.39	0.00	3921.91
MW - 11	05/06/13	3975.30	-	53.19	0.00	3922.11
MW - 11	05/29/13	3975.30	-	53.34	0.00	3921.96
MW - 11	06/26/13	3975.30	-	53.36	0.00	3921.94
MW - 11	07/31/13	3975.30	-	53.29	0.00	3922.01
MW - 11	08/06/13	3975.30	-	53.26	0.00	3922.04
MW - 11	09/30/13	3975.30	-	53.35	0.00	3921.95
MW - 11	11/18/13	3975.30	-	53.32	0.00	3921.98

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 12	03/02/00	3974.55	-	52.80	0.00	3921.75
MW - 12	04/25/00	3974.55	-	52.86	0.00	3921.69
MW - 12	09/06/00	3974.55	-	52.90	0.00	3921.65
MW - 12	11/28/00	3974.55	-	52.92	0.00	3921.63
MW - 12	02/21/01	3974.55	-	52.75	0.00	3921.80
MW - 12	05/31/01	3974.55	-	52.75	0.00	3921.80
MW - 12	08/31/01	3974.55	-	52.78	0.00	3921.77
MW - 12	11/21/01	3974.55	-	52.82	0.00	3921.73
MW - 12	02/13/02	3974.55	-	52.85	0.00	3921.70
MW - 12	06/12/02	3974.55	-	52.83	0.00	3921.72
MW - 12	08/26/02	3974.55	-	52.83	0.00	3921.72
MW - 12	11/21/02	3974.55	-	52.89	0.00	3921.66
MW - 12	02/05/03	3974.55	-	52.88	0.00	3921.67
MW - 12	05/07/03	3974.55	-	52.82	0.00	3921.73
MW - 12	08/18/03	3974.55	-	52.89	0.00	3921.66
MW - 12	12/01/03	3974.55	-	52.93	0.00	3921.62
MW - 12	02/05/04	3974.55	-	52.92	0.00	3921.63
MW - 12	05/05/04	3974.55	-	52.90	0.00	3921.65
MW - 12	09/01/04	3974.55	-	52.94	0.00	3921.61
MW - 12	12/15/04	3974.55	-	52.90	0.00	3921.65
MW - 12	03/22/05	3974.55	-	52.69	0.00	3921.86
MW - 12	06/22/05	3974.55	-	52.58	0.00	3921.97
MW - 12	09/21/05	3974.55	-	52.51	0.00	3922.04
MW - 12	12/16/05	3974.55	-	52.46	0.00	3922.09
MW - 12	03/20/06	3974.55	-	52.39	0.00	3922.16
MW - 12	06/21/06	3974.55	-	52.36	0.00	3922.19
MW - 12	09/27/06	3974.55	-	52.44	0.00	3922.11
MW - 12	12/04/06	3974.55	-	52.33	0.00	3922.22
MW - 12	03/14/07	3974.55	-	52.28	0.00	3922.27
MW - 12	05/29/07	3974.55	-	52.26	0.00	3922.29
MW - 12	08/30/07	3974.55	-	52.23	0.00	3922.32
MW - 12	11/12/07	3974.55	-	52.20	0.00	3922.35
MW - 12	03/07/08	3974.55	-	52.12	0.00	3922.43
MW - 12	06/02/08	3974.55	-	52.05	0.00	3922.50
MW - 12	09/03/08	3974.55	-	52.07	0.00	3922.48
MW - 12	12/08/08	3974.55	-	52.05	0.00	3922.50
MW - 12	02/19/09	3974.55	-	52.02	0.00	3922.53
MW - 12	05/20/09	3974.55	-	51.99	0.00	3922.56
MW - 12	08/12/09	3974.55	-	51.97	0.00	3922.58
MW - 12	11/25/09	3974.55	-	51.98	0.00	3922.57
MW - 12	01/07/10	3974.55	-	51.95	0.00	3922.60
MW - 12	02/11/10	3974.55	-	51.95	0.00	3922.60
MW - 12	05/17/10	3974.55	-	52.13	0.00	3922.42

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 12	08/16/10	3974.55	-	52.13	0.00	3922.42
MW - 12	11/10/10	3974.55	-	52.13	0.00	3922.42
MW - 12	02/28/11	3974.55	-	52.12	0.00	3922.43
MW - 12	05/12/11	3974.55	-	51.92	0.00	3922.63
MW - 12	08/15/11	3974.55	-	52.08	0.00	3922.47
MW - 12	11/22/11	3974.55	-	51.97	0.00	3922.58
MW - 12	02/28/12	3974.55	-	51.97	0.00	3922.58
MW - 12	05/17/12	3974.55	-	51.95	0.00	3922.60
MW - 12	08/01/12	3974.55	-	52.06	0.00	3922.49
MW - 12	10/25/12	3974.55	-	52.12	0.00	3922.43
MW - 12	11/29/12	3974.55	-	52.19	0.00	3922.36
MW - 12	02/11/13	3974.55	-	52.08	0.00	3922.47
MW - 12	04/11/13	3974.55	-	52.30	0.00	3922.25
MW - 12	05/06/13	3974.55	-	52.13	0.00	3922.42
MW - 12	05/29/13	3974.55	-	52.26	0.00	3922.29
MW - 12	06/26/13	3974.55	-	52.31	0.00	3922.24
MW - 12	07/31/13	3974.55	-	52.21	0.00	3922.34
MW - 12	08/06/13	3974.55	-	52.21	0.00	3922.34
MW - 12	09/30/13	3974.55	-	52.25	0.00	3922.30
MW - 12	11/18/13	3974.55	-	52.27	0.00	3922.28
MW - 12	12/08/13	3974.55	-	52.28	0.00	3922.27
MW - 13	03/02/00	3975.00	-	53.77	0.00	3921.23
MW - 13	04/25/00	3975.00	-	53.85	0.00	3921.15
MW - 13	09/06/00	3975.00	-	53.90	0.00	3921.10
MW - 13	11/28/00	3975.00	-	53.91	0.00	3921.09
MW - 13	02/21/01	3975.00	-	53.80	0.00	3921.20
MW - 13	05/31/01	3975.00	-	53.72	0.00	3921.28
MW - 13	08/23/01	3975.00	-	53.76	0.00	3921.24
MW - 13	11/21/01	3975.00	-	53.83	0.00	3921.17
MW - 13	02/13/02	3975.00	-	53.86	0.00	3921.14
MW - 13	06/12/02	3975.00	-	53.81	0.00	3921.19
MW - 13	08/26/02	3975.00	-	53.82	0.00	3921.18
MW - 13	11/21/02	3975.00	-	53.89	0.00	3921.11
MW - 13	02/05/03	3975.00	-	53.85	0.00	3921.15
MW - 13	05/07/03	3975.00	-	53.78	0.00	3921.22
MW - 13	08/18/03	3975.00	-	53.88	0.00	3921.12
MW - 13	12/01/03	3975.00	-	53.91	0.00	3921.09
MW - 13	02/05/04	3975.00	-	53.90	0.00	3921.10
MW - 13	05/05/04	3975.00	-	53.90	0.00	3921.10
MW - 13	09/01/04	3975.00	-	53.93	0.00	3921.07
MW - 13	12/15/04	3975.00	-	53.88	0.00	3921.12
MW - 13	03/22/05	3975.00	-	53.64	0.00	3921.36
MW - 13	06/22/05	3975.00	-	53.58	0.00	3921.42

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 13	09/21/05	3975.00	-	53.51	0.00	3921.49
MW - 13	12/16/05	3975.00	-	53.44	0.00	3921.56
MW - 13	03/20/06	3975.00	-	53.43	0.00	3921.57
MW - 13	06/21/06	3975.00	-	53.38	0.00	3921.62
MW - 13	09/27/06	3975.00	-	53.33	0.00	3921.67
MW - 13	12/04/06	3975.00	-	53.33	0.00	3921.67
MW - 13	02/09/07	3975.00	-	52.32	0.00	3922.68
MW - 13	02/23/07	3975.00	-	53.27	0.00	3921.73
MW - 13	03/14/07	3975.00	-	53.28	0.00	3921.72
MW - 13	05/29/07	3975.00	-	53.26	0.00	3921.74
MW - 13	08/30/07	3975.00	-	53.22	0.00	3921.78
MW - 13	11/12/07	3975.00	-	53.19	0.00	3921.81
MW - 13	03/07/08	3975.00	-	53.13	0.00	3921.87
MW - 13	06/02/08	3975.00	-	53.07	0.00	3921.93
MW - 13	09/03/08	3975.00	-	53.07	0.00	3921.93
MW - 13	12/08/08	3975.00	-	53.05	0.00	3921.95
MW - 13	02/19/09	3975.00	-	53.02	0.00	3921.98
MW - 13	05/20/09	3975.00	-	52.99	0.00	3922.01
MW - 13	08/12/09	3975.00	-	52.99	0.00	3922.01
MW - 13	11/04/09	3975.00	-	52.94	0.00	3922.06
MW - 13	11/11/09	3975.00	-	52.94	0.00	3922.06
MW - 13	11/18/09	3975.00	-	52.95	0.00	3922.05
MW - 13	11/25/09	3975.00	-	52.97	0.00	3922.03
MW - 13	12/02/09	3975.00	-	52.95	0.00	3922.05
MW - 13	01/07/10	3975.00	-	52.94	0.00	3922.06
MW - 13	02/02/10	3975.00	-	52.90	0.00	3922.10
MW - 13	02/11/10	3975.00	-	52.92	0.00	3922.08
MW - 13	05/17/10	3975.00	-	53.06	0.00	3921.94
MW - 13	08/16/10	3975.00	-	53.06	0.00	3921.94
MW - 13	11/10/10	3975.00	-	53.09	0.00	3921.91
MW - 13	02/28/11	3975.00	-	53.07	0.00	3921.93
MW - 13	03/04/11	3975.00	-	52.92	0.00	3922.08
MW - 13	04/28/11	3975.00	-	52.92	0.00	3922.08
MW - 13	05/04/11	3975.00	-	52.91	0.00	3922.09
MW - 13	05/11/11	3975.00	-	52.91	0.00	3922.09
MW - 13	05/12/11	3975.00	-	52.92	0.00	3922.08
MW - 13	05/18/11	3975.00	-	52.92	0.00	3922.08
MW - 13	05/23/11	3975.00	-	52.93	0.00	3922.07
MW - 13	06/08/11	3975.00	-	52.93	0.00	3922.07
MW - 13	06/16/11	3975.00	-	52.93	0.00	3922.07
MW - 13	06/22/11	3975.00	-	52.94	0.00	3922.06
MW - 13	06/30/11	3975.00	-	52.94	0.00	3922.06
MW - 13	07/06/11	3975.00	-	52.94	0.00	3922.06
MW - 13	07/13/11	3975.00	-	52.95	0.00	3922.05

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 13	07/15/11	3975.00	-	52.95	0.00	3922.05
MW - 13	07/19/11	3975.00	-	52.95	0.00	3922.05
MW - 13	07/21/11	3975.00	-	52.94	0.00	3922.06
MW - 13	07/25/11	3975.00	-	52.95	0.00	3922.05
MW - 13	07/28/11	3975.00	-	52.96	0.00	3922.04
MW - 13	08/02/11	3975.00	-	52.96	0.00	3922.04
MW - 13	08/09/11	3975.00	-	52.95	0.00	3922.05
MW - 13	08/12/11	3975.00	-	52.96	0.00	3922.04
MW - 13	08/15/11	3975.00	-	53.00	0.00	3922.00
MW - 13	08/16/11	3975.00	-	52.97	0.00	3922.03
MW - 13	08/19/11	3975.00	-	52.97	0.00	3922.03
MW - 13	08/23/11	3975.00	-	52.98	0.00	3922.02
MW - 13	09/01/11	3975.00	-	52.97	0.00	3922.03
MW - 13	09/15/11	3975.00	-	52.98	0.00	3922.02
MW - 13	09/22/11	3975.00	-	52.96	0.00	3922.04
MW - 13	10/11/11	3975.00	-	52.99	0.00	3922.01
MW - 13	10/13/11	3975.00	-	53.03	0.00	3921.97
MW - 13	11/22/11	3975.00	-	52.96	0.00	3922.04
MW - 13	12/29/11	3975.00	-	52.96	0.00	3922.04
MW - 13	01/26/12	3975.00	-	52.97	0.00	3922.03
MW - 13	01/31/12	3975.00	-	52.99	0.00	3922.01
MW - 13	02/15/12	3975.00	-	52.95	0.00	3922.05
MW - 13	02/28/12	3975.00	-	52.95	0.00	3922.05
MW - 13	03/20/12	3975.00	-	53.03	0.00	3921.97
MW - 13	03/27/12	3975.00	-	54.96	0.00	3920.04
MW - 13	04/10/12	3975.00	-	52.98	0.00	3922.02
MW - 13	04/19/12	3975.00	-	52.98	0.00	3922.02
MW - 13	04/26/12	3975.00	-	52.96	0.00	3922.04
MW - 13	05/08/12	3975.00	-	52.97	0.00	3922.03
MW - 13	05/15/12	3975.00	-	52.94	0.00	3922.06
MW - 13	05/17/12	3975.00	-	52.93	0.00	3922.07
MW - 13	06/05/12	3975.00	-	53.00	0.00	3922.00
MW - 13	06/21/12	3975.00	-	52.64	0.00	3922.36
MW - 13	06/28/12	3975.00	-	52.70	0.00	3922.30
MW - 13	07/17/12	3975.00	-	53.01	0.00	3921.99
MW - 13	08/01/12	3975.00	-	53.04	0.00	3921.96
MW - 13	10/02/12	3975.00	-	53.31	0.00	3921.69
MW - 13	10/09/12	3975.00	-	53.19	0.00	3921.81
MW - 13	10/16/12	3975.00	-	53.13	0.00	3921.87
MW - 13	10/25/12	3975.00	-	53.14	0.00	3921.86
MW - 13	10/30/12	3975.00	-	53.11	0.00	3921.89
MW - 13	11/29/12	3975.00	-	53.14	0.00	3921.86
MW - 13	12/14/12	3975.00	-	53.16	0.00	3921.84
MW - 13	02/11/13	3975.00	-	53.09	0.00	3921.91

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 13	04/11/13	3975.00	-	53.29	0.00	3921.71
MW - 13	04/15/13	3975.00	-	53.20	0.00	3921.80
MW - 13	04/22/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/06/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/09/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/20/13	3975.00	-	53.14	0.00	3921.86
MW - 13	05/24/13	3975.00	-	53.25	0.00	3921.75
MW - 13	05/29/13	3975.00	-	53.26	0.00	3921.74
MW - 13	05/31/13	3975.00	-	53.23	0.00	3921.77
MW - 13	06/07/13	3975.00	-	53.31	0.00	3921.69
MW - 13	06/12/13	3975.00	-	53.30	0.00	3921.70
MW - 13	06/14/13	3975.00	-	53.25	0.00	3921.75
MW - 13	06/19/13	3975.00	-	53.24	0.00	3921.76
MW - 13	06/21/13	3975.00	-	53.28	0.00	3921.72
MW - 13	06/25/13	3975.00	-	53.21	0.00	3921.79
MW - 13	06/26/13	3975.00	-	53.26	0.00	3921.74
MW - 13	07/03/13	3975.00	-	53.26	0.00	3921.74
MW - 13	07/09/13	3975.00	-	53.25	0.00	3921.75
MW - 13	07/11/13	3975.00	-	53.31	0.00	3921.69
MW - 13	07/24/13	3975.00	-	53.22	0.00	3921.78
MW - 13	07/26/13	3975.00	-	53.29	0.00	3921.71
MW - 13	07/31/13	3975.00	-	53.25	0.00	3921.75
MW - 13	08/02/13	3975.00	-	53.29	0.00	3921.71
MW - 13	08/06/13	3975.00	-	53.22	0.00	3921.78
MW - 13	08/14/13	3975.00	-	53.28	0.00	3921.72
MW - 13	08/21/13	3975.00	-	53.32	0.00	3921.68
MW - 13	08/26/13	3975.00	-	53.29	0.00	3921.71
MW - 13	09/06/13	3975.00	-	53.30	0.00	3921.70
MW - 13	08/30/13	3975.00	-	53.28	0.00	3921.72
MW - 13	09/13/13	3975.00	-	53.23	0.00	3921.77
MW - 13	09/27/13	3975.00	-	53.34	0.00	3921.66
MW - 13	09/30/13	3975.00	-	53.35	0.00	3921.65
MW - 13	10/02/13	3975.00	-	53.30	0.00	3921.70
MW - 13	10/03/13	3975.00	-	53.28	0.00	3921.72
MW - 13	10/11/13	3975.00	-	53.21	0.00	3921.79
MW - 13	10/17/13	3975.00	-	53.22	0.00	3921.78
MW - 13	10/22/13	3975.00	-	53.22	0.00	3921.78
MW - 13	10/24/13	3975.00	-	53.37	0.00	3921.63
MW - 13	10/30/13	3975.00	-	53.34	0.00	3921.66
MW - 13	11/01/13	3975.00	-	53.25	0.00	3921.75
MW - 13	11/04/13	3975.00	-	53.29	0.00	3921.71
MW - 13	11/08/13	3975.00	-	53.32	0.00	3921.68
MW - 13	11/13/13	3975.00	-	53.25	0.00	3921.75
MW - 13	11/15/13	3975.00	-	53.25	0.00	3921.75

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 13	11/19/13	3975.00	-	53.25	0.00	3921.75
MW - 13	12/12/13	3975.00	-	53.31	0.00	3921.69
MW - 13	12/16/13	3975.00	-	53.30	0.00	3921.70
MW - 13	12/18/13	3975.00	-	53.30	0.00	3921.70
MW - 13	12/23/13	3975.00	-	53.36	0.00	3921.64
MW - 13	12/30/13	3975.00	-	53.33	0.00	3921.67
MW - 14	03/02/00	3976.15	-	54.49	0.00	3921.66
MW - 14	04/25/00	3976.15	-	54.55	0.00	3921.60
MW - 14	09/06/00	3976.15	-	54.61	0.00	3921.54
MW - 14	11/28/00	3976.15	-	54.61	0.00	3921.54
MW - 14	02/21/01	3976.15	-	54.44	0.00	3921.71
MW - 14	05/31/01	3976.15	-	54.45	0.00	3921.70
MW - 14	08/23/01	3976.15	-	54.47	0.00	3921.68
MW - 14	11/21/01	3976.15	-	54.50	0.00	3921.65
MW - 14	02/13/02	3976.15	-	54.55	0.00	3921.60
MW - 14	06/12/02	3976.15	-	54.52	0.00	3921.63
MW - 14	08/26/02	3976.15	-	54.53	0.00	3921.62
MW - 14	11/21/02	3976.15	-	54.57	0.00	3921.58
MW - 14	02/05/03	3976.15	-	54.52	0.00	3921.63
MW - 14	05/07/03	3976.15	-	54.51	0.00	3921.64
MW - 14	08/18/03	3976.15	-	54.57	0.00	3921.58
MW - 14	12/01/03	3976.15	-	54.61	0.00	3921.54
MW - 14	02/05/04	3976.15	-	54.60	0.00	3921.55
MW - 14	05/05/04	3976.15	-	54.58	0.00	3921.57
MW - 14	09/01/04	3976.15	-	54.65	0.00	3921.50
MW - 14	12/15/04	3976.15	-	54.60	0.00	3921.55
MW - 14	03/22/05	3976.15	-	54.40	0.00	3921.75
MW - 14	06/22/05	3976.15	-	54.29	0.00	3921.86
MW - 14	09/21/05	3976.15	-	54.21	0.00	3921.94
MW - 14	12/16/05	3976.15	-	54.14	0.00	3922.01
MW - 14	03/20/06	3976.15	-	54.11	0.00	3922.04
MW - 14	06/21/06	3976.15	-	54.06	0.00	3922.09
MW - 14	09/27/06	3976.15	-	54.04	0.00	3922.11
MW - 14	12/04/06	3976.15	-	54.02	0.00	3922.13
MW - 14	02/09/07	3976.15	-	54.01	0.00	3922.14
MW - 14	02/23/07	3976.15	-	53.96	0.00	3922.19
MW - 14	03/14/07	3976.15	-	53.99	0.00	3922.16
MW - 14	05/29/07	3976.15	-	53.94	0.00	3922.21
MW - 14	08/30/07	3976.15	-	53.92	0.00	3922.23
MW - 14	11/12/07	3976.15	-	53.87	0.00	3922.28
MW - 14	03/07/08	3976.15	-	53.81	0.00	3922.34
MW - 14	06/02/08	3976.15	-	53.75	0.00	3922.40
MW - 14	09/03/08	3976.15	-	53.75	0.00	3922.40

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	12/08/08	3976.15	-	53.70	0.00	3922.45
MW - 14	02/19/09	3976.15	-	53.71	0.00	3922.44
MW - 14	05/20/09	3976.15	-	53.69	0.00	3922.46
MW - 14	08/12/09	3976.15	-	53.69	0.00	3922.46
MW - 14	11/04/09	3976.15	-	53.66	0.00	3922.49
MW - 14	11/11/09	3976.15	-	53.66	0.00	3922.49
MW - 14	11/18/09	3976.15	-	53.65	0.00	3922.50
MW - 14	11/25/09	3976.15	-	53.65	0.00	3922.50
MW - 14	12/02/09	3976.15	-	52.02	0.00	3924.13
MW - 14	01/07/10	3976.15	-	53.64	0.00	3922.51
MW - 14	02/02/10	3976.15	-	53.63	0.00	3922.52
MW - 14	02/11/10	3976.15	-	53.63	0.00	3922.52
MW - 14	05/17/10	3976.15	-	53.72	0.00	3922.43
MW - 14	08/16/10	3976.15	-	53.71	0.00	3922.44
MW - 14	11/10/10	3976.15	-	53.70	0.00	3922.45
MW - 14	02/28/11	3976.15	-	53.71	0.00	3922.44
MW - 14	03/04/11	3976.15	-	53.56	0.00	3922.59
MW - 14	04/28/11	3976.15	-	53.63	0.00	3922.52
MW - 14	05/04/11	3976.15	-	52.38	0.00	3923.77
MW - 14	05/11/11	3976.15	-	53.59	0.00	3922.56
MW - 14	05/12/11	3976.15	-	53.58	0.00	3922.57
MW - 14	05/18/11	3976.15	-	53.57	0.00	3922.58
MW - 14	05/23/11	3976.15	-	53.62	0.00	3922.53
MW - 14	06/08/11	3976.15	-	53.45	0.00	3922.70
MW - 14	06/16/11	3976.15	-	53.53	0.00	3922.62
MW - 14	06/22/11	3976.15	-	53.52	0.00	3922.63
MW - 14	06/30/11	3976.15	-	53.71	0.00	3922.44
MW - 14	07/06/11	3976.15	-	53.60	0.00	3922.55
MW - 14	07/13/11	3976.15	-	53.66	0.00	3922.49
MW - 14	07/15/11	3976.15	-	53.67	0.00	3922.48
MW - 14	07/19/11	3976.15	-	53.62	0.00	3922.53
MW - 14	07/21/11	3976.15	-	53.58	0.00	3922.57
MW - 14	07/25/11	3976.15	-	53.57	0.00	3922.58
MW - 14	07/28/11	3976.15	-	53.62	0.00	3922.53
MW - 14	08/02/11	3976.15	-	53.70	0.00	3922.45
MW - 14	08/09/11	3976.15	-	53.66	0.00	3922.49
MW - 14	08/12/11	3976.15	-	53.67	0.00	3922.48
MW - 14	08/15/11	3976.15	-	53.67	0.00	3922.48
MW - 14	08/16/11	3976.15	-	53.66	0.00	3922.49
MW - 14	08/19/11	3976.15	-	53.69	0.00	3922.46
MW - 14	08/23/11	3976.15	-	53.71	0.00	3922.44
MW - 14	08/26/11	3976.15	-	53.72	0.00	3922.43
MW - 14	08/30/11	3976.15	-	53.63	0.00	3922.52
MW - 14	09/01/11	3976.15	-	53.68	0.00	3922.47

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 14	09/15/11	3976.15	-	53.68	0.00	3922.47
MW - 14	09/22/11	3976.15	-	53.61	0.00	3922.54
MW - 14	10/11/11	3976.15	-	53.72	0.00	3922.43
MW - 14	10/13/11	3976.15	-	53.76	0.00	3922.39
MW - 14	10/26/11	3976.15	-	53.70	0.00	3922.45
MW - 14	11/22/11	3976.15	-	53.66	0.00	3922.49
MW - 14	12/29/11	3976.15	-	53.63	0.00	3922.52
MW - 14	01/26/12	3976.15	-	53.64	0.00	3922.51
MW - 14	02/28/12	3976.15	-	53.62	0.00	3922.53
MW - 14	03/20/12	3976.15	-	53.68	0.00	3922.47
MW - 14	03/27/12	3976.15	-	53.65	0.00	3922.50
MW - 14	05/17/12	3976.15	-	53.64	0.00	3922.51
MW - 14	08/01/12	3976.15	-	53.75	0.00	3922.40
MW - 14	10/25/12	3976.15	-	53.80	0.00	3922.35
MW - 14	11/29/12	3976.15	-	53.81	0.00	3922.34
MW - 14	02/11/13	3976.15	-	53.73	0.00	3922.42
MW - 14	04/11/13	3976.15	-	53.96	0.00	3922.19
MW - 14	05/06/13	3976.15	-	53.82	0.00	3922.33
MW - 14	05/29/13	3976.15	-	53.93	0.00	3922.22
MW - 14	06/26/13	3976.15	-	53.86	0.00	3922.29
MW - 14	07/31/13	3976.15	-	53.79	0.00	3922.36
MW - 14	08/06/13	3976.15	-	53.82	0.00	3922.33
MW - 14	09/30/13	3976.15	-	53.90	0.00	3922.25
MW - 14	11/19/13	3976.15	-	53.96	0.00	3922.19
MW - 15	03/02/00	3974.69	-	53.31	0.00	3921.38
MW - 15	04/25/00	3974.69	-	53.39	0.00	3921.30
MW - 15	09/06/00	3974.69	-	53.45	0.00	3921.24
MW - 15	11/28/00	3974.69	-	53.45	0.00	3921.24
MW - 15	02/21/01	3974.69	-	53.35	0.00	3921.34
MW - 15	05/31/01	3974.69	-	53.25	0.00	3921.44
MW - 15	08/23/01	3974.69	-	53.32	0.00	3921.37
MW - 15	11/21/01	3974.69	-	53.46	0.00	3921.23
MW - 15	02/13/02	3974.69	-	53.39	0.00	3921.30
MW - 15	06/12/02	3974.69	-	53.36	0.00	3921.33
MW - 15	08/26/02	3974.69	-	53.45	0.00	3921.24
MW - 15	11/21/02	3974.69	-	53.42	0.00	3921.27
MW - 15	02/05/03	3974.69	-	53.40	0.00	3921.29
MW - 15	05/07/03	3974.69	-	53.35	0.00	3921.34
MW - 15	08/18/03	3974.69	-	53.41	0.00	3921.28
MW - 15	12/01/03	3974.69	-	53.45	0.00	3921.24
MW - 15	02/05/04	3974.69	-	53.45	0.00	3921.24
MW - 15	05/05/04	3974.69	-	53.42	0.00	3921.27
MW - 15	09/01/04	3974.69	-	53.47	0.00	3921.22

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	12/15/04	3974.69	-	53.40	0.00	3921.29
MW - 15	03/22/05	3974.69	-	53.19	0.00	3921.50
MW - 15	06/22/05	3974.69	-	53.14	0.00	3921.55
MW - 15	09/21/05	3974.69	-	53.05	0.00	3921.64
MW - 15	12/16/05	3974.69	-	52.99	0.00	3921.70
MW - 15	03/20/06	3974.69	-	52.96	0.00	3921.73
MW - 15	06/21/06	3974.69	-	52.91	0.00	3921.78
MW - 15	09/27/06	3974.69	-	52.88	0.00	3921.81
MW - 15	12/04/06	3974.69	-	52.88	0.00	3921.81
MW - 15	02/09/07	3974.69	-	52.87	0.00	3921.82
MW - 15	02/23/07	3974.69	-	52.80	0.00	3921.89
MW - 15	03/14/07	3974.69	-	52.81	0.00	3921.88
MW - 15	05/29/07	3974.69	-	52.79	0.00	3921.90
MW - 15	08/30/07	3974.69	-	52.77	0.00	3921.92
MW - 15	11/12/07	3974.69	-	52.73	0.00	3921.96
MW - 15	03/07/08	3974.69	-	52.66	0.00	3922.03
MW - 15	06/02/08	3974.69	-	52.60	0.00	3922.09
MW - 15	09/03/08	3974.69	-	52.62	0.00	3922.07
MW - 15	12/08/08	3974.69	-	52.62	0.00	3922.07
MW - 15	02/19/09	3974.69	-	52.56	0.00	3922.13
MW - 15	05/20/09	3974.69	-	52.53	0.00	3922.16
MW - 15	08/12/09	3974.69	-	52.53	0.00	3922.16
MW - 15	11/04/09	3974.69	-	52.47	0.00	3922.22
MW - 15	11/11/09	3974.69	-	52.46	0.00	3922.23
MW - 15	11/18/09	3974.69	-	52.50	0.00	3922.19
MW - 15	11/25/09	3974.69	-	52.51	0.00	3922.18
MW - 15	12/02/09	3974.69	-	52.49	0.00	3922.20
MW - 15	01/07/10	3974.69	-	52.50	0.00	3922.19
MW - 15	02/02/10	3974.69	-	52.47	0.00	3922.22
MW - 15	02/11/10	3974.69	-	52.47	0.00	3922.22
MW - 15	05/17/10	3974.69	-	52.59	0.00	3922.10
MW - 15	08/16/10	3974.69	-	52.59	0.00	3922.10
MW - 15	11/10/10	3974.69	-	52.58	0.00	3922.11
MW - 15	02/28/11	3974.69	-	52.59	0.00	3922.10
MW - 15	03/04/11	3974.69	-	52.43	0.00	3922.26
MW - 15	04/28/11	3974.69	-	52.38	0.00	3922.31
MW - 15	05/04/11	3974.69	-	52.37	0.00	3922.32
MW - 15	05/11/11	3974.69	-	52.39	0.00	3922.30
MW - 15	05/12/11	3974.69	-	52.48	0.00	3922.21
MW - 15	05/18/11	3974.69	-	52.51	0.00	3922.18
MW - 15	05/23/11	3974.69	-	52.30	0.00	3922.39
MW - 15	06/08/11	3974.69	-	52.53	0.00	3922.16
MW - 15	06/16/11	3974.69	-	52.46	0.00	3922.23
MW - 15	06/22/11	3974.69	-	52.44	0.00	3922.25

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	06/30/11	3974.69	-	52.49	0.00	3922.20
MW - 15	07/06/11	3974.69	-	52.48	0.00	3922.21
MW - 15	07/13/11	3974.69	-	52.49	0.00	3922.20
MW - 15	07/15/11	3974.69	-	52.54	0.00	3922.15
MW - 15	07/19/11	3974.69	-	52.50	0.00	3922.19
MW - 15	07/21/11	3974.69	-	52.52	0.00	3922.17
MW - 15	07/26/11	3974.69	-	52.50	0.00	3922.19
MW - 15	07/28/11	3974.69	-	52.58	0.00	3922.11
MW - 15	08/02/11	3974.69	-	52.63	0.00	3922.06
MW - 15	08/09/11	3974.69	-	52.65	0.00	3922.04
MW - 15	08/12/11	3974.69	-	52.70	0.00	3921.99
MW - 15	08/15/11	3974.69	-	52.70	0.00	3921.99
MW - 15	08/16/11	3974.69	-	52.69	0.00	3922.00
MW - 15	08/19/11	3974.69	-	52.72	0.00	3921.97
MW - 15	08/23/11	3974.69	-	52.74	0.00	3921.95
MW - 15	08/26/11	3974.69	-	52.76	0.00	3921.93
MW - 15	08/30/11	3974.69	-	52.50	0.00	3922.19
MW - 15	09/01/11	3974.69	-	52.53	0.00	3922.16
MW - 15	09/15/11	3974.69	-	52.58	0.00	3922.11
MW - 15	09/22/11	3974.69	-	52.52	0.00	3922.17
MW - 15	10/11/11	3974.69	-	52.13	0.00	3922.56
MW - 15	10/13/11	3974.69	-	52.64	0.00	3922.05
MW - 15	10/26/11	3974.69	-	52.59	0.00	3922.10
MW - 15	11/22/11	3974.69	-	52.54	0.00	3922.15
MW - 15	12/29/11	3974.69	-	52.46	0.00	3922.23
MW - 15	01/26/12	3974.69	-	52.55	0.00	3922.14
MW - 15	01/31/12	3974.69	-	52.56	0.00	3922.13
MW - 15	02/15/12	3974.69	-	52.50	0.00	3922.19
MW - 15	02/28/12	3974.69	-	52.51	0.00	3922.18
MW - 15	03/20/12	3974.69	-	52.57	0.00	3922.12
MW - 15	03/27/12	3974.69	-	52.54	0.00	3922.15
MW - 15	04/10/12	3974.69	-	52.54	0.00	3922.15
MW - 15	04/19/12	3974.69	-	52.55	0.00	3922.14
MW - 15	04/26/12	3974.69	-	52.49	0.00	3922.20
MW - 15	05/08/12	3974.69	-	52.50	0.00	3922.19
MW - 15	05/15/12	3974.69	-	52.51	0.00	3922.18
MW - 15	05/17/12	3974.69	-	52.49	0.00	3922.20
MW - 15	06/05/12	3974.69	-	52.53	0.00	3922.16
MW - 15	06/21/12	3974.69	-	53.09	0.00	3921.60
MW - 15	06/28/12	3974.69	-	53.16	0.00	3921.53
MW - 15	08/01/12	3974.69	-	52.60	0.00	3922.09
MW - 15	10/02/12	3974.69	-	52.70	0.00	3921.99
MW - 15	10/09/12	3974.69	-	52.75	0.00	3921.94
MW - 15	10/16/12	3974.69	-	52.67	0.00	3922.02

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	10/25/12	3974.69	-	52.67	0.00	3922.02
MW - 15	10/30/12	3974.69	-	52.68	0.00	3922.01
MW - 15	11/29/12	3974.69	-	52.73	0.00	3921.96
MW - 15	12/14/12	3974.69	-	52.71	0.00	3921.98
MW - 15	02/11/13	3974.69	-	52.65	0.00	3922.04
MW - 15	04/11/13	3974.69	-	52.91	0.00	3921.78
MW - 15	04/15/13	3974.69	-	52.91	0.00	3921.78
MW - 15	04/22/13	3974.69	-	52.66	0.00	3922.03
MW - 15	05/06/13	3974.69	-	52.66	0.00	3922.03
MW - 15	05/09/13	3974.69	-	52.68	0.00	3922.01
MW - 15	05/20/13	3974.69	-	52.69	0.00	3922.00
MW - 15	05/24/13	3974.69	-	52.83	0.00	3921.86
MW - 15	05/29/13	3974.69	-	52.92	0.00	3921.77
MW - 15	05/31/13	3974.69	-	52.82	0.00	3921.87
MW - 15	06/07/13	3974.69	-	52.93	0.00	3921.76
MW - 15	06/12/13	3974.69	-	52.91	0.00	3921.78
MW - 15	06/14/13	3974.69	-	52.86	0.00	3921.83
MW - 15	06/19/13	3974.69	-	52.88	0.00	3921.81
MW - 15	06/21/13	3974.69	-	52.94	0.00	3921.75
MW - 15	06/25/13	3974.69	-	52.75	0.00	3921.94
MW - 15	06/26/13	3974.69	-	52.88	0.00	3921.81
MW - 15	07/03/13	3974.69	-	52.86	0.00	3921.83
MW - 15	07/09/13	3974.69	-	52.87	0.00	3921.82
MW - 15	07/11/13	3974.69	-	52.92	0.00	3921.77
MW - 15	07/24/13	3974.69	-	52.84	0.00	3921.85
MW - 15	07/26/13	3974.69	-	52.88	0.00	3921.81
MW - 15	07/31/13	3974.69	-	52.83	0.00	3921.86
MW - 15	08/02/13	3974.69	-	52.87	0.00	3921.82
MW - 15	08/06/13	3974.69	-	52.78	0.00	3921.91
MW - 15	08/14/13	3974.69	-	52.89	0.00	3921.80
MW - 15	08/21/13	3974.69	-	52.91	0.00	3921.78
MW - 15	08/26/13	3974.69	-	52.87	0.00	3921.82
MW - 15	09/06/13	3974.69	-	52.87	0.00	3921.82
MW - 15	08/30/13	3974.69	-	52.84	0.00	3921.85
MW - 15	09/13/13	3974.69	-	52.80	0.00	3921.89
MW - 15	09/27/13	3974.69	-	52.93	0.00	3921.76
MW - 15	09/30/13	3974.69	-	52.91	0.00	3921.78
MW - 15	10/02/13	3974.69	-	52.92	0.00	3921.77
MW - 15	10/03/13	3974.69	-	52.88	0.00	3921.81
MW - 15	10/11/13	3974.69	-	52.76	0.00	3921.93
MW - 15	10/17/13	3974.69	-	52.79	0.00	3921.90
MW - 15	10/22/13	3974.69	-	52.78	0.00	3921.91
MW - 15	10/24/13	3974.69	-	52.96	0.00	3921.73
MW - 15	10/30/13	3974.69	-	52.92	0.00	3921.77

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 15	11/01/13	3974.69	-	52.85	0.00	3921.84
MW - 15	11/04/13	3974.69	-	52.83	0.00	3921.86
MW - 15	11/08/13	3974.69	-	52.95	0.00	3921.74
MW - 15	11/13/13	3974.69	-	52.80	0.00	3921.89
MW - 15	11/15/13	3974.69	-	52.81	0.00	3921.88
MW - 15	11/19/13	3974.69	-	52.79	0.00	3921.90
MW - 15	12/08/13	3974.69	-	52.79	0.00	3921.90
MW - 15	12/12/13	3974.69	-	52.85	0.00	3921.84
MW - 15	12/16/13	3974.69	-	52.83	0.00	3921.86
MW - 15	12/18/13	3974.69	-	52.84	0.00	3921.85
MW - 15	12/23/13	3974.69	-	52.94	0.00	3921.75
MW - 15	12/30/13	3974.69	-	52.89	0.00	3921.80
MW - 16	12/23/02	3975.12	-	53.44	0.00	3921.68
MW - 16	01/10/03	3975.12	-	53.45	0.00	3921.67
MW - 16	05/07/03	3975.12	-	53.38	0.00	3921.74
MW - 16	08/18/03	3975.12	-	53.44	0.00	3921.68
MW - 16	12/01/03	3975.12	-	53.48	0.00	3921.64
MW - 16	02/05/04	3975.12	-	53.48	0.00	3921.64
MW - 16	05/05/04	3975.12	-	53.41	0.00	3921.71
MW - 16	09/01/04	3975.12	-	53.52	0.00	3921.60
MW - 16	12/15/04	3975.12	-	53.48	0.00	3921.64
MW - 16	03/22/05	3975.12	-	53.26	0.00	3921.86
MW - 16	06/22/05	3975.12	-	53.15	0.00	3921.97
MW - 16	09/21/05	3975.12	-	53.08	0.00	3922.04
MW - 16	12/16/05	3975.12	-	53.02	0.00	3922.10
MW - 16	03/20/06	3975.12	-	52.97	0.00	3922.15
MW - 16	06/21/06	3975.12	-	52.94	0.00	3922.18
MW - 16	09/27/06	3975.12	-	52.90	0.00	3922.22
MW - 16	12/04/06	3975.12	-	52.88	0.00	3922.24
MW - 16	03/14/07	3975.12	-	52.84	0.00	3922.28
MW - 16	05/29/07	3975.12	-	52.80	0.00	3922.32
MW - 16	08/30/07	3975.12	-	52.78	0.00	3922.34
MW - 16	11/12/07	3975.12	-	52.73	0.00	3922.39
MW - 16	03/07/08	3975.12	-	52.66	0.00	3922.46
MW - 16	06/02/08	3975.12	-	52.62	0.00	3922.50
MW - 16	09/03/08	3975.12	-	52.63	0.00	3922.49
MW - 16	12/08/08	3975.12	-	52.57	0.00	3922.55
MW - 16	02/19/09	3975.12	-	52.58	0.00	3922.54
MW - 16	05/20/09	3975.12	-	52.54	0.00	3922.58
MW - 16	08/12/09	3975.12	-	52.55	0.00	3922.57
MW - 16	11/25/09	3975.12	-	52.51	0.00	3922.61
MW - 16	01/07/10	3975.12	-	52.51	0.00	3922.61
MW - 16	02/11/10	3975.12	-	52.48	0.00	3922.64

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 16	05/17/10	3975.12	-	52.60	0.00	3922.52
MW - 16	08/16/10	3975.12	-	52.61	0.00	3922.51
MW - 16	11/10/10	3975.12	-	52.61	0.00	3922.51
MW - 16	02/28/11	3975.12	-	52.60	0.00	3922.52
MW - 16	05/12/11	3975.12	-	52.29	0.00	3922.83
MW - 16	08/15/11	3975.12	-	52.56	0.00	3922.56
MW - 16	11/22/11	3975.12	-	52.40	0.00	3922.72
MW - 16	02/28/12	3975.12	-	52.41	0.00	3922.71
MW - 16	05/17/12	3975.12	-	52.50	0.00	3922.62
MW - 16	08/01/12	3975.12	-	52.61	0.00	3922.51
MW - 16	10/25/12	3975.12	-	52.64	0.00	3922.48
MW - 16	11/29/12	3975.12	-	52.41	0.00	3922.71
MW - 16	02/11/13	3975.12	-	52.59	0.00	3922.53
MW - 16	04/11/13	3975.12	-	52.19	0.00	3922.93
MW - 16	05/06/13	3975.12	-	52.67	0.00	3922.45
MW - 16	05/29/13	3975.12	-	52.42	0.00	3922.70
MW - 16	06/26/13	3975.12	-	52.19	0.00	3922.93
MW - 16	07/31/13	3975.12	-	52.32	0.00	3922.80
MW - 16	08/06/13	3975.12	-	52.42	0.00	3922.70
MW - 16	09/30/13	3975.12	-	52.49	0.00	3922.63
MW - 16	11/19/13	3975.12	-	52.81	0.00	3922.31
MW - 17	12/23/02	3975.93	-	54.41	0.00	3921.52
MW - 17	01/10/03	3975.93	-	54.35	0.00	3921.58
MW - 17	05/07/03	3975.93	-	54.35	0.00	3921.58
MW - 17	08/18/03	3975.93	-	54.36	0.00	3921.57
MW - 17	12/01/03	3975.93	-	54.47	0.00	3921.46
MW - 17	02/05/04	3975.93	-	54.44	0.00	3921.49
MW - 17	05/05/04	3975.93	-	54.42	0.00	3921.51
MW - 17	09/01/04	3975.93	-	54.50	0.00	3921.43
MW - 17	12/15/04	3975.93	-	54.44	0.00	3921.49
MW - 17	03/22/05	3975.93	-	54.23	0.00	3921.70
MW - 17	06/22/05	3975.93	-	54.13	0.00	3921.80
MW - 17	09/21/05	3975.93	-	54.56	0.00	3921.37
MW - 17	12/16/05	3975.93	-	54.00	0.00	3921.93
MW - 17	03/20/06	3975.93	-	53.94	0.00	3921.99
MW - 17	08/09/06	PLUGGED & ABANDONED				
MW - 18	05/20/09	-	-	53.72	0.00	-
MW - 18	08/12/09	-	-	53.72	0.00	-
MW - 18	11/25/09	-	-	53.70	0.00	-
MW - 18	01/07/10	-	-	53.70	0.00	-
MW - 18	02/11/10	-	-	53.67	0.00	-
MW - 18	05/17/10	-	-	53.79	0.00	-

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW - 18	08/16/10	-	-	53.79	0.00	-
MW - 18	11/10/10	-	-	53.80	0.00	-
MW - 18	02/28/11	-	-	53.79	0.00	-
MW - 18	05/12/11	-	-	53.65	0.00	-
MW - 18	08/15/11	-	-	53.70	0.00	-
MW - 18	11/22/11	-	-	53.71	0.00	-
MW - 18	02/28/12	-	-	53.69	0.00	-
MW - 18	05/17/12	-	-	53.68	0.00	-
MW - 18	08/01/12	-	-	53.79	0.00	-
MW - 18	10/25/12	-	-	53.84	0.00	-
MW - 18	11/29/12	-	-	53.87	0.00	-
MW - 18	02/11/13	-	-	53.85	0.00	-
MW - 18	04/11/13	-	-	53.95	0.00	-
MW - 18	05/06/13	-	-	53.85	0.00	-
MW - 18	05/29/13	-	-	53.90	0.00	-
MW - 18	06/26/13	-	-	53.94	0.00	-
MW - 18	07/31/13	-	-	53.94	0.00	-
MW - 18	08/06/13	-	-	53.93	0.00	-
MW - 18	09/30/13	-	-	53.99	0.00	-
MW - 18	11/19/13	-	-	54.01	0.00	-
RW - 1	11/08/02	3970.79	48.44	51.55	3.11	3921.88
RW - 1	11/21/02	3970.79	49.01	49.04	0.03	3921.78
RW - 1	12/27/02	3970.79	48.48	51.37	2.89	3921.88
RW - 1	01/06/03	3970.79	49.48	51.13	1.65	3921.06
RW - 1	01/08/03	3970.79	48.46	51.20	2.74	3921.92
RW - 1	01/10/03	3970.79	48.95	48.97	0.02	3921.84
RW - 1	01/13/03	3970.79	48.65	50.36	1.71	3921.88
RW - 1	02/05/03	3970.79	48.51	51.32	2.81	3921.86
RW - 1	02/26/03	3970.79	48.41	51.34	2.93	3921.94
RW - 1	03/04/03	3970.79	48.41	51.34	2.93	3921.94
RW - 1	03/12/03	3970.79	48.44	51.41	2.97	3921.90
RW - 1	03/18/03	3970.79	48.51	51.51	3.00	3921.83
RW - 1	03/25/03	3970.79	48.85	49.04	0.19	3921.91
RW - 1	03/31/03	3970.79	48.92	49.07	0.15	3921.85
RW - 1	04/09/03	3970.79	48.97	49.00	0.03	3921.82
RW - 1	04/14/03	3970.79	sheen	48.99	0.00	3921.80
RW - 1	05/07/03	3970.79	48.39	51.12	2.73	3921.99
RW - 1	05/08/03	3970.79	48.46	51.21	2.75	3921.92
RW - 1	05/13/03	3970.79	48.49	51.32	2.83	3921.88
RW - 1	05/21/03	3970.79	48.57	51.36	2.79	3921.80
RW - 1	05/27/03	3970.79	48.44	51.27	2.83	3921.93
RW - 1	05/28/03	3970.79	48.54	51.45	2.91	3921.81
RW - 1	06/03/03	3970.79	48.52	51.48	2.96	3921.83

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	06/09/03	3970.79	48.46	51.40	2.94	3921.89
RW - 1	07/01/03	3970.79	48.51	51.40	2.89	3921.85
RW - 1	07/08/03	3970.79	48.53	49.37	0.84	3922.13
RW - 1	07/29/03	3970.79	48.43	51.24	2.81	3921.94
RW - 1	08/04/03	3970.79	48.71	51.60	2.89	3921.65
RW - 1	08/18/03	3970.79	48.69	49.08	0.39	3922.04
RW - 1	08/25/03	3970.79	48.69	51.65	2.96	3921.66
RW - 1	10/01/03	3970.79	48.60	49.12	0.52	3922.11
RW - 1	10/06/03	3970.79	48.97	49.04	0.07	3921.81
RW - 1	10/08/03	3970.79	49.14	50.18	1.04	3921.49
RW - 1	10/15/03	3970.79	49.15	49.75	0.60	3921.55
RW - 1	11/12/03	3970.79	48.12	51.02	2.90	3922.24
RW - 1	11/19/03	3970.79	58.42	51.34	-7.08	3913.43
RW - 1	12/01/03	3970.79	49.21	50.49	1.28	3921.39
RW - 1	12/10/03	3970.79	48.68	50.92	2.24	3921.77
RW - 1	02/05/04	3970.79	49.18	51.71	2.53	3921.23
RW - 1	02/17/04	3970.79	48.71	51.51	2.80	3921.66
RW - 1	02/25/04	3970.79	49.15	51.67	2.52	3921.26
RW - 1	03/09/04	3970.79	48.60	49.32	0.72	3922.08
RW - 1	03/16/04	3970.79	48.62	50.13	1.51	3921.94
RW - 1	03/22/04	3970.79	48.79	51.92	3.13	3921.53
RW - 1	04/07/04	3970.79	48.70	49.22	0.52	3922.01
RW - 1	04/12/04	3970.79	48.68	51.04	2.36	3921.76
RW - 1	04/19/04	3970.79	48.61	49.10	0.49	3922.11
RW - 1	05/05/04	3970.79	48.70	51.51	2.81	3921.67
RW - 1	05/11/04	3970.79	48.83	51.77	2.94	3921.52
RW - 1	06/07/04	3970.79	48.43	51.31	2.88	3921.93
RW - 1	11/26/04	3970.79	48.50	51.30	2.80	3921.87
RW - 1	12/02/04	3970.79	48.53	51.22	2.69	3921.86
RW - 1	12/06/04	3970.79	48.72	51.03	2.31	3921.72
RW - 1	12/13/04	3970.79	48.96	51.10	2.14	3921.51
RW - 1	12/15/04	3970.79	48.96	51.10	2.14	3921.51
RW - 1	12/27/04	3970.79	48.46	51.20	2.74	3921.92
RW - 1	01/10/05	3970.79	48.40	51.00	2.60	3922.00
RW - 1	01/18/05	3970.79	48.55	51.05	2.50	3921.87
RW - 1	01/18/05	3970.79	48.75	49.35	0.60	3921.95
RW - 1	01/25/05	3970.79	48.44	50.55	2.11	3922.03
RW - 1	01/27/05	3970.79	48.52	51.10	2.58	3921.88
RW - 1	02/01/05	3970.79	48.50	50.25	1.75	3922.03
RW - 1	02/07/05	3970.79	48.45	50.30	1.85	3922.06
RW - 1	02/11/05	3970.79	48.47	50.27	1.80	3922.05
RW - 1	02/15/05	3970.79	48.35	50.34	1.99	3922.14
RW - 1	02/22/05	3970.79	48.30	50.79	2.49	3922.12
RW - 1	02/24/05	3970.79	48.27	50.79	2.52	3922.14

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	03/03/05	3970.79	48.52	50.85	2.33	3921.92
RW - 1	03/09/05	3970.79	48.55	50.87	2.32	3921.89
RW - 1	03/22/05	3970.79	48.25	50.95	2.70	3922.14
RW - 1	03/24/05	3970.79	48.25	50.95	2.70	3922.14
RW - 1	03/31/05	3970.79	48.28	50.91	2.63	3922.12
RW - 1	06/22/05	3970.79	48.28	50.18	1.90	3922.23
RW - 1	07/21/05	3970.79	48.15	50.82	2.67	3922.24
RW - 1	08/03/05	3970.79	48.13	50.76	2.63	3922.27
RW - 1	08/12/05	3970.79	48.13	50.78	2.65	3922.26
RW - 1	08/15/05	3970.79	48.22	50.24	2.02	3922.27
RW - 1	08/22/05	3970.79	48.13	50.51	2.38	3922.30
RW - 1	08/30/05	3970.79	48.14	50.62	2.48	3922.28
RW - 1	09/07/05	3970.79	48.14	50.55	2.41	3922.29
RW - 1	09/14/05	3970.79	48.20	50.55	2.35	3922.24
RW - 1	09/20/05	3970.79	48.16	50.40	2.24	3922.29
RW - 1	09/21/05	3970.79	48.22	50.56	2.34	3922.22
RW - 1	09/28/05	3970.79	48.12	50.55	2.43	3922.31
RW - 1	10/06/05	3970.79	48.16	50.51	2.35	3922.28
RW - 1	10/13/05	3970.79	48.15	50.49	2.34	3922.29
RW - 1	10/20/05	3970.79	48.19	50.40	2.21	3922.27
RW - 1	10/26/05	3970.79	48.18	50.35	2.17	3922.28
RW - 1	11/03/05	3970.79	48.10	50.50	2.40	3922.33
RW - 1	11/10/05	3970.79	48.11	50.54	2.43	3922.32
RW - 1	11/16/05	3970.79	48.13	50.40	2.27	3922.32
RW - 1	11/23/05	3970.79	48.17	50.37	2.20	3922.29
RW - 1	11/28/05	3970.79	48.08	50.50	2.42	3922.35
RW - 1	12/05/05	3970.79	48.19	50.30	2.11	3922.28
RW - 1	12/12/05	3970.79	48.15	50.33	2.18	3922.31
RW - 1	12/16/05	3970.79	48.84	49.98	1.14	3921.78
RW - 1	12/19/05	3970.79	48.21	50.35	2.14	3922.26
RW - 1	12/29/05	3970.79	48.12	50.41	2.29	3922.33
RW - 1	01/04/06	3970.79	48.14	50.40	2.26	3922.31
RW - 1	01/10/06	3970.79	48.10	50.53	2.43	3922.33
RW - 1	01/17/06	3970.79	48.10	50.45	2.35	3922.34
RW - 1	01/26/06	3970.79	48.10	50.45	2.35	3922.34
RW - 1	01/31/06	3970.79	48.10	50.42	2.32	3922.34
RW - 1	02/07/06	3970.79	48.11	50.34	2.23	3922.35
RW - 1	02/09/06	3970.79	48.12	50.43	2.31	3922.32
RW - 1	02/13/06	3970.79	48.12	50.45	2.33	3922.32
RW - 1	02/22/06	3970.79	48.13	50.47	2.34	3922.31
RW - 1	02/28/06	3970.79	48.11	50.46	2.35	3922.33
RW - 1	03/07/06	3970.79	48.13	50.39	2.26	3922.32
RW - 1	03/15/06	3970.79	48.09	50.36	2.27	3922.36
RW - 1	03/20/06	3970.79	48.10	50.27	2.17	3922.36

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	03/22/06	3970.79	48.14	50.43	2.29	3922.31
RW - 1	03/29/06	3970.79	48.09	50.40	2.31	3922.35
RW - 1	04/11/06	3970.79	47.96	50.37	2.41	3922.47
RW - 1	04/18/06	3970.79	48.02	50.31	2.29	3922.43
RW - 1	04/25/06	3970.79	48.05	50.29	2.24	3922.40
RW - 1	05/02/06	3970.79	48.00	50.31	2.31	3922.44
RW - 1	05/09/06	3970.79	48.03	50.21	2.18	3922.43
RW - 1	05/16/06	3970.79	48.05	50.22	2.17	3922.41
RW - 1	05/23/06	3970.79	48.03	50.20	2.17	3922.43
RW - 1	05/31/06	3970.79	48.06	50.18	2.12	3922.41
RW - 1	06/06/06	3970.79	48.10	50.09	1.99	3922.39
RW - 1	06/13/06	3970.79	48.05	50.05	2.00	3922.44
RW - 1	06/20/06	3970.79	48.10	50.10	2.00	3922.39
RW - 1	06/21/06	3970.79	48.26	49.08	0.82	3922.41
RW - 1	07/06/06	3970.79	48.09	50.18	2.09	3922.39
RW - 1	07/12/06	3970.79	48.06	50.17	2.11	3922.41
RW - 1	07/20/06	3970.79	49.89	50.16	0.27	3920.86
RW - 1	07/25/06	3970.79	48.01	50.21	2.20	3922.45
RW - 1	08/01/06	3970.79	48.01	50.23	2.22	3922.45
RW - 1	08/16/06	3970.79	48.01	50.25	2.24	3922.44
RW - 1	08/23/06	3970.79	48.06	50.11	2.05	3922.42
RW - 1	08/28/06	3970.79	48.03	50.03	2.00	3922.46
RW - 1	09/12/06	3970.79	48.09	49.80	1.71	3922.44
RW - 1	09/22/06	3970.79	48.14	49.90	1.76	3922.39
RW - 1	09/27/06	3970.79	48.20	49.60	1.40	3922.38
RW - 1	10/06/06	3970.79	48.04	50.00	1.96	3922.46
RW - 1	10/10/06	3970.79	48.20	49.34	1.14	3922.42
RW - 1	10/16/06	3970.79	48.13	49.52	1.39	3922.45
RW - 1	10/26/06	3970.79	48.05	49.83	1.78	3922.47
RW - 1	11/03/06	3970.79	48.18	49.70	1.52	3922.38
RW - 1	11/09/06	3970.79	48.10	49.60	1.50	3922.47
RW - 1	11/16/06	3970.79	48.19	49.16	0.97	3922.45
RW - 1	11/22/06	3970.79	48.20	49.56	1.36	3922.39
RW - 1	12/04/06	3970.79	48.10	49.84	1.74	3922.43
RW - 1	12/08/06	3970.79	48.08	49.99	1.91	3922.42
RW - 1	12/15/06	3970.79	48.09	49.53	1.44	3922.48
RW - 1	01/05/07	3970.79	48.05	50.10	2.05	3922.43
RW - 1	01/12/07	3970.79	48.13	49.70	1.57	3922.42
RW - 1	01/18/07	3970.79	48.11	49.51	1.40	3922.47
RW - 1	01/24/07	3970.79	48.18	49.46	1.28	3922.42
RW - 1	01/29/07	3970.79	48.21	49.33	1.12	3922.41
RW - 1	02/09/07	3970.79	48.03	48.05	0.02	3922.76
RW - 1	02/16/07	3970.79	48.10	49.77	1.67	3922.44
RW - 1	03/02/07	3970.79	48.00	49.82	1.82	3922.52

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	03/14/07	3970.79	48.11	49.20	1.09	3922.52
RW - 1	03/26/07	3970.79	48.09	49.42	1.33	3922.50
RW - 1	04/03/07	3970.79	47.99	49.80	1.81	3922.53
RW - 1	04/09/07	3970.79	48.01	49.60	1.59	3922.54
RW - 1	04/26/07	3970.79	47.96	49.87	1.91	3922.54
RW - 1	04/30/07	3970.79	48.14	49.05	0.91	3922.51
RW - 1	05/11/07	3970.79	48.01	49.65	1.64	3922.53
RW - 1	05/16/07	3970.79	48.14	49.07	0.93	3922.51
RW - 1	05/22/07	3970.79	48.08	49.03	0.95	3922.57
RW - 1	05/29/07	3970.79	48.06	49.29	1.23	3922.55
RW - 1	06/01/07	3970.79	48.00	49.46	1.46	3922.57
RW - 1	06/08/07	3970.79	48.03	49.37	1.34	3922.56
RW - 1	06/11/07	3970.79	48.17	49.00	0.83	3922.50
RW - 1	06/20/07	3970.79	48.00	49.50	1.50	3922.57
RW - 1	07/10/07	3970.79	48.01	49.56	1.55	3922.55
RW - 1	07/20/07	3970.79	47.99	49.60	1.61	3922.56
RW - 1	07/25/07	3970.79	48.04	49.22	1.18	3922.57
RW - 1	08/01/07	3970.79	48.02	49.24	1.22	3922.59
RW - 1	08/10/07	3970.79	48.02	49.37	1.35	3922.57
RW - 1	08/15/07	3970.79	48.03	49.16	1.13	3922.59
RW - 1	08/30/07	3970.79	47.97	49.61	1.64	3922.57
RW - 1	08/31/07	3970.79	47.97	49.61	1.64	3922.57
RW - 1	09/19/07	3970.79	47.92	49.73	1.81	3922.60
RW - 1	09/27/07	3970.79	47.98	49.39	1.41	3922.60
RW - 1	10/01/07	3970.79	48.02	49.06	1.04	3922.61
RW - 1	10/19/07	3970.79	47.92	49.62	1.70	3922.62
RW - 1	10/26/07	3970.79	47.97	49.39	1.42	3922.61
RW - 1	11/12/07	3970.79	47.93	49.58	1.65	3922.61
RW - 1	11/16/07	3970.79	47.92	49.31	1.39	3922.66
RW - 1	11/29/07	3970.79	47.92	50.01	2.09	3922.56
RW - 1	12/13/07	3970.79	47.90	49.54	1.64	3922.64
RW - 1	01/10/08	3970.79	47.90	49.50	1.60	3922.65
RW - 1	01/17/08	3970.79	47.92	49.37	1.45	3922.65
RW - 1	01/22/08	3970.79	47.90	49.43	1.53	3922.66
RW - 1	02/06/08	3970.79	47.09	49.05	1.96	3923.41
RW - 1	2/12/08 #1	3970.79	48.01	48.91	0.90	3922.65
RW - 1	2/12/08 #2	3970.79	48.19	48.21	0.02	3922.60
RW - 1	2/27/08 #1	3970.79	48.00	48.98	0.98	3922.64
RW - 1	2/27/08 #2	3970.79	48.15	48.21	0.06	3922.63
RW - 1	03/07/08	3970.79	47.92	49.21	1.29	3922.68
RW - 1	3/12/08 #1	3970.79	47.92	49.21	1.29	3922.68
RW - 1	3/12/08 #2	3970.79	48.04	48.31	0.27	3922.71
RW - 1	3/20/2008#1	3970.79	48.23	48.50	0.27	3922.52
RW - 1	3/20/08#2	3970.79	48.10	48.45	0.35	3922.64

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	3/23/08 #1	3970.79	47.99	48.99	1.00	3922.65
RW - 1	3/23/08 #2	3970.79	48.17	48.21	0.04	3922.61
RW - 1	4/2/08 #1	3970.79	47.98	48.92	0.94	3922.67
RW - 1	4/2/08 #2	3970.79	48.09	48.42	0.33	3922.65
RW - 1	4/9/08 #1	3970.79	47.95	48.98	1.03	3922.69
RW - 1	4/9/08 #2	3970.79	48.12	48.15	0.03	3922.67
RW - 1	04/16/08	3970.79	47.98	48.87	0.89	3922.68
RW - 1	04/23/08	3970.79	47.98	48.91	0.93	3922.67
RW - 1	04/30/08	3970.79	47.92	49.07	1.15	3922.70
RW - 1	05/29/08	3970.79	47.97	48.85	0.88	3922.69
RW - 1	06/02/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	06/03/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	06/11/08	3970.79	47.91	48.99	1.08	3922.72
RW - 1	06/18/08	3970.79	47.96	48.84	0.88	3922.70
RW - 1	06/23/08	3970.79	47.99	48.70	0.71	3922.69
RW - 1	07/01/08	3970.79	47.94	49.02	1.08	3922.69
RW - 1	07/09/08	3970.79	47.95	48.91	0.96	3922.70
RW - 1	07/15/08	3970.79	47.98	48.76	0.78	3922.69
RW - 1	07/22/08	3970.79	47.94	49.00	1.06	3922.69
RW - 1	08/02/08	3970.79	47.92	48.96	1.04	3922.71
RW - 1	08/13/08	3970.79	47.90	49.03	1.13	3922.72
RW - 1	09/03/08	3970.79	47.83	49.22	1.39	3922.75
RW - 1	09/11/08	3970.79	47.94	48.86	0.92	3922.71
RW - 1	09/19/08	3970.79	47.91	48.85	0.94	3922.74
RW - 1	09/26/08	3970.79	47.89	49.00	1.11	3922.73
RW - 1	10/10/08	3970.79	47.91	48.84	0.93	3922.74
RW - 1	10/17/08	3970.79	47.74	47.93	0.19	3923.02
RW - 1	10/21/08	3970.79	47.95	48.52	0.57	3922.75
RW - 1	10/30/08	3970.79	47.89	48.95	1.06	3922.74
RW - 1	11/04/08	3970.79	48.00	48.61	0.61	3922.70
RW - 1	11/18/08	3970.79	47.91	49.03	1.12	3922.71
RW - 1	11/25/08	3970.79	47.90	49.12	1.22	3922.71
RW - 1	11/25/08	3970.79	48.70	48.72	0.02	3922.09
RW - 1	12/10/08	3970.79	47.87	49.05	1.18	3922.74
RW - 1	12/18/08	3970.79	47.84	49.10	1.26	3922.76
RW - 1	01/06/09	3970.79	47.84	49.07	1.23	3922.77
RW - 1	01/14/09	3970.79	47.09	48.75	1.66	3923.45
RW - 1	01/21/09	3970.79	47.91	48.84	0.93	3922.74
RW - 1	01/22/09	3970.79	48.00	48.21	0.21	3922.76
RW - 1	01/30/09	3970.79	47.91	48.74	0.83	3922.76
RW - 1	02/03/09	3970.79	47.99	48.57	0.58	3922.71
RW - 1	02/12/09	3970.79	47.89	48.91	1.02	3922.75
RW - 1	02/19/09	3970.79	47.85	49.00	1.15	3922.77
RW - 1	03/04/09	3970.79	47.92	48.97	1.05	3922.71

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	03/06/09	3970.79	47.82	49.00	1.18	3922.79
RW - 1	03/11/09	3970.79	47.94	48.60	0.66	3922.75
RW - 1	03/16/09	3970.79	47.95	49.00	1.05	3922.68
RW - 1	03/19/09	3970.79	47.90	48.72	0.82	3922.77
RW - 1	03/24/09	3970.79	47.89	48.49	0.60	3922.81
RW - 1	04/03/09	3970.79	47.85	48.90	1.05	3922.78
RW - 1	04/15/09	3970.79	47.86	48.80	0.94	3922.79
RW - 1	04/17/09	3970.79	47.98	48.25	0.27	3922.77
RW - 1	04/22/09	3970.79	47.83	48.88	1.05	3922.80
RW - 1	04/29/09	3970.79	47.84	48.79	0.95	3922.81
RW - 1	05/20/09	3970.79	47.82	48.88	1.06	3922.81
RW - 1	06/09/09	3970.79	47.82	48.95	1.13	3922.80
RW - 1	06/17/09	3970.79	47.88	48.81	0.93	3922.77
RW - 1	06/23/09	3970.79	47.83	48.87	1.04	3922.80
RW - 1	07/01/09	3970.79	47.82	48.88	1.06	3922.81
RW - 1	07/08/09	3970.79	47.89	48.61	0.72	3922.79
RW - 1	07/15/09	3970.79	47.86	48.64	0.78	3922.81
RW - 1	07/17/09	3970.79	47.91	48.60	0.69	3922.78
RW - 1	07/23/09	3970.79	47.83	48.88	1.05	3922.80
RW - 1	07/24/09	3970.79	47.96	48.17	0.21	3922.80
RW - 1	07/30/09	3970.79	47.91	48.60	0.69	3922.78
RW - 1	08/04/09	3970.79	47.91	48.48	0.57	3922.79
RW - 1	08/12/09	3970.79	47.88	48.73	0.85	3922.78
RW - 1	08/20/09	3970.79	47.92	48.75	0.83	3922.75
RW - 1	08/26/09	3970.79	47.83	48.80	0.97	3922.81
RW - 1	09/02/09	3970.79	47.87	48.75	0.88	3922.79
RW - 1	09/09/09	3970.79	47.90	48.61	0.71	3922.78
RW - 1	09/14/09	3970.79	47.92	48.45	0.53	3922.79
RW - 1	09/21/09	3970.79	47.86	48.71	0.85	3922.80
RW - 1	10/01/09	3970.79	47.88	48.84	0.96	3922.77
RW - 1	10/08/09	3970.79	47.90	48.76	0.86	3922.76
RW - 1	10/14/09	3970.79	47.87	48.70	0.83	3922.80
RW - 1	10/21/09	3970.79	47.82	48.59	0.77	3922.85
RW - 1	10/28/09	3970.79	47.85	48.69	0.84	3922.81
RW - 1	11/04/09	3970.79	47.90	48.63	0.73	3922.78
RW - 1	11/11/09	3970.79	47.87	48.60	0.73	3922.81
RW - 1	11/18/09	3970.79	47.88	48.61	0.73	3922.80
RW - 1	11/25/09	3970.79	47.90	48.58	0.68	3922.79
RW - 1	12/02/09	3970.79	47.86	48.80	0.94	3922.79
RW - 1	12/10/09	3970.79	47.87	48.61	0.74	3922.81
RW - 1	12/17/09	3970.79	47.94	48.59	0.65	3922.75
RW - 1	12/21/09	3970.79	47.87	48.52	0.65	3922.82
RW - 1	12/30/09	3970.79	48.02	48.49	0.47	3922.70
RW - 1	01/07/10	3970.79	47.95	48.20	0.25	3922.80

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 1	01/18/10	3970.79	47.91	48.28	0.37	3922.82
RW - 1	02/02/10	3970.79	47.88	48.55	0.67	3922.81
RW - 1	02/11/10	3970.79	47.84	48.51	0.67	3922.85
RW - 1	02/18/10	3970.79	47.82	48.60	0.78	3922.85
RW - 1	02/25/10	3970.79	47.99	48.34	0.35	3922.75
RW - 1	03/02/10	3970.79	48.05	48.28	0.23	3922.71
RW - 1	03/04/10	3970.79	47.97	48.10	0.13	3922.80
RW - 1	03/10/10	3970.79	47.93	48.26	0.33	3922.81
RW - 1	03/12/10	3970.79	47.98	48.37	0.39	3922.75
RW - 1	03/15/10	3970.79	48.00	48.10	0.10	3922.78
RW - 1	03/18/10	3970.79	47.88	48.42	0.54	3922.83
RW - 1	03/22/10	3970.79	48.00	48.23	0.23	3922.76
RW - 1	05/17/10	3970.79	50.39	50.48	0.09	3920.39
RW - 1	05/20/10	3970.79	50.08	50.39	0.31	3920.66
RW - 1	03/04/11	3970.79	50.30	50.62	0.32	3920.44
RW - 1	05/12/11	3970.79	48.55	49.30	0.75	3922.13
RW - 1	08/02/11	3970.79	51.80	52.10	0.30	3918.95
RW - 1	08/09/11	3970.79	49.80	50.42	0.62	3920.90
RW - 1	08/12/11	3970.79	-	49.20	0.00	3921.59
RW - 1	08/15/11	3970.79	-	49.20	0.00	3921.59
RW - 1	08/23/11	3970.79	51.60	52.30	0.70	3919.09
RW - 1	08/26/11	3970.79	48.11	48.90	0.79	3922.56
RW - 1	11/22/11	3970.79	49.10	50.04	0.94	3921.55
RW - 1	12/02/11	3970.79	47.82	48.80	0.98	3922.82
RW - 1	12/29/11	3970.79	47.93	48.66	0.73	3922.75
RW - 1	01/26/12	3970.79	48.75	50.46	1.71	3921.78
RW - 1	02/28/12	3970.79	49.24	51.24	2.00	3921.25
RW - 1	05/17/12	3970.79	47.82	49.02	1.20	3922.79
RW - 1	08/01/12	3970.79	47.94	49.13	1.19	3922.67
RW - 1	10/25/12	3970.79	47.96	49.39	1.43	3922.62
RW - 1	11/29/12	3970.79	47.97	49.62	1.65	3922.57
RW - 1	02/11/13	3970.79	47.86	49.79	1.93	3922.64
RW - 1	04/11/13	3970.79	-	48.41	0.00	3922.38
RW - 1	05/06/13	3970.79	47.98	49.25	1.27	3922.62
RW - 1	05/29/13	3970.79	-	48.33	0.00	3922.46
RW - 1	06/26/13	3970.79	-	49.73	0.00	3921.06
RW - 1	07/31/13	3970.79	48.13	49.15	1.02	3922.51
RW - 1	08/06/13	3970.79	48.30	48.37	0.07	3922.48
RW - 1	09/30/13	3970.79	48.21	48.96	0.75	3922.47
RW - 1	11/18/13	3970.79	48.23	48.76	0.53	3922.48
RW - 2	05/20/10	-	-	54.42	0.00	-
RW - 2	03/04/11	-	sheen	54.05	0.00	-
RW - 2	05/12/11	-	-	52.69	0.00	-

TABLE 1
GROUNDWATER ELEVATION DATA
PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 2	08/02/11	-	sheen	55.00	0.00	-
RW - 2	08/09/11	-	sheen	55.50	0.00	-
RW - 2	08/12/11	-	sheen	54.07	0.00	-
RW - 2	08/15/11	-	sheen	54.01	0.00	-
RW - 2	08/23/11	-	sheen	53.92	0.00	-
RW - 2	08/26/11	-	sheen	52.75	0.00	-
RW - 2	12/02/11	-	52.60	52.93	0.33	-
RW - 2	12/29/11	-	52.62	52.96	0.34	-
RW - 2	01/26/12	-	52.89	53.13	0.24	-
RW - 2	02/28/12	-	52.55	53.18	0.63	-
RW - 2	05/17/12	-	52.47	53.31	0.84	-
RW - 2	08/01/12	-	52.59	53.42	0.83	-
RW - 2	10/25/12	-	52.65	53.53	0.88	-
RW - 2	11/29/12	-	52.73	53.56	0.83	-
RW - 2	02/11/13	-	52.76	52.86	0.10	-
RW - 2	04/11/13	-	53.05	53.07	0.02	-
RW - 2	05/06/13	-	52.77	52.89	0.12	-
RW - 2	05/29/13	-	53.00	53.09	0.09	-
RW - 2	06/26/13	-	53.04	53.29	0.25	-
RW - 2	07/31/13	-	52.89	53.09	0.20	-
RW - 2	08/06/13	-	52.89	53.03	0.14	-
RW - 2	09/30/13	-	52.95	53.14	0.19	-
RW - 2	11/18/13	-	52.90	53.18	0.28	-
RW - 3	05/20/10	-	54.73	58.80	4.07	-
RW - 3	03/04/11	-	54.66	55.70	1.04	-
RW - 3	05/12/11	-	53.84	54.65	0.81	-
RW - 3	08/02/11	-	54.35	55.32	0.97	-
RW - 3	08/09/11	-	54.24	55.50	1.26	-
RW - 3	08/12/11	-	54.26	55.65	1.39	-
RW - 3	08/15/11	-	54.24	55.50	1.26	-
RW - 3	08/23/11	-	53.92	54.85	0.93	-
RW - 3	08/26/11	-	53.07	53.95	0.88	-
RW - 3	12/02/11	-	53.01	53.97	0.96	-
RW - 3	12/29/11	-	53.11	53.84	0.73	-
RW - 3	01/26/12	-	53.55	54.08	0.53	-
RW - 3	02/28/12	-	53.00	54.14	1.14	-
RW - 3	05/17/12	-	53.10	53.62	0.52	-
RW - 3	08/01/12	-	53.22	53.74	0.52	-
RW - 3	10/25/12	-	53.13	54.32	1.19	-
RW - 3	11/29/12	-	53.26	53.87	0.61	-
RW - 3	02/11/13	-	53.16	54.00	0.84	-
RW - 3	04/11/13	-	53.44	54.19	0.75	-
RW - 3	05/06/13	-	53.18	54.10	0.92	-

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
TNM 97-04 (TOWNSEND)
LEA COUNTY, NEW MEXICO

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
RW - 3	05/29/13	-	53.35	54.16	0.81	-
RW - 3	06/26/13	-	53.38	54.26	0.88	-
RW - 3	07/31/13	-	53.20	54.55	1.35	-
RW - 3	08/06/13	-	53.19	54.66	1.47	-
RW - 3	09/30/13	-	53.27	54.71	1.44	-
RW - 3	11/18/13	-	52.22	53.72	1.50	-
RW - 4	05/20/10	-	55.62	59.23	3.61	-
RW - 4	03/04/11	-	53.13	55.08	1.95	-
RW - 4	05/12/11	-	53.58	55.35	1.77	-
RW - 4	08/02/11	-	55.71	58.75	3.04	-
RW - 4	08/09/11	-	55.02	58.91	3.89	-
RW - 4	08/12/11	-	54.40	58.55	4.15	-
RW - 4	08/15/11	-	55.02	58.91	3.89	-
RW - 4	08/23/11	-	54.42	57.62	3.20	-
RW - 4	08/26/11	-	52.93	55.20	2.27	-
RW - 4	12/02/11	-	52.69	55.52	2.83	-
RW - 4	12/29/11	-	52.83	55.21	2.38	-
RW - 4	01/26/12	-	52.99	55.36	2.37	-
RW - 4	02/28/12	-	52.94	55.00	2.06	-
RW - 4	05/17/12	-	52.85	54.81	1.96	-
RW - 4	08/01/12	-	52.97	54.92	1.95	-
RW - 4	10/25/12	-	53.03	54.91	1.88	-
RW - 4	11/29/12	-	53.07	55.00	1.93	-
RW-4	02/11/13	-	52.99	54.92	1.93	
RW - 4	04/11/13	-	53.22	55.13	1.91	-
RW - 4	05/06/13	-	53.07	54.76	1.69	-
RW - 4	05/29/13	-	53.19	55.05	1.86	-
RW - 4	06/26/13	-	52.83	56.36	3.53	-
RW - 4	07/31/13	-	52.47	57.93	5.46	-
RW - 4	08/06/13	-	52.40	58.42	6.02	-
RW - 4	09/30/13	-	52.72	57.32	4.60	-
RW - 4	11/18/13	-	53.15	55.15	2.00	-

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p -XYLENES	o -XYLENES
NMOCD REGULATORY GUIDELINES		0.01	0.75	0.75	0.62	
MW - 1	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	04/05/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	05/31/01	<0.001	<0.001	<0.001	<0.001	
MW - 1	08/23/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	02/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	06/12/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	08/26/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	11/21/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	08/18/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 1	12/01/03	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 1	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 1	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 1	03/22/05	Not Sampled on Current Sample Schedule				
MW - 1	06/22/05	Not Sampled on Current Sample Schedule				
MW - 1	09/14/05	Plugged and Abandoned				
MW - 2	03/22/05	Not Sampled Due to PSH in Well				
MW - 2	06/22/05	Not Sampled Due to PSH in Well				
MW - 2	09/21/05	Not Sampled Due to PSH in Well				
MW - 2	12/16/05	Not Sampled Due to PSH in Well				
MW - 2	03/20/06	Not Sampled Due to PSH in Well				
MW - 2	06/21/06	Not Sampled Due to PSH in Well				
MW - 2	09/27/06	Not Sampled Due to PSH in Well				
MW - 2	12/04/06	Not Sampled Due to PSH in Well				
MW - 2	03/14/07	Not Sampled Due to PSH in Well				
MW - 2	05/29/07	Not Sampled Due to PSH in Well				
MW - 2	08/30/07	Not Sampled Due to PSH in Well				
MW - 2	11/12/07	Not Sampled Due to PSH in Well				
MW - 2	03/07/08	Not Sampled Due to PSH in Well				
MW - 2	06/02/08	Not Sampled Due to PSH in Well				
MW - 2	09/03/08	Not Sampled Due to PSH in Well				
MW - 2	12/10/08	13.80	5.200	0.864	2.700	
MW - 2	02/19/09	Not Sampled Due to PSH in Well				
MW - 2	05/20/09	Not Sampled Due to PSH in Well				
MW - 2	08/12/09	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 2	11/25/09	12.00	6.380	0.834	2.940	
MW - 2	02/11/10	Not Sampled Due to PSH in Well				
MW - 2	05/17/10	Not Sampled Due to PSH in Well				
MW - 2	08/16/10	Not Sampled Due to PSH in Well				
MW - 2	11/10/10	Not Sampled Due to PSH in Well				
MW - 2	02/28/11	Not Sampled Due to PSH in Well				
MW - 2	05/12/11	Not Sampled Due to PSH in Well				
MW - 2	08/15/11	Not Sampled Due to PSH in Well				
MW - 2	11/22/11	Not Sampled Due to PSH in Well				
MW - 2	02/28/12	Not Sampled Due to PSH in Well				
MW - 2	05/17/12	Not Sampled Due to PSH in Well				
MW - 2	08/01/12	Not Sampled Due to PSH in Well				
MW - 2	11/29/12	Not Sampled Due to PSH in Well				
MW - 2	02/11/13	Not Sampled Due to PSH in Well				
MW - 2	05/06/13	Not Sampled Due to PSH in Well				
MW - 2	08/06/13	Not Sampled Due to PSH in Well				
MW - 2	11/18/13	Not Sampled Due to PSH in Well				
MW - 3	03/22/05	Not Sampled Due to PSH in Well				
MW - 3	06/22/05	Not Sampled Due to PSH in Well				
MW - 3	09/21/05	Not Sampled Due to PSH in Well				
MW - 3	12/16/05	Not Sampled Due to PSH in Well				
MW - 3	03/20/06	Not Sampled Due to PSH in Well				
MW - 3	06/21/06	Not Sampled Due to PSH in Well				
MW - 3	09/27/06	Not Sampled Due to PSH in Well				
MW - 3	12/04/06	Not Sampled Due to PSH in Well				
MW - 3	03/14/07	Not Sampled Due to PSH in Well				
MW - 3	05/29/07	Not Sampled Due to PSH in Well				
MW - 3	08/30/07	Not Sampled Due to PSH in Well				
MW - 3	11/12/07	Not Sampled Due to PSH in Well				
MW - 3	03/07/08	Not Sampled Due to PSH in Well				
MW - 3	06/02/08	Not Sampled Due to PSH in Well				
MW - 3	09/03/08	Not Sampled Due to PSH in Well				
MW - 3	12/10/08	10.10	6.40	1.040	2.80	
MW - 3	02/19/09	Not Sampled Due to PSH in Well				
MW - 3	05/20/09	Not Sampled Due to PSH in Well				
MW - 3	08/12/09	Not Sampled Due to PSH in Well				
MW - 3	11/25/09	16.80	17.20	4.690	14.20	
MW - 3	02/11/10	Not Sampled Due to PSH in Well				
MW - 3	05/17/10	Not Sampled Due to PSH in Well				
MW - 3	08/16/10	Not Sampled Due to PSH in Well				
MW - 3	11/10/10	Not Sampled Due to PSH in Well				
MW - 3	02/28/11	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 3	05/12/11	Not Sampled Due to PSH in Well				
MW - 3	08/15/11	Not Sampled Due to PSH in Well				
MW - 3	11/22/11	Not Sampled Due to PSH in Well				
MW - 3	02/28/12	Not Sampled Due to PSH in Well				
MW - 3	05/17/12	Not Sampled Due to PSH in Well				
MW - 3	08/01/12	Not Sampled Due to PSH in Well				
MW - 3	11/29/12	Not Sampled Due to PSH in Well				
MW - 3	02/11/13	Not Sampled Due to PSH in Well				
MW - 3	05/06/13	Not Sampled Due to PSH in Well				
MW - 3	05/06/13	Not Sampled Due to PSH in Well				
MW - 3	11/18/13	Not Sampled Due to PSH in Well				
MW - 4	03/22/05	Not Sampled Due to PSH in Well				
MW - 4	06/22/05	Not Sampled Due to PSH in Well				
MW - 4	09/21/05	Not Sampled Due to PSH in Well				
MW - 4	12/16/05	Not Sampled Due to PSH in Well				
MW - 4	03/20/06	Not Sampled Due to PSH in Well				
MW - 4	06/21/06	Not Sampled Due to PSH in Well				
MW - 4	09/27/06	Not Sampled Due to PSH in Well				
MW - 4	12/04/06	Not Sampled Due to PSH in Well				
MW - 4	03/14/07	Not Sampled Due to PSH in Well				
MW - 4	05/29/07	Not Sampled Due to PSH in Well				
MW - 4	08/30/07	Not Sampled Due to PSH in Well				
MW - 4	11/12/07	Not Sampled Due to PSH in Well				
MW - 4	03/07/08	Not Sampled Due to PSH in Well				
MW - 4	06/02/08	Not Sampled Due to PSH in Well				
MW - 4	09/03/08	Not Sampled Due to PSH in Well				
MW - 4	12/10/08	1.930	0.996	0.613	1.620	
MW - 4	02/19/09	Not Sampled Due to PSH in Well				
MW - 4	05/20/09	Not Sampled Due to PSH in Well				
MW - 4	08/12/09	Not Sampled Due to PSH in Well				
MW - 4	11/25/09	2.000	1.060	0.618	1.340	
MW - 4	02/11/10	2.150	1.230	0.825	2.150	
MW - 4	05/17/10	0.747	0.125	0.335	0.549	
MW - 4	08/16/10	1.180	0.237	0.445	0.599	
MW - 4	11/10/10	0.583	0.174	0.370	0.762	
MW - 4	02/28/11	1.140	0.343	0.556	0.999	
MW - 4	05/12/11	1.020	0.292	0.517	1.210	
MW - 4	08/15/11	0.838	0.084	0.355	0.387	
MW - 4	11/22/11	0.684	0.061	0.435	1.070	
MW - 4	02/28/12	0.614	0.073	0.366	0.865	
MW - 4	05/17/12	0.901	0.071	0.474	0.929	
MW - 4	08/01/12	0.632	<0.050	0.396	0.776	

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 4	11/29/12	0.188	0.0042	0.135	0.308	
MW - 4	02/11/13	0.262	<0.005	0.329	0.790	
MW - 4	05/06/13	0.396	<0.005	0.480	1.55	
MW - 4	08/06/13	0.259	<0.005	0.406	1.05	
MW - 4	11/19/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 4	12/08/13	0.0777	<0.0500	<0.0500	<0.150	
MW - 5	03/22/05	Not Sampled Due to PSH in Well				
MW - 5	06/22/05	Not Sampled Due to PSH in Well				
MW - 5	09/21/05	Not Sampled Due to PSH in Well				
MW - 5	12/16/05	Not Sampled Due to PSH in Well				
MW - 5	03/20/06	Not Sampled Due to PSH in Well				
MW - 5	06/21/06	Not Sampled Due to PSH in Well				
MW - 5	09/27/06	Not Sampled Due to PSH in Well				
MW - 5	12/04/06	Not Sampled Due to PSH in Well				
MW - 5	03/14/07	Not Sampled Due to PSH in Well				
MW - 5	05/29/07	Not Sampled Due to PSH in Well				
MW - 5	08/30/07	Not Sampled Due to PSH in Well				
MW - 5	11/12/07	Not Sampled Due to PSH in Well				
MW - 5	03/07/08	Not Sampled Due to PSH in Well				
MW - 5	06/02/08	Not Sampled Due to PSH in Well				
MW - 5	09/03/08	Not Sampled Due to PSH in Well				
MW - 5	12/10/08	18.90	9.030	1.490	3.520	
MW - 5	02/19/09	Not Sampled Due to PSH in Well				
MW - 5	05/20/09	Not Sampled Due to PSH in Well				
MW - 5	08/12/09	Not Sampled Due to PSH in Well				
MW - 5	11/25/09	15.60	5.700	1.080	2.290	
MW - 5	02/11/10	Not Sampled Due to PSH in Well				
MW - 5	05/17/10	Not Sampled Due to PSH in Well				
MW - 5	08/16/10	Not Sampled Due to PSH in Well				
MW - 5	11/10/10	Not Sampled Due to PSH in Well				
MW - 5	02/28/11	Not Sampled Due to PSH in Well				
MW - 5	05/12/11	Not Sampled Due to PSH in Well				
MW - 5	08/15/11	Not Sampled Due to PSH in Well				
MW - 5	11/22/11	Not Sampled Due to PSH in Well				
MW - 5	02/28/12	Not Sampled Due to PSH in Well				
MW - 5	05/17/12	Not Sampled Due to PSH in Well				
MW - 5	08/01/12	Not Sampled Due to PSH in Well				
MW - 5	11/29/12	Not Sampled Due to PSH in Well				
MW - 5	02/11/13	Not Sampled Due to PSH in Well				
MW - 5	05/06/13	Not Sampled Due to PSH in Well				
MW - 5	08/06/13	Not Sampled Due to PSH in Well				
MW - 5	11/18/13	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 6	03/22/05	Not Sampled Due to PSH in Well				
MW - 6	06/22/05	Not Sampled Due to PSH in Well				
MW - 6	09/21/05	Not Sampled Due to PSH in Well				
MW - 6	12/16/05	Not Sampled Due to PSH in Well				
MW - 6	03/20/06	Not Sampled Due to PSH in Well				
MW - 6	06/21/06	Not Sampled Due to PSH in Well				
MW - 6	09/27/06	Not Sampled Due to PSH in Well				
MW - 6	12/04/06	Not Sampled Due to PSH in Well				
MW - 6	03/14/07	Not Sampled Due to PSH in Well				
MW - 6	05/29/07	Not Sampled Due to PSH in Well				
MW - 6	08/30/07	Not Sampled Due to PSH in Well				
MW - 6	11/12/07	Not Sampled Due to PSH in Well				
MW - 6	03/07/08	Not Sampled Due to PSH in Well				
MW - 6	06/02/08	Not Sampled Due to PSH in Well				
MW - 6	09/03/08	Not Sampled Due to PSH in Well				
MW - 6	12/10/08	26.00	3.950	1.230	2.850	
MW - 6	02/19/09	Not Sampled Due to PSH in Well				
MW - 6	05/20/09	Not Sampled Due to PSH in Well				
MW - 6	08/12/09	Not Sampled Due to PSH in Well				
MW - 6	11/25/09	19.80	5.060	1.010	2.330	
MW - 6	02/11/10	Not Sampled Due to PSH in Well				
MW - 6	05/17/10	Not Sampled Due to PSH in Well				
MW - 6	08/16/10	Not Sampled Due to PSH in Well				
MW - 6	11/10/10	4.04	2.830	0.494	1.710	
MW - 6	02/28/11	3.77	2.320	0.330	0.926	
MW - 6	05/12/11	1.37	0.637	0.123	0.503	
MW - 6	08/15/11	2.10	0.945	0.0741	0.612	
MW - 6	11/22/11	3.59	1.460	0.3170	1.100	
MW - 6	02/28/12	4.54	1.560	0.2890	1.200	
MW - 6	05/17/12	Not Sampled Due to PSH in Well				
MW - 6	08/01/12	Not Sampled Due to PSH in Well				
MW - 6	11/29/12	Not Sampled Due to PSH in Well				
MW - 6	02/11/13	Not Sampled Due to PSH in Well				
MW - 6	05/06/13	Not Sampled Due to PSH in Well				
MW - 6	08/06/13	Not Sampled Due to PSH in Well				
MW - 6	11/18/13	Not Sampled Due to PSH in Well				
MW - 7	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	02/21/01	0.005	<0.001	<0.001	0.013	0.026

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 7	05/31/01	0.033	0.015	<0.001	0.100	
MW - 7	08/23/01	0.009	0.002	<0.001	0.029	0.049
MW - 7	11/21/01	0.007	0.002	<0.001	0.022	0.037
MW - 7	02/13/02	0.004	<0.001	<0.001	0.017	0.027
MW - 7	06/12/02	0.002	<0.001	<0.001	0.009	0.001
MW - 7	08/26/02	0.001	<0.001	0.012	0.014	<0.001
MW - 7	11/21/02	<0.001	<0.001	<0.001	0.003	<0.001
MW - 7	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	08/18/03	<0.001	<0.001	<0.001	0.002	<0.001
MW - 7	12/01/03	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 7	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 7	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 7	03/22/05	Not Sampled on Current Sample Schedule				
MW - 7	06/22/05	Not Sampled on Current Sample Schedule				
MW - 7	09/21/05	Not Sampled on Current Sample Schedule				
MW - 7	12/16/05	<0.001	<0.001	0.0028	0.0031	
MW - 7	03/20/06	Not Sampled on Current Sample Schedule				
MW - 7	06/21/06	Not Sampled on Current Sample Schedule				
MW - 7	09/27/06	Not Sampled on Current Sample Schedule				
MW - 7	12/04/06	<0.001	<0.001	0.0309	0.0085	
MW - 7	03/14/07	Not Sampled on Current Sample Schedule				
MW - 7	05/29/07	Not Sampled on Current Sample Schedule				
MW - 7	08/30/07	Not Sampled on Current Sample Schedule				
MW - 7	11/12/07	<0.001	<0.001	0.0062	0.0015	
MW - 7	03/07/08	Not Sampled on Current Sample Schedule				
MW - 7	06/02/08	Not Sampled on Current Sample Schedule				
MW - 7	09/03/08	Not Sampled on Current Sample Schedule				
MW - 7	12/08/08	<0.001	<0.001	<0.001	<0.001	
MW - 7	02/19/09	Not Sampled on Current Sample Schedule				
MW - 7	05/20/09	Not Sampled on Current Sample Schedule				
MW - 7	08/12/09	Not Sampled on Current Sample Schedule				
MW - 7	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 7	02/11/10	Not Sampled on Current Sample Schedule				
MW - 7	05/17/10	Not Sampled on Current Sample Schedule				
MW - 7	08/16/10	Not Sampled on Current Sample Schedule				
MW - 7	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 7	02/28/11	Not Sampled on Current Sample Schedule				
MW - 7	05/12/11	Not Sampled on Current Sample Schedule				
MW - 7	08/15/11	Not Sampled on Current Sample Schedule				
MW - 7	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 7	02/28/12	Not Sampled on Current Sample Schedule				
MW - 7	05/17/12	Not Sampled on Current Sample Schedule				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 7	08/01/12	Not Sampled on Current Sample Schedule				
MW - 7	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 7	02/11/13	Not Sampled on Current Sample Schedule				
MW - 7	05/06/13	Not Sampled on Current Sample Schedule				
MW - 7	08/06/13	Not Sampled on Current Sample Schedule				
MW - 7	11/19/13	0.0729	0.0023	0.0788	0.2020	
MW - 7	12/08/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 8	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	05/31/01	<0.001	<0.001	<0.001	<0.001	
MW - 8	08/23/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	02/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	06/12/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	08/26/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	11/21/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	08/18/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	12/01/03	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 8	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 8	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 8	03/22/05	Not Sampled on Current Sample Schedule				
MW - 8	06/22/05	Not Sampled on Current Sample Schedule				
MW - 8	09/14/05	Plugged and Abandoned				
MW - 9	03/22/05	Not Sampled Due to PSH in Well				
MW - 9	06/22/05	Not Sampled Due to PSH in Well				
MW - 9	09/21/05	Not Sampled Due to PSH in Well				
MW - 9	12/16/05	Not Sampled Due to PSH in Well				
MW - 9	03/20/06	Not Sampled Due to PSH in Well				
MW - 9	06/21/06	Not Sampled Due to PSH in Well				
MW - 9	09/27/06	Not Sampled Due to PSH in Well				
MW - 9	12/04/06	Not Sampled Due to PSH in Well				
MW - 9	03/14/07	Not Sampled Due to PSH in Well				
MW - 9	05/29/07	Not Sampled Due to PSH in Well				
MW - 9	08/30/07	Not Sampled Due to PSH in Well				
MW - 9	11/12/07	Not Sampled Due to PSH in Well				
MW - 9	03/07/08	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 9	06/02/08	Not Sampled Due to PSH in Well				
MW - 9	09/03/08	Not Sampled Due to PSH in Well				
MW - 9	12/10/08	2.240	2.850	0.633	1.790	
MW - 9	02/19/09	Not Sampled Due to PSH in Well				
MW - 9	05/20/09	Not Sampled Due to PSH in Well				
MW - 9	08/12/09	Not Sampled Due to PSH in Well				
MW - 9	08/12/09	2.090	2.470	0.503	1.600	
MW - 9	02/11/10	Not Sampled Due to PSH in Well				
MW - 9	05/17/10	Not Sampled Due to PSH in Well				
MW - 9	08/16/10	Not Sampled Due to PSH in Well				
MW - 9	11/10/10	Not Sampled Due to PSH in Well				
MW - 9	02/28/11	Not Sampled Due to PSH in Well				
MW - 9	05/12/11	Not Sampled Due to PSH in Well				
MW - 9	08/15/11	Not Sampled Due to PSH in Well				
MW - 9	11/22/11	Not Sampled Due to PSH in Well				
MW - 9	02/28/12	Not Sampled Due to PSH in Well				
MW - 9	05/17/12	Not Sampled Due to PSH in Well				
MW - 9	08/01/12	Not Sampled Due to PSH in Well				
MW - 9	11/29/12	Not Sampled Due to PSH in Well				
MW - 9	02/11/13	Not Sampled Due to PSH in Well				
MW - 9	05/06/13	Not Sampled Due to PSH in Well				
MW - 9	08/06/13	Not Sampled Due to PSH in Well				
MW - 9	11/18/13	Not Sampled Due to PSH in Well				
MW - 10	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	05/31/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	08/23/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	02/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	06/12/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	08/26/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	11/21/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	08/18/03	0.005	0.002	<0.001	0.001	<0.001
MW - 10	12/01/03	0.002	0.001	<0.001	<0.002	<0.001
MW - 10	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 10	12/15/04	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 10	03/22/05	Not Sampled on Current Sample Schedule				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 10	06/22/05	Not Sampled on Current Sample Schedule				
MW - 10	09/21/05	Not Sampled on Current Sample Schedule				
MW - 10	12/16/05	<0.001	<0.001	<0.001	<0.001	
MW - 10	03/20/06	Not Sampled on Current Sample Schedule				
MW - 10	06/21/06	Not Sampled on Current Sample Schedule				
MW - 10	09/27/06	Not Sampled on Current Sample Schedule				
MW - 10	12/04/06	<0.001	<0.001	<0.001	<0.001	
MW - 10	03/14/07	Not Sampled on Current Sample Schedule				
MW - 10	05/29/07	Not Sampled on Current Sample Schedule				
MW - 10	08/30/07	Not Sampled on Current Sample Schedule				
MW - 10	11/12/07	<0.001	<0.001	<0.001	<0.001	
MW - 10	03/07/08	Not Sampled on Current Sample Schedule				
MW - 10	06/02/08	Not Sampled on Current Sample Schedule				
MW - 10	09/03/08	Not Sampled on Current Sample Schedule				
MW - 10	12/08/08	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/19/09	Not Sampled on Current Sample Schedule				
MW - 10	05/20/09	Not Sampled on Current Sample Schedule				
MW - 10	08/12/09	Not Sampled on Current Sample Schedule				
MW - 10	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/11/10	Not Sampled on Current Sample Schedule				
MW - 10	05/17/10	Not Sampled on Current Sample Schedule				
MW - 10	08/16/10	Not Sampled on Current Sample Schedule				
MW - 10	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/28/11	Not Sampled on Current Sample Schedule				
MW - 10	05/12/11	Not Sampled on Current Sample Schedule				
MW - 10	08/15/11	Not Sampled on Current Sample Schedule				
MW - 10	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/28/12	Not Sampled on Current Sample Schedule				
MW - 10	05/17/12	Not Sampled on Current Sample Schedule				
MW - 10	08/01/12	Not Sampled on Current Sample Schedule				
MW - 10	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 10	02/11/13	Not Sampled on Current Sample Schedule				
MW - 10	05/06/13	Not Sampled on Current Sample Schedule				
MW - 10	08/06/13	Not Sampled on Current Sample Schedule				
MW - 10	11/18/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 11	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	05/31/01	0.015	<0.001	<0.001	<0.001	
MW - 11	08/23/01	0.005	<0.001	<0.001	<0.001	<0.001

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 11	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	02/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	06/12/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	08/26/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	11/21/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 11	08/18/03	0.006	<0.001	<0.001	0.006	<0.001
MW - 11	12/01/03	0.039	<0.001	0.002	0.004	<0.001
MW - 11	02/05/04	<0.001	<0.001	<0.001	0.017	<0.001
MW - 11	05/05/04	<0.001	<0.001	<0.001	0.005	<0.001
MW - 11	09/01/04	<0.001	<0.001	<0.001	0.006	<0.001
MW - 11	12/15/04	<0.001	<0.001	<0.001	0.002	
MW - 11	03/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 11	06/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 11	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW - 11	12/16/05	<0.001	<0.001	<0.001	<0.001	
MW - 11	03/20/06	<0.001	<0.001	<0.001	<0.001	
MW - 11	06/21/06	<0.001	<0.001	<0.001	<0.001	
MW - 11	09/27/06	Not Sampled on Current Sample Schedule				
MW - 11	12/04/06	<0.001	<0.001	<0.001	<0.001	
MW - 11	03/14/07	Not Sampled on Current Sample Schedule				
MW - 11	05/29/07	Not Sampled on Current Sample Schedule				
MW - 11	08/30/07	Not Sampled on Current Sample Schedule				
MW - 11	11/12/07	<0.001	<0.001	<0.001	<0.001	
MW - 11	03/07/08	Not Sampled on Current Sample Schedule				
MW - 11	06/02/08	Not Sampled on Current Sample Schedule				
MW - 11	09/03/08	Not Sampled on Current Sample Schedule				
MW - 11	12/08/08	<0.001	<0.001	<0.001	<0.001	
MW - 11	02/19/09	Not Sampled on Current Sample Schedule				
MW - 11	05/20/09	Not Sampled on Current Sample Schedule				
MW - 11	08/12/09	Not Sampled on Current Sample Schedule				
MW - 11	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 11	02/11/10	Not Sampled on Current Sample Schedule				
MW - 11	05/17/10	Not Sampled on Current Sample Schedule				
MW - 11	08/16/10	Not Sampled on Current Sample Schedule				
MW - 11	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 11	02/28/11	Not Sampled on Current Sample Schedule				
MW - 11	05/12/11	Not Sampled on Current Sample Schedule				
MW - 11	08/15/11	Not Sampled on Current Sample Schedule				
MW - 11	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 11	02/28/12	Not Sampled on Current Sample Schedule				
MW - 11	05/17/12	Not Sampled on Current Sample Schedule				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 11	08/01/12	Not Sampled on Current Sample Schedule				
MW - 11	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 11	02/11/13	Not Sampled on Current Sample Schedule				
MW - 11	05/06/13	Not Sampled on Current Sample Schedule				
MW - 11	08/06/13	Not Sampled on Current Sample Schedule				
MW - 11	11/18/13	0.0023	<0.00100	<0.00100	<0.00300	
MW - 12	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	11/28/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	05/31/01	<0.001	<0.001	<0.001	<0.001	
MW - 12	08/23/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	02/13/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	06/12/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	08/26/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	11/21/02	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	02/06/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	08/18/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 12	12/01/03	0.002	0.001	<0.001	<0.002	<0.001
MW - 12	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 12	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 12	03/22/05	Not Sampled on Current Sample Schedule				
MW - 12	06/22/05	Not Sampled on Current Sample Schedule				
MW - 12	09/21/05	Not Sampled on Current Sample Schedule				
MW - 12	12/16/05	<0.001	<0.001	<0.001	<0.001	
MW - 12	03/20/06	Not Sampled on Current Sample Schedule				
MW - 12	06/21/06	Not Sampled on Current Sample Schedule				
MW - 12	09/27/06	Not Sampled on Current Sample Schedule				
MW - 12	12/04/06	<0.001	<0.001	<0.001	<0.001	
MW - 12	03/14/07	Not Sampled on Current Sample Schedule				
MW - 12	05/29/07	Not Sampled on Current Sample Schedule				
MW - 12	08/30/07	Not Sampled on Current Sample Schedule				
MW - 12	11/12/07	<0.001	<0.001	<0.001	<0.001	
MW - 12	03/07/08	Not Sampled on Current Sample Schedule				
MW - 12	06/02/08	Not Sampled on Current Sample Schedule				
MW - 12	09/04/08	Not Sampled on Current Sample Schedule				
MW - 12	12/08/08	<0.001	<0.001	<0.001	0.007	
MW - 12	02/19/09	<0.001	<0.001	<0.001	<0.001	
MW - 12	05/20/09	Not Sampled on Current Sample Schedule				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 12	08/12/09	Not Sampled on Current Sample Schedule				
MW - 12	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 12	02/11/10	Not Sampled on Current Sample Schedule				
MW - 12	05/17/10	Not Sampled on Current Sample Schedule				
MW - 12	08/16/10	Not Sampled on Current Sample Schedule				
MW - 12	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 12	02/28/11	Not Sampled on Current Sample Schedule				
MW - 12	05/12/11	Not Sampled on Current Sample Schedule				
MW - 12	08/15/11	Not Sampled on Current Sample Schedule				
MW - 12	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 12	02/28/12	Not Sampled on Current Sample Schedule				
MW - 12	05/17/12	Not Sampled on Current Sample Schedule				
MW - 12	08/01/12	Not Sampled on Current Sample Schedule				
MW - 12	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 12	02/11/13	Not Sampled on Current Sample Schedule				
MW - 12	05/06/13	Not Sampled on Current Sample Schedule				
MW - 12	08/06/13	Not Sampled on Current Sample Schedule				
MW - 12	11/18/13	0.386	<0.00100	0.0412	0.0058	
MW - 12	12/08/13	<0.00100	<0.001	<0.00100	<0.00300	
MW - 13	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	04/25/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	09/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	11/28/00	0.004	<0.001	<0.001	<0.001	<0.001
MW - 13	02/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	05/31/01	<0.001	<0.001	<0.001	<0.001	
MW - 13	08/23/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	11/21/01	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 13	02/13/02	0.007	<0.001	<0.001	<0.001	<0.001
MW - 13	06/12/02	0.115	<0.001	<0.001	0.013	<0.001
MW - 13	08/26/02	0.046	<0.001	<0.001	0.024	<0.001
MW - 13	11/21/02	0.010	<0.001	<0.001	0.045	<0.001
MW - 13	02/06/03	<0.001	<0.001	<0.001	0.028	<0.001
MW - 13	05/07/03	0.003	<0.001	<0.001	0.019	<0.001
MW - 13	08/18/03	0.002	<0.001	<0.001	0.035	<0.001
MW - 13	12/01/03	<0.001	<0.001	<0.001	0.018	<0.001
MW - 13	02/05/04	0.002	<0.001	0.001	0.053	<0.001
MW - 13	05/05/04	<0.001	<0.001	0.001	0.002	<0.001
MW - 13	09/01/04	<0.001	<0.001	0.002	0.016	<0.001
MW - 13	12/15/04	<0.001	<0.001	<0.001	0.002	
MW - 13	03/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 13	06/22/05	<0.001	<0.001	<0.001	0.005	
MW - 13	09/21/05	<0.001	<0.001	<0.001	0.003	

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
 TNM 97-04
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 13	12/16/05	<0.001	<0.001	<0.001	0.0074	
MW - 13	03/20/06	0.001	<0.001	0.001	0.0106	
MW - 13	06/21/06	0.008	<0.001	0.003	0.0064	
MW - 13	09/27/06	0.103	<0.001	0.011	0.0115	
MW - 13	12/04/06	0.293	<0.001	0.011	0.0094	
MW - 13	03/14/07	0.530	<0.005	0.029	0.0161	
MW - 13	05/29/07	0.496	<0.005	<0.005	<0.005	
MW - 13	08/30/07	0.609	<0.005	0.0201	<0.005	
MW - 13	11/12/07	0.350	<0.005	<0.005	<0.005	
MW - 13	03/07/08	0.0279	<0.005	<0.005	<0.005	
MW - 13	06/02/08	0.662	<0.001	0.0173	<0.010	
MW - 13	09/03/08	0.974	<0.005	0.0143	0.0206	
MW - 13	12/08/08	1.200	<0.005	<0.005	<0.005	
MW - 13	02/19/09	0.548	<0.005	<0.005	0.0151	
MW - 13	05/20/09	0.667	<0.005	0.072	0.1920	
MW - 13	08/12/09	1.470	<0.005	0.047	0.1630	
MW - 13	11/25/09	1.420	<0.005	<0.005	<0.005	
MW - 13	02/11/10	1.920	<0.005	<0.005	<0.005	
MW - 13	05/17/10	0.666	<0.005	<0.005	<0.005	
MW - 13	08/16/10	1.810	<0.0200	0.0367	<0.0200	
MW - 13	11/10/10	2.040	<0.0200	<0.0200	<0.0200	
MW - 13	02/28/11	2.160	<0.005	0.0426	<0.005	
MW - 13	05/12/11	3.130	<0.0200	0.2550	<0.0200	
MW - 13	08/15/11	0.738	<0.0200	<0.0200	<0.0200	
MW - 13	11/22/11	0.810	<0.0200	0.0714	<0.0200	
MW - 13	02/28/12	0.347	0.140	0.1750	0.4490	
MW - 13	05/17/12	0.0059	<0.001	<0.001	<0.001	
MW - 13	08/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 13	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 13	02/11/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 13	11/19/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 14	03/02/00	0.141	0.032	0.056	0.038	0.008
MW - 14	04/25/00	0.368	0.045	0.106	0.061	0.017
MW - 14	09/06/00	0.609	0.015	0.124	0.024	0.020
MW - 14	11/28/00	0.691	0.022	0.107	0.038	0.034
MW - 14	02/21/01	0.921	0.061	0.194	0.114	0.088
MW - 14	05/31/01	1.030	0.223	0.172	0.339	
MW - 14	08/23/01	1.780	0.865	0.315	0.491	0.235
MW - 14	11/21/01	0.623	0.301	0.131	0.162	0.068
MW - 14	02/13/02	0.572	0.414	0.142	0.213	0.093

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 14	06/12/02	0.718	0.470	0.144	0.187	0.087
MW - 14	08/26/02	0.606	0.355	0.147	0.188	0.089
MW - 14	11/21/02	0.850	0.666	0.178	0.350	0.175
MW - 14	02/06/03	1.100	0.651	0.256	0.450	0.243
MW - 14	05/07/03	1.880	1.180	0.463	0.839	0.470
MW - 14	08/18/03	0.833	0.242	0.235	0.366	0.213
MW - 14	12/01/03	0.791	0.319	0.211	0.397	0.191
MW - 14	02/05/04	0.763	0.819	0.226	0.492	0.218
MW - 14	05/05/04	0.811	0.234	0.233	0.580	0.275
MW - 14	12/15/04	0.071	0.019	0.021	0.078	
MW - 14	03/22/05	0.274	0.017	0.049	0.313	
MW - 14	06/22/05	0.543	0.283	0.379	1.130	
MW - 14	09/21/05	0.413	0.159	0.318	0.996	
MW - 14	12/16/05	0.361	0.279	0.291	0.956	
MW - 14	03/20/06	0.405	0.300	0.321	1.040	
MW - 14	06/21/06	0.414	0.352	0.322	1.060	
MW - 14	09/27/06	0.063	0.096	0.075	0.222	
MW - 14	12/04/06	0.249	0.157	0.263	0.954	
MW - 14	03/14/07	0.194	0.292	0.220	0.751	
MW - 14	05/29/07	0.212	0.097	0.251	0.807	
MW - 14	08/30/07	0.129	0.0891	0.211	0.671	
MW - 14	11/12/07	0.092	0.0249	0.196	0.634	
MW - 14	03/07/08	0.0338	<0.001	0.0609	0.464	
MW - 14	06/02/08	0.0920	0.0310	0.1470	0.480	
MW - 14	09/03/08	0.0933	0.0025	0.2080	0.787	
MW - 14	12/08/08	0.0264	<0.001	0.0908	0.399	
MW - 14	02/19/09	Not Sampled				
MW - 14	05/20/09	0.0456	0.0053	0.1500	0.580	
MW - 14	08/12/09	0.0439	<0.001	0.1570	0.669	
MW - 14	11/25/09	0.0181	<0.001	0.0102	0.167	
MW - 14	05/17/10	0.0107	<0.001	0.0681	0.248	
MW - 14	08/16/10	<0.001	0.0024	0.0372	0.134	
MW - 14	11/10/10	0.0057	<0.001	0.0127	0.0494	
MW - 14	02/28/11	Not Sampled				
MW - 14	05/12/11	0.0116	<0.001	0.0575	0.1050	
MW - 14	08/15/11	<0.001	<0.001	<0.001	<0.001	
MW - 14	11/22/11	0.0026	<0.001	0.0166	0.0318	
MW - 14	02/28/12	<0.001	<0.001	0.0242	0.0670	
MW - 14	05/17/12	<0.001	<0.001	<0.001	0.0017	
MW - 14	08/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 14	11/29/12	<0.001	<0.001	0.0035	0.0088	
MW - 14	02/11/13	<0.00100	<0.00100	0.0173	0.0444	
MW - 14	05/06/13	<0.00100	<0.00100	0.00740	0.0204	

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 14	08/06/13	<0.00100	<0.00100	0.0169	0.0473	
MW - 14	11/19/13	0.0019	<0.00100	<0.00100	<0.00300	
MW - 15	03/02/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 15	04/25/00	0.649	<0.001	<0.001	0.018	0.019
MW - 15	09/06/00	0.010	<0.001	0.003	0.024	<0.001
MW - 15	11/28/00	1.380	<0.010	<0.010	0.031	<0.010
MW - 15	02/21/01	2.870	<0.010	0.011	0.058	<0.010
MW - 15	05/31/01	3.830	<0.001	0.049	0.101	
MW - 15	08/23/01	4.600	0.001	0.077	0.075	0.009
MW - 15	11/21/01	4.000	0.012	0.117	0.084	0.039
MW - 15	02/13/02	2.910	0.020	0.128	0.063	0.060
MW - 15	06/12/02	5.430	0.004	0.216	0.032	0.057
MW - 15	08/26/02	4.590	0.002	0.183	0.230	0.300
MW - 15	11/21/02	8.130	0.002	0.384	0.009	<0.001
MW - 15	02/06/03	2.070	<0.001	0.041	0.010	<0.001
MW - 15	05/07/03	1.890	<0.001	0.006	<0.001	<0.001
MW - 15	08/18/03	1.910	0.001	0.122	0.006	<0.001
MW - 15	12/01/03	1.190	<0.001	0.057	0.006	<0.001
MW - 15	02/05/04	3.680	0.016	0.191	0.043	0.016
MW - 15	05/05/04	1.700	0.026	0.085	0.030	0.027
MW - 15	12/15/04	0.545	<0.0200	<0.0200	<0.0200	
MW - 15	03/22/05	2.380	0.057	0.163	0.140	
MW - 15	06/22/05	7.790	0.125	0.427	0.528	
MW - 15	09/21/05	4.470	<0.1	0.241	0.303	
MW - 15	12/16/05	5.650	0.103	0.273	0.275	
MW - 15	03/20/06	4.720	<0.2	0.217	0.337	
MW - 15	06/21/06	3.060	<0.2	<0.2	<0.2	
MW - 15	09/27/06	0.806	<0.02	0.031	0.065	
MW - 15	12/04/06	2.950	<0.02	0.224	0.346	
MW - 15	03/14/07	1.82	<0.05	0.144	0.138	
MW - 15	05/29/07	3.73	<0.2	<0.2	<0.2	
MW - 15	08/30/07	2.330	<0.002	0.184	0.175	
MW - 15	11/12/07	4.370	<0.05	0.487	0.621	
MW - 15	03/07/08	0.556	<0.05	<0.05	0.135	
MW - 15	06/02/08	1.880	<0.010	0.164	0.210	
MW - 15	09/03/08	4.310	<0.0200	0.348	0.387	
MW - 15	12/08/08	2.870	<0.0200	0.230	0.181	
MW - 15	02/19/09	0.673	<0.005	0.0472	0.0094	
MW - 15	05/20/09	2.050	<0.005	0.2190	0.1430	
MW - 15	08/12/09	0.510	<0.005	0.0523	0.0653	
MW - 15	11/25/09	1.390	<0.005	0.0820	0.0206	
MW - 15	02/11/10	1.640	<0.005	0.1410	0.0821	

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 15	05/21/10	0.787	<0.005	0.0366	0.0447	
MW - 15	08/16/10	0.819	<0.0100	0.0350	0.0217	
MW - 15	11/10/10	0.0785	<0.0100	<0.0100	<0.0100	
MW - 15	02/28/11	0.500	<0.0200	<0.0200	<0.0200	
MW - 15	05/12/11	4.210	<0.0200	0.3500	0.4040	
MW - 15	08/15/11	1.050	<0.0200	<0.0200	<0.0200	
MW - 15	11/22/11	1.490	<0.0200	0.0731	0.0676	
MW - 15	02/28/12	0.303	<0.0200	0.1470	0.4200	
MW - 15	05/17/12	<0.001	<0.001	<0.001	<0.001	
MW - 15	08/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 15	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 15	02/11/13	<0.001	<0.001	<0.001	<0.001	
MW - 15	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 15	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 15	11/19/13	0.0194	<0.00100	0.0031	<0.00100	
MW - 15	12/08/13	<0.00100	<0.00100	0.00710	<0.00300	
MW - 16	01/10/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 16	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 16	08/18/03	0.008	0.003	<0.001	0.002	<0.001
MW - 16	12/01/03	0.014	0.005	0.003	0.005	0.003
MW - 16	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 16	05/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 16	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 16	03/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 16	06/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 16	09/21/05	<0.005	<0.005	<0.005	<0.005	
MW - 16	12/16/05	<0.005	<0.005	<0.005	<0.005	
MW - 16	03/20/06	<0.005	<0.005	<0.005	<0.005	
MW - 16	06/21/06	<0.001	<0.001	<0.001	<0.001	
MW - 16	09/27/06	Not Sampled on Current Sample Schedule				
MW - 16	12/04/06	<0.001	<0.001	<0.001	<0.001	
MW - 16	03/14/07	Not Sampled on Current Sample Schedule				
MW - 16	05/29/07	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/30/07	Not Sampled on Current Sample Schedule				
MW - 16	11/12/07	<0.001	<0.001	<0.001	<0.001	
MW - 16	03/07/08	Not Sampled on Current Sample Schedule				
MW - 16	06/02/08	Not Sampled on Current Sample Schedule				
MW - 16	09/03/08	<0.001	<0.001	<0.001	<0.001	
MW - 16	12/08/08	<0.001	<0.001	<0.001	<0.001	
MW - 16	02/19/09	Not Sampled on Current Sample Schedule				
MW - 16	05/20/09	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/12/09	Not Sampled on Current Sample Schedule				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 16	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 16	02/11/10	Not Sampled on Current Sample Schedule				
MW - 16	05/21/10	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/16/10	Not Sampled on Current Sample Schedule				
MW - 16	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 16	02/28/11	Not Sampled on Current Sample Schedule				
MW - 16	05/12/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/15/11	Not Sampled on Current Sample Schedule				
MW - 16	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 16	02/28/12	Not Sampled on Current Sample Schedule				
MW - 16	05/17/12	<0.001	<0.001	<0.001	<0.001	
MW - 16	08/01/12	Not Sampled on Current Sample Schedule				
MW - 16	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 16	02/11/13	Not Sampled on Current Sample Schedule				
MW - 16	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 16	08/06/13	Not Sampled on Current Sample Schedule				
MW - 16	11/19/13	<0.00100	<0.00100	<0.00100	<0.00300	
MW - 17	01/10/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 17	05/07/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 17	08/18/03	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 17	12/01/03	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 17	02/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 17	05/05/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 17	09/01/04	<0.001	<0.001	<0.001	<0.002	<0.001
MW - 17	12/15/04	<0.001	<0.001	<0.001	<0.001	
MW - 17	03/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 17	06/22/05	<0.001	<0.001	<0.001	<0.001	
MW - 17	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW - 17	12/16/05	<0.001	<0.001	<0.001	<0.001	
MW - 17	03/20/06	<0.001	<0.001	<0.001	<0.001	
MW - 17	06/21/06	Not Sampled				
MW - 17	08/09/06	Plugged and Abandoned				
MW - 18	08/12/09	<0.001	<0.001	<0.001	<0.001	
MW - 18	11/25/09	<0.001	<0.001	<0.001	<0.001	
MW - 18	02/11/10	<0.001	<0.001	<0.001	<0.001	
MW - 18	05/17/10	<0.001	<0.001	<0.001	<0.001	
MW - 18	08/16/10	<0.001	<0.001	<0.001	<0.001	
MW - 18	11/10/10	<0.001	<0.001	<0.001	<0.001	
MW - 18	02/28/11	<0.001	<0.001	<0.001	<0.001	
MW - 18	05/12/11	<0.001	<0.001	<0.001	<0.001	
MW - 18	08/15/11	<0.001	<0.001	<0.001	<0.001	

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
MW - 18	11/22/11	<0.001	<0.001	<0.001	<0.001	
MW - 18	02/28/12	<0.001	<0.001	<0.001	<0.001	
MW - 18	05/17/12	<0.001	<0.001	<0.001	<0.001	
MW - 18	08/01/12	<0.001	<0.001	<0.001	<0.001	
MW - 18	11/29/12	<0.001	<0.001	<0.001	<0.001	
MW - 18	02/11/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	05/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	08/06/13	<0.00100	<0.00100	<0.00100	<0.00100	
MW - 18	11/19/13	<0.00100	<0.00100	<0.00100	<0.00300	
RW - 1	03/22/05	Not Sampled Due to PSH in Well				
RW - 1	06/22/05	Not Sampled Due to PSH in Well				
RW - 1	09/21/05	Not Sampled Due to PSH in Well				
RW - 1	12/16/05	Not Sampled Due to PSH in Well				
RW - 1	03/20/06	Not Sampled Due to PSH in Well				
RW - 1	06/21/06	Not Sampled Due to PSH in Well				
RW - 1	09/27/06	Not Sampled Due to PSH in Well				
RW - 1	12/04/06	Not Sampled Due to PSH in Well				
RW - 1	03/14/07	Not Sampled Due to PSH in Well				
RW - 1	05/29/07	Not Sampled Due to PSH in Well				
RW - 1	08/30/07	Not Sampled Due to PSH in Well				
RW - 1	11/12/07	Not Sampled Due to PSH in Well				
RW - 1	03/07/08	Not Sampled Due to PSH in Well				
RW - 1	06/02/08	Not Sampled Due to PSH in Well				
RW - 1	09/03/08	Not Sampled Due to PSH in Well				
RW - 1	12/10/08	10.10	2.440	0.792	1.500	
RW - 1	02/19/09	Not Sampled Due to PSH in Well				
RW - 1	05/20/09	Not Sampled Due to PSH in Well				
RW - 1	08/12/09	Not Sampled Due to PSH in Well				
RW - 1	11/25/09	11.10	5.480	0.946	2.270	
RW - 1	02/11/10	Not Sampled Due to PSH in Well				
RW - 1	05/17/10	Not Sampled Due to PSH in Well				
RW - 1	08/16/10	Not Sampled Due to PSH in Well				
RW - 1	11/10/10	Not Sampled Due to PSH in Well				
RW - 1	02/28/11	Not Sampled Due to PSH in Well				
RW - 1	05/12/11	Not Sampled Due to PSH in Well				
RW - 1	08/15/11	Not Sampled Due to PSH in Well				
RW - 1	11/22/11	Not Sampled Due to PSH in Well				
RW - 1	02/28/12	Not Sampled Due to PSH in Well				
RW - 1	05/17/12	Not Sampled Due to PSH in Well				
RW - 1	08/01/12	Not Sampled Due to PSH in Well				
RW - 1	11/29/12	Not Sampled Due to PSH in Well				
RW - 1	02/11/13	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
TNM 97-04
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
RW - 1	05/06/13	Not Sampled Due to PSH in Well				
RW - 1	08/06/13	Not Sampled Due to PSH in Well				
RW - 1	11/18/13	Not Sampled Due to PSH in Well				
RW - 2	08/16/10	Not Sampled Due to PSH in Well				
RW - 2	11/10/10	Not Sampled Due to PSH in Well				
RW - 2	02/28/11	Not Sampled Due to PSH in Well				
RW - 2	05/12/11	Not Sampled Due to PSH in Well				
RW - 2	08/15/11	Not Sampled Due to PSH in Well				
RW - 2	11/22/11	Not Sampled Due to PSH in Well				
RW - 2	02/28/12	Not Sampled Due to PSH in Well				
RW - 2	05/17/12	Not Sampled Due to PSH in Well				
RW - 2	08/01/12	Not Sampled Due to PSH in Well				
RW - 2	11/29/12	Not Sampled Due to PSH in Well				
RW - 2	02/11/13	Not Sampled Due to PSH in Well				
RW - 2	05/06/13	Not Sampled Due to PSH in Well				
RW - 2	08/06/13	Not Sampled Due to PSH in Well				
RW - 2	11/18/13	Not Sampled Due to PSH in Well				
RW - 3	08/16/10	Not Sampled Due to PSH in Well				
RW - 3	11/10/10	Not Sampled Due to PSH in Well				
RW - 3	02/28/11	Not Sampled Due to PSH in Well				
RW - 3	05/12/11	Not Sampled Due to PSH in Well				
RW - 3	08/15/11	Not Sampled Due to PSH in Well				
RW - 3	11/22/11	Not Sampled Due to PSH in Well				
RW - 3	02/28/12	Not Sampled Due to PSH in Well				
RW - 3	05/17/12	Not Sampled Due to PSH in Well				
RW - 3	08/01/12	Not Sampled Due to PSH in Well				
RW - 3	11/29/12	Not Sampled Due to PSH in Well				
RW - 3	02/11/13	Not Sampled Due to PSH in Well				
RW - 3	05/06/13	Not Sampled Due to PSH in Well				
RW - 3	08/06/13	Not Sampled Due to PSH in Well				
RW - 3	11/18/13	Not Sampled Due to PSH in Well				
RW - 4	08/16/10	Not Sampled Due to PSH in Well				
RW - 4	11/10/10	Not Sampled Due to PSH in Well				
RW - 4	02/28/11	Not Sampled Due to PSH in Well				
RW - 4	05/12/11	Not Sampled Due to PSH in Well				
RW - 4	08/15/11	Not Sampled Due to PSH in Well				
RW - 4	11/22/11	Not Sampled Due to PSH in Well				
RW - 4	02/28/12	Not Sampled Due to PSH in Well				
RW - 4	05/17/12	Not Sampled Due to PSH in Well				
RW - 4	08/01/12	Not Sampled Due to PSH in Well				

TABLE 2

HISTORIC CONCENTRATIONS OF BTEX IN GROUNDWATER

PLAINS PIPELINE, L.P.
 TNM 97-04
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE NUMBER GW-0294

All Concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENES
RW - 4	11/29/12	Not Sampled Due to PSH in Well				
RW - 4	02/11/13	Not Sampled Due to PSH in Well				
RW - 4	05/06/13	Not Sampled Due to PSH in Well				
RW - 4	08/06/13	Not Sampled Due to PSH in Well				
RW - 4	11/18/13	Not Sampled Due to PSH in Well				

TABLE 3

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-04 TOWNSEND

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER GW-0294

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[ghi]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-2	12/10/08	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0109	<0.000922	<0.000922	0.0429	<0.000922	0.0587	<0.000922	0.232	0.354	0.417	0.0377
	11/25/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0276	<0.000922	0.0378	<0.000922	0.207	0.274	0.337	0.0267
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
MW-3	12/10/08	<0.000184	0.00934	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00578	<0.000184	<0.000184	0.024	<0.000184	0.0368	<0.000184	0.192	0.348	0.409	0.0228
	11/25/09	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	<0.0370	0.788	<0.0370	1.06	<0.0370	3.87	7.02	8.74	0.626
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
MW-4	12/10/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0039	<0.000184	0.00376	<0.000184	0.0668	0.0435	0.0423	0.00414
	11/25/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	0.0143	<0.000917	0.0181	<0.000917	0.103	0.118	0.089	0.0123
	11/10/10	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00338	<0.000184	0.00404	<0.000184	0.0279	0.035	0.0188	0.00247
	12/15/11	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	0.00322	<0.000187	0.00423	<0.000187	0.0469	0.0371	0.0317	0.00409
	11/29/12	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	0.00306	<0.000190	<0.000190	0.0081	<0.000190	0.0123	<0.000190	0.0274	0.0289	0.0235	0.00877
	11/19/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	0.0877	0.109	0.121	12.6
MW-5	12/10/08	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	<0.000935	0.0424	<0.000935	0.192	0.301	0.346	0.0316
	11/25/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00909	<0.000184	0.0104	<0.000184	0.0905	0.0931	0.107	0.00848
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
MW-6	12/10/08	<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	0.00706	<0.000184	0.0921	0.0687	0.0744	0.00635
	11/25/09	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	<0.000922	0.0528	<0.000922	0.0648	<0.000922	0.294	0.498	0.569	0.0467

TABLE 3

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-04 TOWNSEND

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER GW-0294

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[ghi]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			—
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	0.00132	<0.000190	0.00137	<0.000190	0.0179	0.0212	0.0179	0.00158
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
MW-7	12/08/08	<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	0.0002	<0.000184	<0.000184	<0.000184
	11/25/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-9	12/10/08	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	<0.000926	0.0134	<0.000926	0.016	<0.000926	0.102	0.122	0.138	0.0127
	11/25/09	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	<0.000917	0.0250	<0.000917	0.0315	<0.000917	0.125	0.221	0.253	0.0201
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
MW-10	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/25/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/18/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-11	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/25/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		

TABLE 3

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-04 TOWNSEND

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER GW-0294

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			—
		Not Sampled as part of Quarterly Monitoring Event.																		
		Not Sampled as part of Quarterly Monitoring Event.																		
MW-12	12/08/08	<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
	11/25/09	<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
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/18/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-13	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000294	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.00116
	11/25/09	<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	0.000638
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-14	12/08/08	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	<0.000185	0.000417	<0.000185	0.000311	<0.000185	0.00328	0.00314	0.00298	0.000355
	11/25/09	<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	0.00605	0.00516	0.00321	<0.000184
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-15	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000558	<0.000184	0.000384	<0.000184	0.00993	0.00525	0.00386	0.000687
	11/25/09	<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	0.00209	0.00101	<0.000184	<0.000184
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		

TABLE 3

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-04 TOWNSEND

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER GW-0294

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[ghi]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-16	12/08/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/25/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled as part of Quarterly Monitoring Event.																		
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
MW-18	11/25/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/31/11	<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	0.000262	
	11/29/12	Not Sampled as part of Quarterly Monitoring Event.																		
	11/19/13	Not Sampled as part of Quarterly Monitoring Event.																		
RW-1	12/10/08	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0085	<0.000184	0.0104	<0.000184	0.075	0.0857	0.0912	0.00817
	11/25/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.0120	<0.000184	0.0131	<0.000184	0.0961	0.113	0.126	0.0100
	11/10/10	Not Sampled as part of Quarterly Monitoring Event.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
RW-2	11/10/10	Not Sampled due to the presence of PSH.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
RW-3	11/10/10	Not Sampled due to the presence of PSH.																		
	12/15/11	Not Sampled due to the presence of PSH.																		
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		
RW-4	11/10/10	Not Sampled due to the presence of PSH.																		
	12/15/11	Not Sampled due to the presence of PSH.																		

TABLE 3

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN GROUNDWATER

PLAINS MARKETING, L.P.

TNM 97-04 TOWNSEND

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER GW-0294

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[ghi]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			—
	11/29/12	Not Sampled due to the presence of PSH.																		
	11/18/13	Not Sampled due to the presence of PSH.																		

TABLE 4

HISTORIC BTEX CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

Results and Regulatory Guidelines in mg/L

Sample Date	Sample Location	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX
NMOCD Regulatory		0.010	0.75	0.75	0.62	-
09/02/10	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
09/10/10	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
09/16/10	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
09/23/10	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
10/25/10	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
11/23/10	Post Carbon	0.0047	<0.001	<0.001	<0.001	0.0047
01/28/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
02/28/11	Post Carbon	0.0319	0.037	0.0338	0.0992	0.2019
03/18/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
04/28/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
07/13/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
07/28/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
08/16/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
09/21/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
10/27/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
11/17/11	Post Carbon	<0.001	<0.001	<0.001	<0.001	<0.001
01/26/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
02/28/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
03/29/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
05/24/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
08/03/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
12/31/12	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
01/31/13	Post Carbon*	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
02/27/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
03/28/13	Post Carbon**	0.114	0.0406	0.0059	0.059	0.2195
04/12/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
06/24/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
07/29/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
08/29/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
09/25/13	Post Carbon	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
10/30/13	Post Carbon	<0.00100	<0.00100	<0.00300	<0.00300	<0.00300
11/26/13	Post Carbon	0.00150	<0.00100	<0.00300	<0.00300	<0.00300
12/26/13	Post Carbon	<0.00100	<0.00100	<0.00300	<0.00300	<0.00300

Samples were not collected in the months of April, June, July, September, October, and November of 2012 due to bad weather and/or repairs.

Samples were not collected in the months of April and May 2013 due to system maintenance and repairs.

*Resampled 12/31/12 Post Carbon sample due to WQCC Metal analytical results exceeding WQCC regulatory standards.

**Resampled 3/12/13 Post Carbon sample due to inconsistent analytical results, results likely due to field error.

TABLE 5

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

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		--	
Post Carbon	01/28/11	<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	
Post Carbon	02/28/11	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	
Post Carbon	03/18/11	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	
Post Carbon	04/28/11	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Post Carbon	05/01/11	PAH Analysis not conducted - System inoperable due to mechanical issues																		
Post Carbon	06/01/11	PAH Analysis not conducted due to elevated BTEX concentrations																		
Post Carbon	07/13/11	PAH Analysis inadvertently not conducted																		
Post Carbon	07/28/11	PAH Analysis inadvertently not conducted																		
Post Carbon	08/16/11	<0.0002	<0.0002	<0.0002	0.000213	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000216	<0.0002	<0.0002	<0.0002	0.000238	<0.0002	<0.0002	<0.0002	
Post Carbon	09/21/11	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00101	0.00158	0.00102	
Post Carbon	10/27/11	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Post Carbon	11/17/11	<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	
Post Carbon	01/26/12	<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	
Post Carbon	02/28/12	<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	
Post Carbon	03/29/12	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Post Carbon	05/24/12	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	

TABLE 5

HISTORIC POLYNUCLEAR AROMATIC HYDROCARBON CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

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		---	
Post Carbon	08/03/12	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Post Carbon	12/31/12	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	
Post Carbon*	01/31/13	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	<0.000199	
Post Carbon	02/27/13	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	
Post Carbon	04/12/13	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	<0.000220	
Post Carbon	06/24/13	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	<0.000211	
Post Carbon	07/29/13	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	<0.000201	
Post Carbon	08/29/13	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	<0.000195	
Post Carbon	09/25/13	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	<0.000197	
Post Carbon	10/30/13	<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	
Post Carbon	11/26/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	
Post Carbon	12/26/13	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	

Samples were not taken in the months of April, June, July, September, October, and November of 2012 due to bad weather and/or repairs.

*Resampled Post Carbon due to WQCC Metal sample results of 12/31/12 exceeding WQCC standards.

TABLE 6

HISTORIC WQCC METALS CONCENTRATIONS IN EFFLUENT GROUNDWATER

PLAINS MARKETING, L.P.
TNM 97-04 TOWNSEND
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER GW-0294

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.																
		Total Aluminum	Total Boron	Total Cobalt	Total Copper	Total Iron	Total Manganese	Total Molybdenum	Total Nickel	Total Arsenic	Total Barium	Total Cadmium	Total Chromium	Total Mercury	Total Lead	Total Selenium	Total Silver	Total Zinc
		5.0 mg/L	0.75 mg/L	0.05 mg/L	1.0 mg/L	1.0 mg/L	0.2 mg/L	1.0 mg/L	0.2 mg/L	0.1 mg/L	1.0 mg/L	0.01 mg/L	0.05 mg/L	0.002 mg/L	0.05 mg/L	0.05 mg/L	0.05 mg/L	10 mg/L
Post Carbon	09/02/10	0.533	0.105	<0.005	<0.005	0.119	0.197	<0.010	<0.005	<0.010	0.171	<0.005	<0.005	<0.0002	0.005	<0.020	<0.005	0.01
Post Carbon	09/10/10	<0.050	0.168	<0.005	<0.005	0.177	0.091	<0.050	<0.010	<0.010	0.243	<0.005	<0.010	<0.0002	<0.005	<0.020	<0.005	<0.005
Post Carbon	09/16/10	0.057	0.216	<0.005	0.005	0.044	0.101	<0.050	<0.010	<0.010	0.28	<0.005	<0.010	<0.0002	<0.005	<0.020	<0.005	0.01
Post Carbon	09/23/10	0.053	0.112	<0.005	<0.005	0.311	0.034	<0.050	<0.010	<0.010	0.194	<0.005	<0.010	<0.0002	<0.005	<0.020	<0.005	0.015
Post Carbon	11/17/11	<0.050	0.221	<0.005	<0.005	0.012	0.064	<0.050	<0.010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005
Post Carbon	12/31/12	0.304	0.086	<0.0100	<0.00500	0.053	<0.00500	<0.0500	<0.0100	<0.0100	0.245	<0.0100	<0.0100	<0.000200	<0.0100	<0.0200	<0.00500	0.014
Post Carbon*	01/31/13	0.304	0.021	<0.0100	1.09	8.13	0.021	<0.0500	0.042	<0.0100	0.103	<0.0100	<0.0100	<0.000200	0.13	<0.0200	<0.00500	0.589
Post Carbon**	01/31/13	<0.0100	0.0981	<0.00500	<0.00500	<0.200	<0.00500	<0.00500	<0.00500	0.00696	0.217	<0.00200	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	0.00659
Post Carbon	02/28/14	<0.0500	0.0270	<0.0100	<0.00500	0.415	0.104	<0.0500	<0.0100	<0.0100	0.249	<0.0100	<0.0100	<0.000200	<0.0100	<0.0200	<0.00500	<0.0100

*Sample analysis conducted by TraceAnalysis, Inc.

**Samples analysis conducted by ALS Environmental Laboratories.

N/A - Laboratory failed to complete the analysis on the eight RCRA metals

Summary Report

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

Report Date: February 7, 2013

Work Order: 13013128



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
319993	Post-Carbon	water	2013-01-31	11:30	2013-01-31

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
319993 - Post-Carbon	<0.00100	<0.00100	<0.00100	<0.00100

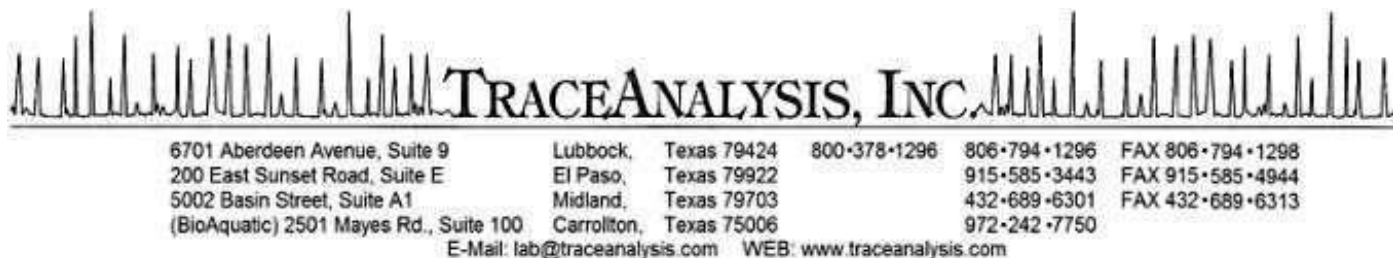
Sample: 319993 - Post-Carbon

Param	Flag	Result	Units	RL
Total Silver		<0.00500	mg/L	0.005
Total Aluminum		<0.0500	mg/L	0.05
Total Arsenic		<0.0100	mg/L	0.01
Total Boron		0.0860	mg/L	0.01
Total Barium		0.245	mg/L	0.01
Total Cadmium		<0.0100	mg/L	0.01
Total Cobalt		<0.0100	mg/L	0.01
Total Chromium		<0.0100	mg/L	0.01
Total Copper		<0.00500	mg/L	0.005
Total Iron		0.0530	mg/L	0.01
Total Mercury		<0.000200	mg/L	0.0002
Total Manganese		<0.00500	mg/L	0.005
Total Molybdenum		<0.0500	mg/L	0.05
Total Nickel		<0.0100	mg/L	0.01
Naphthalene		<0.000199	mg/L	0.0002
2-Methylnaphthalene		<0.000199	mg/L	0.0002

continued ...

sample 319993 continued ...

Param	Flag	Result	Units	RL
1-Methylnaphthalene		<0.000199	mg/L	0.0002
Acenaphthylene		<0.000199	mg/L	0.0002
Acenaphthene		<0.000199	mg/L	0.0002
Dibenzofuran		<0.000199	mg/L	0.0002
Fluorene		<0.000199	mg/L	0.0002
Anthracene		<0.000199	mg/L	0.0002
Phenanthrene		<0.000199	mg/L	0.0002
Fluoranthene		<0.000199	mg/L	0.0002
Pyrene		<0.000199	mg/L	0.0002
Benzo(a)anthracene		<0.000199	mg/L	0.0002
Chrysene	Qs	<0.000199	mg/L	0.0002
Benzo(b)fluoranthene		<0.000199	mg/L	0.0002
Benzo(k)fluoranthene		<0.000199	mg/L	0.0002
Benzo(a)pyrene		<0.000199	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000199	mg/L	0.0002
Dibenzo(a,h)anthracene	Qs	<0.000199	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000199	mg/L	0.0002
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0200	mg/L	0.02
Total Zinc		0.0140	mg/L	0.01



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: February 7, 2013

Work Order: 13013128



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
319993	Post-Carbon	water	2013-01-31	11:30	2013-01-31

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 45 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

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QC Batch 98698 - Method Blank (1)	12
QC Batch 98698 - Method Blank (1)	12
QC Batch 98698 - Method Blank (1)	12
QC Batch 98698 - Method Blank (1)	13
QC Batch 98698 - Method Blank (1)	13
QC Batch 98698 - Method Blank (1)	13
QC Batch 98698 - Method Blank (1)	13
QC Batch 98698 - Method Blank (1)	14
QC Batch 98698 - Method Blank (1)	14
QC Batch 98698 - Method Blank (1)	14
QC Batch 98698 - Method Blank (1)	14
QC Batch 98698 - Method Blank (1)	15
QC Batch 98698 - Method Blank (1)	15
QC Batch 98698 - Method Blank (1)	15
QC Batch 98698 - Method Blank (1)	15
QC Batch 98698 - Method Blank (1)	16
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QC Batch 98578 - LCS (1)	18
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QC Batch 98698 - LCS (1)	19
QC Batch 98698 - LCS (1)	19
QC Batch 98698 - LCS (1)	19
QC Batch 98698 - LCS (1)	20
QC Batch 98698 - LCS (1)	20
QC Batch 98698 - LCS (1)	21
QC Batch 98698 - LCS (1)	21
QC Batch 98698 - LCS (1)	21
QC Batch 98698 - LCS (1)	21
QC Batch 98698 - LCS (1)	22
QC Batch 98698 - LCS (1)	22
QC Batch 98698 - LCS (1)	22
QC Batch 98698 - LCS (1)	22
QC Batch 98698 - LCS (1)	23
QC Batch 98698 - LCS (1)	23
QC Batch 98698 - LCS (1)	24
QC Batch 98698 - LCS (1)	24
QC Batch 98713 - LCS (1)	24
QC Batch 98718 - LCS (1)	26

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-01-31 and assigned to work order 13013128. Samples for work order 13013128 were received intact without headspace and at a temperature of 0.3 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Ag, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Al, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
As, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Ba, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
BTEX	S 8021B	83531	2013-01-31 at 15:00	98578	2013-01-31 at 15:00
B, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Cd, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Co, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Cr, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Cu, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Fe, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Hg, Total	S 7470A	83652	2013-02-07 at 11:45	98718	2013-02-07 at 11:46
Mn, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Mo, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Ni, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
PAH	S 8270D	83648	2013-02-05 at 15:00	98713	2013-02-07 at 10:16
Pb, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Se, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31
Zn, Total	S 6010C	83617	2013-02-06 at 10:00	98698	2013-02-07 at 08:31

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 13013128 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.

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Analytical Report

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Ag, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Silver	U	1	<0.00500	mg/L	1	0.00500

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Al, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Aluminum	U	1	<0.0500	mg/L	1	0.0500

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	As, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Arsenic	U	1	<0.0100	mg/L	1	0.0100

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	B, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Boron		1	0.0860	mg/L	1	0.0100

Sample: 319993 - Post-Carbon

Laboratory: Lubbock
Analysis: Ba, Total
QC Batch: 98698
Prep Batch: 83617

Analytical Method: S 6010C
Date Analyzed: 2013-02-07
Sample Preparation: 2013-02-06

Prep Method: S 3010A
Analyzed By: RR
Prepared By: KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Barium		1	0.245	mg/L	1	0.0100

Sample: 319993 - Post-Carbon

Laboratory: Midland
Analysis: BTEX
QC Batch: 98578
Prep Batch: 83531

Analytical Method: S 8021B
Date Analyzed: 2013-01-31
Sample Preparation: 2013-01-31

Prep Method: S 5030B
Analyzed By: YG
Prepared By: YG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.118	mg/L	1	0.100	118	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0962	mg/L	1	0.100	96	68.1 - 109

Sample: 319993 - Post-Carbon

Laboratory: Lubbock
Analysis: Cd, Total
QC Batch: 98698
Prep Batch: 83617

Analytical Method: S 6010C
Date Analyzed: 2013-02-07
Sample Preparation: 2013-02-06

Prep Method: S 3010A
Analyzed By: RR
Prepared By: KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Cadmium	U	1	<0.0100	mg/L	1	0.0100

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Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Co, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Cobalt	U	1	<0.0100	mg/L	1	0.0100

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Cr, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Chromium	U	1	<0.0100	mg/L	1	0.0100

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Cu, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Copper	U	1	<0.00500	mg/L	1	0.00500

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Fe, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Iron		1	0.0530	mg/L	1	0.0100

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Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Hg, Total	Analytical Method:	S 7470A
QC Batch:	98718	Date Analyzed:	2013-02-07
Prep Batch:	83652	Sample Preparation:	2013-02-07
		Prep Method:	N/A
		Analyzed By:	KV
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Mercury	U	1	<0.000200	mg/L	1	0.000200

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Mn, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Manganese	U	1	<0.00500	mg/L	1	0.00500

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Mo, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Molybdenum	U	1	<0.0500	mg/L	1	0.0500

Sample: 319993 - Post-Carbon

Laboratory:	Lubbock		
Analysis:	Ni, Total	Analytical Method:	S 6010C
QC Batch:	98698	Date Analyzed:	2013-02-07
Prep Batch:	83617	Sample Preparation:	2013-02-06
		Prep Method:	S 3010A
		Analyzed By:	RR
		Prepared By:	KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Nickel	U	1	<0.0100	mg/L	1	0.0100

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Sample: 319993 - Post-Carbon

Laboratory: Lubbock

Analysis: PAH

QC Batch: 98713

Prep Batch: 83648

Analytical Method: S 8270D

Date Analyzed: 2013-02-07

Sample Preparation: 2013-02-05

Prep Method: S 3510C

Analyzed By: MN

Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000199	mg/L	0.995	0.000200
2-Methylnaphthalene	U	1	<0.000199	mg/L	0.995	0.000200
1-Methylnaphthalene	U		<0.000199	mg/L	0.995	0.000200
Acenaphthylene	U	1	<0.000199	mg/L	0.995	0.000200
Acenaphthene	U	1	<0.000199	mg/L	0.995	0.000200
Dibenzofuran	U	1	<0.000199	mg/L	0.995	0.000200
Fluorene	U	1	<0.000199	mg/L	0.995	0.000200
Anthracene	U	1	<0.000199	mg/L	0.995	0.000200
Phenanthrene	U	1	<0.000199	mg/L	0.995	0.000200
Fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Pyrene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(a)anthracene	U	1	<0.000199	mg/L	0.995	0.000200
Chrysene	Qs,U	1	<0.000199	mg/L	0.995	0.000200
Benzo(b)fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(k)fluoranthene	U	1	<0.000199	mg/L	0.995	0.000200
Benzo(a)pyrene	U	1	<0.000199	mg/L	0.995	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000199	mg/L	0.995	0.000200
Dibenzo(a,h)anthracene	Qs,U	1	<0.000199	mg/L	0.995	0.000200
Benzo(g,h,i)perylene	U	1	<0.000199	mg/L	0.995	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0555	mg/L	0.995	0.0800	69	40 - 110
2-Fluorobiphenyl			0.0575	mg/L	0.995	0.0800	72	50 - 110
Terphenyl-d14			0.0653	mg/L	0.995	0.0800	82	50 - 135

Sample: 319993 - Post-Carbon

Laboratory: Lubbock

Analysis: Pb, Total

QC Batch: 98698

Prep Batch: 83617

Analytical Method: S 6010C

Date Analyzed: 2013-02-07

Sample Preparation: 2013-02-06

Prep Method: S 3010A

Analyzed By: RR

Prepared By: KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Lead	U	1	<0.0100	mg/L	1	0.0100

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Sample: 319993 - Post-Carbon

Laboratory: Lubbock

Analysis: Se, Total

QC Batch: 98698

Prep Batch: 83617

Analytical Method: S 6010C

Date Analyzed: 2013-02-07

Sample Preparation: 2013-02-06

Prep Method: S 3010A

Analyzed By: RR

Prepared By: KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Selenium	U	1	<0.0200	mg/L	1	0.0200

Sample: 319993 - Post-Carbon

Laboratory: Lubbock

Analysis: Zn, Total

QC Batch: 98698

Prep Batch: 83617

Analytical Method: S 6010C

Date Analyzed: 2013-02-07

Sample Preparation: 2013-02-06

Prep Method: S 3010A

Analyzed By: RR

Prepared By: KV

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Total Zinc		1	0.0140	mg/L	1	0.0100

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Method Blanks

Method Blank (1) QC Batch: 98578

QC Batch: 98578 Date Analyzed: 2013-01-31 Analyzed By: YG
Prep Batch: 83531 QC Preparation: 2013-01-31 Prepared By: YG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000200	mg/L	0.001
Toluene		2	<0.000300	mg/L	0.001
Ethylbenzene		2	<0.000400	mg/L	0.001
Xylene		2	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.117	mg/L	1	0.100	117	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0949	mg/L	1	0.100	95	68.1 - 109

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Silver		1	<0.00130	mg/L	0.005

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Aluminum		1	<0.00340	mg/L	0.05

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Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Arsenic		1	<0.00290	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Boron		1	<0.00440	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Barium		1	<0.00180	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Cadmium		1	<0.00470	mg/L	0.01

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Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Cobalt		1	<0.00430	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Chromium		1	<0.00160	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Copper		1	<0.00180	mg/L	0.005

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Iron		1	<0.00190	mg/L	0.01

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Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Manganese		1	<0.00290	mg/L	0.005

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Molybdenum		1	<0.00550	mg/L	0.05

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Nickel		1	<0.00160	mg/L	0.01

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Lead		1	<0.00820	mg/L	0.01

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Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Selenium		1	<0.00540	mg/L	0.02

Method Blank (1) QC Batch: 98698

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR
Prep Batch: 83617 QC Preparation: 2013-02-06 Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Zinc		1	<0.00530	mg/L	0.01

Method Blank (1) QC Batch: 98713

QC Batch: 98713 Date Analyzed: 2013-02-07 Analyzed By: MN
Prep Batch: 83648 QC Preparation: 2013-02-05 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0603	mg/L	1	0.0800	75	40 - 110
2-Fluorobiphenyl			0.0605	mg/L	1	0.0800	76	50 - 110
Terphenyl-d14			0.0572	mg/L	1	0.0800	72	50 - 135

Method Blank (1) QC Batch: 98718

QC Batch: 98718
Prep Batch: 83652

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-07

Analyzed By: KV
Prepared By: KV

Parameter	Flag	Cert	MDL Result	Units	RL
Total Mercury		1	<0.0000450	mg/L	0.0002

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 98578
Prep Batch: 83531

Date Analyzed: 2013-01-31
QC Preparation: 2013-01-31

Analyzed By: YG
Prepared By: YG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.106	mg/L	1	0.100	<0.000200	106	80 - 120
Toluene		2	0.106	mg/L	1	0.100	<0.000300	106	80 - 120
Ethylbenzene		2	0.108	mg/L	1	0.100	<0.000400	108	70.6 - 120
Xylene		2	0.332	mg/L	1	0.300	<0.00120	111	79.2 - 120

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		2	0.108	mg/L	1	0.100	<0.000200	108	80 - 120	2	20
Toluene		2	0.108	mg/L	1	0.100	<0.000300	108	80 - 120	2	20
Ethylbenzene		2	0.110	mg/L	1	0.100	<0.000400	110	70.6 - 120	2	20
Xylene		2	0.339	mg/L	1	0.300	<0.00120	113	79.2 - 120	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)	Q _{sr}	Q _{sr}	0.117	0.118	mg/L	1	0.100	117	118	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0991	0.0998	mg/L	1	0.100	99	100	68.1 - 109

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		1	0.133	mg/L	1	0.125	<0.00130	106	85 - 115

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

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control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver		1	0.132	mg/L	1	0.125	<0.00130	106	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Aluminum		1	1.00	mg/L	1	1.00	<0.00340	100	85 - 115

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Aluminum		1	1.01	mg/L	1	1.00	<0.00340	101	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Arsenic		1	0.537	mg/L	1	0.500	<0.00290	107	85 - 115

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Arsenic		1	0.536	mg/L	1	0.500	<0.00290	107	85 - 115	0	20

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

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Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Boron		1	0.0480	mg/L	1	0.0500	<0.00440	96	85 - 115

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
Total Boron		1	0.0490	mg/L	1	0.0500	<0.00440	98	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Barium		1	1.07	mg/L	1	1.00	<0.00180	107	85 - 115

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
Total Barium		1	1.07	mg/L	1	1.00	<0.00180	107	85 - 115	0	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium		1	0.236	mg/L	1	0.250	<0.00470	94	85 - 115

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

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Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Cadmium		1	0.242	mg/L	1	0.250	<0.00470	97	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cobalt		1	0.247	mg/L	1	0.250	<0.00430	99	85 - 115

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
Total Cobalt		1	0.242	mg/L	1	0.250	<0.00430	97	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium		1	0.102	mg/L	1	0.100	<0.00160	102	85 - 115

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
Total Chromium		1	0.100	mg/L	1	0.100	<0.00160	100	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

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Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		1	0.128	mg/L	1	0.125	<0.00180	102	85 - 115

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
Total Copper		1	0.128	mg/L	1	0.125	<0.00180	102	85 - 115	0	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron		1	0.477	mg/L	1	0.500	<0.00190	95	85 - 115

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
Total Iron		1	0.485	mg/L	1	0.500	<0.00190	97	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		1	0.260	mg/L	1	0.250	<0.00290	104	85 - 115

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
Total Manganese		1	0.270	mg/L	1	0.250	<0.00290	108	85 - 115	4	20

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

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Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Molybdenum		1	0.525	mg/L	1	0.500	<0.00550	105	85 - 115

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
Total Molybdenum		1	0.536	mg/L	1	0.500	<0.00550	107	85 - 115	2	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Nickel		1	0.274	mg/L	1	0.250	<0.00160	110	85 - 115

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
Total Nickel		1	0.266	mg/L	1	0.250	<0.00160	106	85 - 115	3	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Lead		1	0.480	mg/L	1	0.500	<0.00820	96	85 - 115

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

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Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Lead		1	0.527	mg/L	1	0.500	<0.00820	105	85 - 115	9	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Selenium		1	0.530	mg/L	1	0.500	<0.00540	106	85 - 115

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
Total Selenium		1	0.532	mg/L	1	0.500	<0.00540	106	85 - 115	0	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc		1	0.259	mg/L	1	0.250	<0.00530	104	85 - 115

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
Total Zinc		1	0.258	mg/L	1	0.250	<0.00530	103	85 - 115	0	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 98713
Prep Batch: 83648

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-05

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Naphthalene		1	0.0626	mg/L	1	0.0800	<0.000121	78	40 - 100	
2-Methylnaphthalene		1	0.0592	mg/L	1	0.0800	<0.0000913	74	45 - 105	
1-Methylnaphthalene			0.0582	mg/L	1	0.0800	<0.000109	73	33 - 120	
Acenaphthylene		1	0.0636	mg/L	1	0.0800	<0.000100	80	50 - 105	
Acenaphthene		1	0.0602	mg/L	1	0.0800	<0.000122	75	45 - 110	
Dibenzofuran		1	0.0498	mg/L	1	0.0800	<0.000108	62	55 - 105	
Fluorene		1	0.0598	mg/L	1	0.0800	<0.000100	75	50 - 110	
Anthracene		1	0.0572	mg/L	1	0.0800	<0.0000791	72	55 - 110	
Phenanthrene		1	0.0633	mg/L	1	0.0800	<0.0000824	79	50 - 115	
Fluoranthene		1	0.0565	mg/L	1	0.0800	<0.000124	71	55 - 115	
Pyrene		1	0.0536	mg/L	1	0.0800	<0.0000691	67	50 - 130	
Benzo(a)anthracene		1	0.0577	mg/L	1	0.0800	<0.000101	72	55 - 110	
Chrysene	Qs	Qs	1	0.0974	mg/L	1	0.0800	<0.0000769	122	55 - 110
Benzo(b)fluoranthene		1	0.0618	mg/L	1	0.0800	<0.0000813	77	45 - 120	
Benzo(k)fluoranthene		1	0.0798	mg/L	1	0.0800	<0.0000790	100	45 - 125	
Benzo(a)pyrene		1	0.0763	mg/L	1	0.0800	<0.0000701	95	55 - 110	
Indeno(1,2,3-cd)pyrene		1	0.0758	mg/L	1	0.0800	<0.0000770	95	45 - 125	
Dibenzo(a,h)anthracene	Qs	Qs	1	0.144	mg/L	1	0.0800	<0.0000851	180	40 - 125
Benzo(g,h,i)perylene		1	0.0726	mg/L	1	0.0800	<0.0000798	91	40 - 125	

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

Param	F	C	LCSD			Spike	Matrix		Rec.		RPD	
			Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene		1	0.0613	mg/L	1	0.0800	<0.000121	77	40 - 100	2	20	
2-Methylnaphthalene		1	0.0596	mg/L	1	0.0800	<0.0000913	74	45 - 105	1	20	
1-Methylnaphthalene			0.0594	mg/L	1	0.0800	<0.000109	74	33 - 120	2	20	
Acenaphthylene		1	0.0642	mg/L	1	0.0800	<0.000100	80	50 - 105	1	20	
Acenaphthene		1	0.0596	mg/L	1	0.0800	<0.000122	74	45 - 110	1	20	
Dibenzofuran		1	0.0497	mg/L	1	0.0800	<0.000108	62	55 - 105	0	20	
Fluorene		1	0.0595	mg/L	1	0.0800	<0.000100	74	50 - 110	0	20	
Anthracene		1	0.0573	mg/L	1	0.0800	<0.0000791	72	55 - 110	0	20	
Phenanthrene		1	0.0636	mg/L	1	0.0800	<0.0000824	80	50 - 115	0	20	
Fluoranthene		1	0.0554	mg/L	1	0.0800	<0.000124	69	55 - 115	2	20	
Pyrene		1	0.0523	mg/L	1	0.0800	<0.0000691	65	50 - 130	2	20	
Benzo(a)anthracene		1	0.0569	mg/L	1	0.0800	<0.000101	71	55 - 110	1	20	
Chrysene	Qs	Qs	1	0.0957	mg/L	1	0.0800	<0.0000769	120	55 - 110	2	20
Benzo(b)fluoranthene		1	0.0568	mg/L	1	0.0800	<0.0000813	71	45 - 120	8	20	
Benzo(k)fluoranthene		1	0.0729	mg/L	1	0.0800	<0.0000790	91	45 - 125	9	20	
Benzo(a)pyrene		1	0.0702	mg/L	1	0.0800	<0.0000701	88	55 - 110	8	20	
Indeno(1,2,3-cd)pyrene		1	0.0698	mg/L	1	0.0800	<0.0000770	87	45 - 125	8	20	
Dibenzo(a,h)anthracene	Qs	Qs	1	0.126	mg/L	1	0.0800	<0.0000851	158	40 - 125	13	20
Benzo(g,h,i)perylene		1	0.0669	mg/L	1	0.0800	<0.0000798	84	40 - 125	8	20	

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

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0647	0.0616	mg/L	1	0.0800	81	77	40 - 110
2-Fluorobiphenyl	0.0673	0.0651	mg/L	1	0.0800	84	81	50 - 110
Terphenyl-d14	0.0605	0.0585	mg/L	1	0.0800	76	73	50 - 135

Laboratory Control Spike (LCS-1)

QC Batch: 98718
Prep Batch: 83652

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-07

Analyzed By: KV
Prepared By: KV

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1	0.00407	mg/L	1	0.00400	<0.0000450	102	85 - 115

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
Total Mercury		1	0.00403	mg/L	1	0.00400	<0.0000450	101	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98578
Prep Batch: 83531

Date Analyzed: 2013-01-31
QC Preparation: 2013-01-31

Analyzed By: YG
Prepared By: YG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.105	mg/L	1	0.100	<0.000200	105	25.7 - 139
Toluene		2	0.104	mg/L	1	0.100	<0.000300	104	32.7 - 134
Ethylbenzene		2	0.106	mg/L	1	0.100	<0.000400	106	45.9 - 120
Xylene		2	0.325	mg/L	1	0.300	<0.00120	108	34.9 - 128

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		2	0.107	mg/L	1	0.100	<0.000200	107	25.7 - 139	2	20
Toluene		2	0.107	mg/L	1	0.100	<0.000300	107	32.7 - 134	3	20
Ethylbenzene		2	0.109	mg/L	1	0.100	<0.000400	109	45.9 - 120	3	20
Xylene		2	0.335	mg/L	1	0.300	<0.00120	112	34.9 - 128	3	20

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

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Surrogate			MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.116	0.117	mg/L	1	0.1	116	117	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0970	0.0980	mg/L	1	0.1	97	98	68.1 - 109

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver		1	0.134	mg/L	1	0.125	<0.00130	107	75 - 125

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
Total Silver		1	0.132	mg/L	1	0.125	<0.00130	106	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Aluminum		1	1.05	mg/L	1	1.00	<0.00340	105	75 - 125

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
Total Aluminum		1	1.03	mg/L	1	1.00	<0.00340	103	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

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Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Arsenic		1	0.539	mg/L	1	0.500	<0.00290	108	75 - 125

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
Total Arsenic		1	0.538	mg/L	1	0.500	<0.00290	108	75 - 125	0	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Boron		1	0.142	mg/L	1	0.0500	0.086	112	75 - 125

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
Total Boron		1	0.140	mg/L	1	0.0500	0.086	108	75 - 125	1	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Barium		1	1.30	mg/L	1	1.00	0.245	106	75 - 125

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
Total Barium		1	1.29	mg/L	1	1.00	0.245	104	75 - 125	1	20

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

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Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cadmium		1	0.277	mg/L	1	0.250	<0.00470	111	75 - 125

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
Total Cadmium		1	0.259	mg/L	1	0.250	<0.00470	104	75 - 125	7	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Cobalt		1	0.271	mg/L	1	0.250	<0.00430	108	75 - 125

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
Total Cobalt		1	0.259	mg/L	1	0.250	<0.00430	104	75 - 125	4	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium		1	0.0990	mg/L	1	0.100	<0.00160	99	75 - 125

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

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Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium		1	0.0960	mg/L	1	0.100	<0.00160	96	75 - 125	3	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Copper		1	0.132	mg/L	1	0.125	<0.00180	106	75 - 125

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
Total Copper		1	0.131	mg/L	1	0.125	<0.00180	105	75 - 125	1	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Iron		1	0.595	mg/L	1	0.500	0.053	108	75 - 125

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
Total Iron		1	0.592	mg/L	1	0.500	0.053	108	75 - 125	0	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

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Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Manganese		1	0.268	mg/L	1	0.250	<0.00290	107	75 - 125

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
Total Manganese		1	0.267	mg/L	1	0.250	<0.00290	107	75 - 125	0	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Molybdenum		1	0.544	mg/L	1	0.500	<0.00550	109	75 - 125

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
Total Molybdenum		1	0.524	mg/L	1	0.500	<0.00550	105	75 - 125	4	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Nickel		1	0.263	mg/L	1	0.250	<0.00160	105	75 - 125

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
Total Nickel		1	0.263	mg/L	1	0.250	<0.00160	105	75 - 125	0	20

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

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Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Lead		1	0.522	mg/L	1	0.500	<0.00820	104	75 - 125

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
Total Lead		1	0.522	mg/L	1	0.500	<0.00820	104	75 - 125	0	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Selenium		1	0.543	mg/L	1	0.500	<0.00540	109	75 - 125

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
Total Selenium		1	0.535	mg/L	1	0.500	<0.00540	107	75 - 125	2	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98698
Prep Batch: 83617

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-06

Analyzed By: RR
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc		1	0.279	mg/L	1	0.250	0.014	106	75 - 125

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

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Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc		1	0.279	mg/L	1	0.250	0.014	106	75 - 125	0	20

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

Matrix Spike (MS-1) Spiked Sample: 319993

QC Batch: 98718
Prep Batch: 83652

Date Analyzed: 2013-02-07
QC Preparation: 2013-02-07

Analyzed By: KV
Prepared By: KV

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Mercury		1	0.00396	mg/L	1	0.00400	<0.0000450	99	75 - 125

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
Total Mercury		1	0.00413	mg/L	1	0.00400	<0.0000450	103	75 - 125	4	20

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

Calibration Standards

Standard (CCV-1)

QC Batch: 98578

Date Analyzed: 2013-01-31

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.107	107	80 - 120	2013-01-31
Toluene		2	mg/L	0.100	0.107	107	80 - 120	2013-01-31
Ethylbenzene		2	mg/L	0.100	0.108	108	80 - 120	2013-01-31
Xylene		2	mg/L	0.300	0.331	110	80 - 120	2013-01-31

Standard (CCV-2)

QC Batch: 98578

Date Analyzed: 2013-01-31

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.107	107	80 - 120	2013-01-31
Toluene		2	mg/L	0.100	0.107	107	80 - 120	2013-01-31
Ethylbenzene		2	mg/L	0.100	0.108	108	80 - 120	2013-01-31
Xylene		2	mg/L	0.300	0.334	111	80 - 120	2013-01-31

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		1	mg/L	0.125	0.126	101	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

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Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Boron		1	mg/L	1.00	1.07	107	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

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Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cobalt		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		1	mg/L	1.00	1.05	105	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698 Date Analyzed: 2013-02-07 Analyzed By: RR

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Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		1	mg/L	1.00	1.01	101	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Molybdenum		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Nickel		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

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Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (ICV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		1	mg/L	0.125	0.125	100	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Aluminum		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		1	mg/L	1.00	1.07	107	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Boron		1	mg/L	1.00	1.08	108	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Barium		1	mg/L	1.00	1.01	101	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Report Date: February 7, 2013
TNM 97-04

Work Order: 13013128
TNM 97-04 Townsend

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cadmium		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cobalt		1	mg/L	1.00	1.06	106	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Copper		1	mg/L	1.00	1.04	104	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Report Date: February 7, 2013
TNM 97-04

Work Order: 13013128
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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Iron		1	mg/L	1.00	1.06	106	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Manganese		1	mg/L	1.00	1.05	105	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Molybdenum		1	mg/L	1.00	1.03	103	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Nickel		1	mg/L	1.00	0.993	99	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Report Date: February 7, 2013
TNM 97-04

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Lead		1	mg/L	1.00	1.08	108	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium		1	mg/L	1.00	1.09	109	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98698

Date Analyzed: 2013-02-07

Analyzed By: RR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		1	mg/L	1.00	1.02	102	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98713

Date Analyzed: 2013-02-07

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	59.0	98	80 - 120	2013-02-07
2-Methylnaphthalene		1	mg/L	60.0	53.4	89	80 - 120	2013-02-07
1-Methylnaphthalene			mg/L	60.0	51.4	86	80 - 120	2013-02-07
Acenaphthylene		1	mg/L	60.0	53.5	89	80 - 120	2013-02-07
Acenaphthene		1	mg/L	60.0	55.2	92	80 - 120	2013-02-07
Dibenzofuran		1	mg/L	60.0	59.6	99	80 - 120	2013-02-07
Fluorene		1	mg/L	60.0	55.1	92	80 - 120	2013-02-07
Anthracene		1	mg/L	60.0	54.1	90	80 - 120	2013-02-07
Phenanthrene		1	mg/L	60.0	57.9	96	80 - 120	2013-02-07
Fluoranthene		1	mg/L	60.0	57.3	96	80 - 120	2013-02-07

continued ...

Report Date: February 7, 2013
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standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyrene		1	mg/L	60.0	60.5	101	80 - 120	2013-02-07
Benzo(a)anthracene		1	mg/L	60.0	59.8	100	80 - 120	2013-02-07
Chrysene		1	mg/L	60.0	59.7	100	80 - 120	2013-02-07
Benzo(b)fluoranthene		1	mg/L	60.0	55.8	93	80 - 120	2013-02-07
Benzo(k)fluoranthene		1	mg/L	60.0	55.5	92	80 - 120	2013-02-07
Benzo(a)pyrene		1	mg/L	60.0	59.9	100	80 - 120	2013-02-07
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	63.9	106	80 - 120	2013-02-07
Dibenzo(a,h)anthracene		1	mg/L	60.0	65.6	109	80 - 120	2013-02-07
Benzo(g,h,i)perylene		1	mg/L	60.0	64.4	107	80 - 120	2013-02-07

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			61.6	mg/L	1	60.0	103	-
2-Fluorobiphenyl			61.8	mg/L	1	60.0	103	-
Terphenyl-d14			65.3	mg/L	1	60.0	109	-

Standard (ICV-1)

QC Batch: 98718

Date Analyzed: 2013-02-07

Analyzed By: KV

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1	mg/L	0.00500	0.00517	103	90 - 110	2013-02-07

Standard (CCV-1)

QC Batch: 98718

Date Analyzed: 2013-02-07

Analyzed By: KV

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		1	mg/L	0.00500	0.00531	106	90 - 110	2013-02-07

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	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: February 7, 2013
TNM 97-04

Work Order: 13013128
TNM 97-04 Townsend

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Attachments

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

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

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 + Env.**
Address: **2057 Commerce** (Street, City, Zip)
Contact Person: **Carmille Bryant**
Invoice to: **PLAINS** (If different from above)
Project #: **TNM 47-04**
Project Location (including state): **Lea Co., New Mexico**
Phone #: **432-520-7720**
Fax #:
E-mail:
Project Name: **97-04**
Sampler Signature: **[Signature]**

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX	PRESERVATIVE METHOD	SAMPLING TIME							
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE
31999-3	Post Carbon	3		X						X		1/30	1330
	Post Carbon	3		X						X		1/31	1830

[illegible][illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	Time:	Company:	Date:	Time:	INST	LAB USE ONLY	REMARKS:
Preston Bridges	TA	1/31/13	15:00	[Signature]	TA	1/31/13	15:00	OBS 0.6°C COR 0.6°C						LAB USE ONLY	Rush (24 hr) BTEX only hold P4H for BTEX results Run wacc metals now Dry Weight Basis Required TRRP Report Required Check if Special Reporting Limits Are Needed
[Signature]	TA	1/31/13	15:30	[Signature]	TA	2/1/13	15:55	OBS 3.2°C COR 2.9°C						LAB USE ONLY	

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C. **13: 253250** Carrier # **1173** Medard Rev

Summary Report

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

Report Date: February 15, 2013

Work Order: 13021202



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
320776	MW-18	water	2013-02-11	13:14	2013-02-12
320777	MW-14	water	2013-02-11	12:35	2013-02-12
320778	MW-13	water	2013-02-11	12:55	2013-02-12
320779	MW-15	water	2013-02-11	12:52	2013-02-12
320780	MW-4	water	2013-02-11	12:33	2013-02-12

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
320776 - MW-18	<0.00100	<0.00100	<0.00100	<0.00100
320777 - MW-14	<0.00100	<0.00100	0.0173	0.0444
320778 - MW-13	<0.00100	<0.00100	<0.00100	<0.00100
320779 - MW-15	<0.00100	<0.00100	<0.00100	<0.00100
320780 - MW-4	0.262	<0.00500 ¹	0.329	0.790

¹Dilution due to surfactant.



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		915-585-3443	FAX 915-585-4944
5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com				

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: February 15, 2013

Work Order: 13021202



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
320776	MW-18	water	2013-02-11	13:14	2013-02-12
320777	MW-14	water	2013-02-11	12:35	2013-02-12
320778	MW-13	water	2013-02-11	12:55	2013-02-12
320779	MW-15	water	2013-02-11	12:52	2013-02-12
320780	MW-4	water	2013-02-11	12:33	2013-02-12

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 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The script is fluid and cursive, with the first name "Michael" and last name "Abel" clearly distinguishable.

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-02-12 and assigned to work order 13021202. Samples for work order 13021202 were received intact without headspace and at a temperature of 4.4 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	83810	2013-02-13 at 12:00	98927	2013-02-13 at 12:00
BTEX	S 8021B	83832	2013-02-14 at 12:00	98953	2013-02-14 at 12:00

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 13021202 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: 320776 - MW-18

Laboratory: Midland
Analysis: BTEX
QC Batch: 98927
Prep Batch: 83810

Analytical Method: S 8021B
Date Analyzed: 2013-02-13
Sample Preparation: 2013-02-13

Prep Method: S 5030B
Analyzed By: YG
Prepared By: YG

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)	Q _{sr}	Q _{sr}	0.117	mg/L	1	0.100	117	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0961	mg/L	1	0.100	96	68.1 - 109

Sample: 320777 - MW-14

Laboratory: Midland
Analysis: BTEX
QC Batch: 98927
Prep Batch: 83810

Analytical Method: S 8021B
Date Analyzed: 2013-02-13
Sample Preparation: 2013-02-13

Prep Method: S 5030B
Analyzed By: YG
Prepared By: YG

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		1	0.0173	mg/L	1	0.00100
Xylene		1	0.0444	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.113	mg/L	1	0.100	113	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.106	mg/L	1	0.100	106	68.1 - 109

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TNM 97-04

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TNM 97-04 Townsend

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Sample: 320778 - MW-13

Laboratory: Midland

Analysis: BTEX

QC Batch: 98927

Prep Batch: 83810

Analytical Method: S 8021B

Date Analyzed: 2013-02-13

Sample Preparation: 2013-02-13

Prep Method: S 5030B

Analyzed By: YG

Prepared By: YG

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)	Qsr	Qsr	0.114	mg/L	1	0.100	114	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0986	mg/L	1	0.100	99	68.1 - 109

Sample: 320779 - MW-15

Laboratory: Midland

Analysis: BTEX

QC Batch: 98953

Prep Batch: 83832

Analytical Method: S 8021B

Date Analyzed: 2013-02-14

Sample Preparation: 2013-02-14

Prep Method: S 5030B

Analyzed By: YG

Prepared By: YG

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)	Qsr	Qsr	0.114	mg/L	1	0.100	114	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0978	mg/L	1	0.100	98	68.1 - 109

Report Date: February 15, 2013
TNM 97-04

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Lovington, NM

Sample: 320780 - MW-4

Laboratory: Midland

Analysis: BTEX

QC Batch: 98927

Prep Batch: 83810

Analytical Method: S 8021B

Date Analyzed: 2013-02-13

Sample Preparation: 2013-02-13

Prep Method: S 5030B

Analyzed By: YG

Prepared By: YG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.262	mg/L	5	0.00100
Toluene	¹ U	1	<0.00500	mg/L	5	0.00100
Ethylbenzene		1	0.329	mg/L	5	0.00100
Xylene		1	0.790	mg/L	5	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.569	mg/L	5	0.500	114	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.539	mg/L	5	0.500	108	68.1 - 109

Method Blanks

Method Blank (1) QC Batch: 98927

QC Batch: 98927 Date Analyzed: 2013-02-13 Analyzed By: YG
Prep Batch: 83810 QC Preparation: 2013-02-13 Prepared By: YG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.116	mg/L	1	0.100	116	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0975	mg/L	1	0.100	98	68.1 - 109

Method Blank (1) QC Batch: 98953

QC Batch: 98953 Date Analyzed: 2013-02-14 Analyzed By: YG
Prep Batch: 83832 QC Preparation: 2013-02-14 Prepared By: YG

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Q _{sr}	Q _{sr}	0.114	mg/L	1	0.100	114	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0972	mg/L	1	0.100	97	68.1 - 109

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 98927
Prep Batch: 83810

Date Analyzed: 2013-02-13
QC Preparation: 2013-02-13

Analyzed By: YG
Prepared By: YG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0800	mg/L	1	0.100	<0.000200	80	80 - 120
Toluene		1	0.0810	mg/L	1	0.100	<0.000300	81	80 - 120
Ethylbenzene		1	0.0850	mg/L	1	0.100	<0.000400	85	70.6 - 120
Xylene		1	0.264	mg/L	1	0.300	<0.00120	88	79.2 - 120

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	0.0810	mg/L	1	0.100	<0.000200	81	80 - 120	1	20
Toluene		1	0.0809	mg/L	1	0.100	<0.000300	81	80 - 120	0	20
Ethylbenzene		1	0.0850	mg/L	1	0.100	<0.000400	85	70.6 - 120	0	20
Xylene		1	0.264	mg/L	1	0.300	<0.00120	88	79.2 - 120	0	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)	Q _{sr}	Q _{sr}	0.118	0.118	mg/L	1	0.100	118	118	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.100	0.100	mg/L	1	0.100	100	100	68.1 - 109

Laboratory Control Spike (LCS-1)

QC Batch: 98953
Prep Batch: 83832

Date Analyzed: 2013-02-14
QC Preparation: 2013-02-14

Analyzed By: YG
Prepared By: YG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.103	mg/L	1	0.100	<0.000200	103	80 - 120
Toluene		1	0.105	mg/L	1	0.100	<0.000300	105	80 - 120
Ethylbenzene		1	0.112	mg/L	1	0.100	<0.000400	112	70.6 - 120
Xylene		1	0.346	mg/L	1	0.300	<0.00120	115	79.2 - 120

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

Report Date: February 15, 2013
TNM 97-04

Work Order: 13021202
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Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.106	mg/L	1	0.100	<0.000200	106	80 - 120	3	20
Toluene		1	0.108	mg/L	1	0.100	<0.000300	108	80 - 120	3	20
Ethylbenzene		1	0.114	mg/L	1	0.100	<0.000400	114	70.6 - 120	2	20
Xylene		1	0.355	mg/L	1	0.300	<0.00120	118	79.2 - 120	3	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)	Q _{sr}	Q _{sr}	0.114	0.114	mg/L	1	0.100	114	114	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0997	0.0994	mg/L	1	0.100	100	99	68.1 - 109

Matrix Spike (MS-1) Spiked Sample: 320776

QC Batch: 98927
Prep Batch: 83810

Date Analyzed: 2013-02-13
QC Preparation: 2013-02-13

Analyzed By: YG
Prepared By: YG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0958	mg/L	1	0.100	<0.000200	96	25.7 - 139
Toluene		1	0.0976	mg/L	1	0.100	<0.000300	98	32.7 - 134
Ethylbenzene		1	0.103	mg/L	1	0.100	<0.000400	103	45.9 - 120
Xylene		1	0.320	mg/L	1	0.300	<0.00120	107	34.9 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.107	mg/L	1	0.100	<0.000200	107	25.7 - 139	11	20
Toluene		1	0.109	mg/L	1	0.100	<0.000300	109	32.7 - 134	11	20
Ethylbenzene		1	0.114	mg/L	1	0.100	<0.000400	114	45.9 - 120	10	20
Xylene		1	0.353	mg/L	1	0.300	<0.00120	118	34.9 - 128	10	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)	Q _{sr}	Q _{sr}	0.117	0.118	mg/L	1	0.1	117	118	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.100	0.100	mg/L	1	0.1	100	100	68.1 - 109

Report Date: February 15, 2013
TNM 97-04

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Matrix Spike (MS-1) Spiked Sample: 320779

QC Batch: 98953
Prep Batch: 83832

Date Analyzed: 2013-02-14
QC Preparation: 2013-02-14

Analyzed By: YG
Prepared By: YG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.104	mg/L	1	0.100	<0.000200	104	25.7 - 139
Toluene		1	0.106	mg/L	1	0.100	<0.000300	106	32.7 - 134
Ethylbenzene		1	0.112	mg/L	1	0.100	<0.000400	112	45.9 - 120
Xylene		1	0.344	mg/L	1	0.300	<0.00120	115	34.9 - 128

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.106	mg/L	1	0.100	<0.000200	106	25.7 - 139	2	20
Toluene		1	0.108	mg/L	1	0.100	<0.000300	108	32.7 - 134	2	20
Ethylbenzene		1	0.114	mg/L	1	0.100	<0.000400	114	45.9 - 120	2	20
Xylene		1	0.349	mg/L	1	0.300	<0.00120	116	34.9 - 128	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)	Q _{sr}	Q _{sr}	0.115	0.116	mg/L	1	0.1	115	116	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.100	0.101	mg/L	1	0.1	100	101	68.1 - 109

Calibration Standards

Standard (CCV-1)

QC Batch: 98927

Date Analyzed: 2013-02-13

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.102	102	80 - 120	2013-02-13
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2013-02-13
Ethylbenzene		1	mg/L	0.100	0.109	109	80 - 120	2013-02-13
Xylene		1	mg/L	0.300	0.336	112	80 - 120	2013-02-13

Standard (CCV-2)

QC Batch: 98927

Date Analyzed: 2013-02-13

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.102	102	80 - 120	2013-02-13
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2013-02-13
Ethylbenzene		1	mg/L	0.100	0.107	107	80 - 120	2013-02-13
Xylene		1	mg/L	0.300	0.332	111	80 - 120	2013-02-13

Standard (CCV-3)

QC Batch: 98927

Date Analyzed: 2013-02-13

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0946	95	80 - 120	2013-02-13
Toluene		1	mg/L	0.100	0.0970	97	80 - 120	2013-02-13
Ethylbenzene		1	mg/L	0.100	0.101	101	80 - 120	2013-02-13
Xylene		1	mg/L	0.300	0.314	105	80 - 120	2013-02-13

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Standard (CCV-1)

QC Batch: 98953

Date Analyzed: 2013-02-14

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0993	99	80 - 120	2013-02-14
Toluene		1	mg/L	0.100	0.101	101	80 - 120	2013-02-14
Ethylbenzene		1	mg/L	0.100	0.106	106	80 - 120	2013-02-14
Xylene		1	mg/L	0.300	0.328	109	80 - 120	2013-02-14

Standard (CCV-2)

QC Batch: 98953

Date Analyzed: 2013-02-14

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.104	104	80 - 120	2013-02-14
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2013-02-14
Ethylbenzene		1	mg/L	0.100	0.111	111	80 - 120	2013-02-14
Xylene		1	mg/L	0.300	0.344	115	80 - 120	2013-02-14

Standard (CCV-3)

QC Batch: 98953

Date Analyzed: 2013-02-14

Analyzed By: YG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.102	102	80 - 120	2013-02-14
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2013-02-14
Ethylbenzene		1	mg/L	0.100	0.108	108	80 - 120	2013-02-14
Xylene		1	mg/L	0.300	0.335	112	80 - 120	2013-02-14

Appendix

Report Definitions

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

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Result Comments

- 1 Dilution due to surfactant.

Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

TraceAnalysis, Inc.

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BioAquatic Testing
2501 Mayes Rd., Ste 100
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Company Name:	NOVA	Phone #:	(432) 520-7720
Address:	(Street, City, Zip) 2057 Commerce Drive	Fax #:	
Contact Person:	Camille Bryant	E-mail:	
Invoice to:			
(If different from above)			
Project #:	FWM-97-04	Project Name:	Townsend
Project Location (including state):	New	Sample Signature:	

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST
	NOVA	2-12-13	802		HA	12/13	8:02	OBS COR
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST OBS COR
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST OBS COR

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

Carrier #

Summary Report

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

Report Date: March 7, 2013

Work Order: 13022801



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
322213	Post	water	2013-02-27	14:23	2013-02-28
322214	Pre	water	2013-02-27	14:34	2013-02-28

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
322213 - Post	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs	<0.00100 Qs
322214 - Pre	0.230 Qs	0.0780 Qs	0.00770 Qs	0.0631 Qs

Sample: 322213 - Post

Param	Flag	Result	Units	RL
Naphthalene		<0.000201	mg/L	0.0002
2-Methylnaphthalene		<0.000201	mg/L	0.0002
1-Methylnaphthalene		<0.000201	mg/L	0.0002
Acenaphthylene		<0.000201	mg/L	0.0002
Acenaphthene		<0.000201	mg/L	0.0002
Dibenzofuran		<0.000201	mg/L	0.0002
Fluorene		<0.000201	mg/L	0.0002
Anthracene		<0.000201	mg/L	0.0002
Phenanthrene		<0.000201	mg/L	0.0002
Fluoranthene		<0.000201	mg/L	0.0002
Pyrene		<0.000201	mg/L	0.0002
Benzo(a)anthracene		<0.000201	mg/L	0.0002
Chrysene	Qs	<0.000201	mg/L	0.0002
Benzo(b)fluoranthene		<0.000201	mg/L	0.0002

continued ...

sample 322213 continued ...

Param	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.000201	mg/L	0.0002
Benzo(a)pyrene		<0.000201	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000201	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000201	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000201	mg/L	0.0002



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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: March 7, 2013

Work Order: 13022801



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
322213	Post	water	2013-02-27	14:23	2013-02-28
322214	Pre	water	2013-02-27	14:34	2013-02-28

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 14 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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-02-28 and assigned to work order 13022801. Samples for work order 13022801 were received intact without headspace and at a temperature of 5.3 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	84178	2013-03-01 at 11:10	99374	2013-03-01 at 11:11
PAH	S 8270D	84306	2013-03-06 at 15:00	99513	2013-03-07 at 13:37

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 13022801 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.

Report Date: March 7, 2013
TNM 97-04

Work Order: 13022801
TNM 97-04 Townsend

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Lovington, NM

Analytical Report

Sample: 322213 - Post

Laboratory: Midland
Analysis: BTEX
QC Batch: 99374
Prep Batch: 84178

Analytical Method: S 8021B
Date Analyzed: 2013-03-01
Sample Preparation:

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs,U	2	<0.00100	mg/L	1	0.00100
Toluene	Qs,U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qs,U	2	<0.00100	mg/L	1	0.00100
Xylene	Qs,U	2	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	0.111	mg/L	1	0.100	111	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0975	mg/L	1	0.100	98	68.1 - 109

Sample: 322213 - Post

Laboratory: Lubbock
Analysis: PAH
QC Batch: 99513
Prep Batch: 84306

Analytical Method: S 8270D
Date Analyzed: 2013-03-07
Sample Preparation: 2013-03-06

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000201	mg/L	1.005	0.000200
2-Methylnaphthalene	U	1	<0.000201	mg/L	1.005	0.000200
1-Methylnaphthalene	U		<0.000201	mg/L	1.005	0.000200
Acenaphthylene	U	1	<0.000201	mg/L	1.005	0.000200
Acenaphthene	U	1	<0.000201	mg/L	1.005	0.000200
Dibenzofuran	U	1	<0.000201	mg/L	1.005	0.000200
Fluorene	U	1	<0.000201	mg/L	1.005	0.000200
Anthracene	U	1	<0.000201	mg/L	1.005	0.000200
Phenanthrene	U	1	<0.000201	mg/L	1.005	0.000200
Fluoranthene	U	1	<0.000201	mg/L	1.005	0.000200
Pyrene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)anthracene	U	1	<0.000201	mg/L	1.005	0.000200
Chrysene	Qs,U	1	<0.000201	mg/L	1.005	0.000200

continued ...

Report Date: March 7, 2013
TNM 97-04

Work Order: 13022801
TNM 97-04 Townsend

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Lovington, NM

sample 322213 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(k)fluoranthene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)pyrene	U	1	<0.000201	mg/L	1.005	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000201	mg/L	1.005	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(g,h,i)perylene	U	1	<0.000201	mg/L	1.005	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0655	mg/L	1.005	0.0800	82	40 - 110
2-Fluorobiphenyl			0.0643	mg/L	1.005	0.0800	80	50 - 110
Terphenyl-d14			0.0690	mg/L	1.005	0.0800	86	50 - 135

Sample: 322214 - Pre

Laboratory: Midland
Analysis: BTEX
QC Batch: 99374
Prep Batch: 84178

Analytical Method: S 8021B
Date Analyzed: 2013-03-01
Sample Preparation:

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Q _s	2	0.230	mg/L	1	0.00100
Toluene	Q _s	2	0.0780	mg/L	1	0.00100
Ethylbenzene	Q _s	2	0.00770	mg/L	1	0.00100
Xylene	Q _s	2	0.0631	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.108	mg/L	1	0.100	108	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0991	mg/L	1	0.100	99	68.1 - 109

Report Date: March 7, 2013
TNM 97-04

Work Order: 13022801
TNM 97-04 Townsend

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Lovington, NM

Method Blanks

Method Blank (1) QC Batch: 99374

QC Batch: 99374
Prep Batch: 84178

Date Analyzed: 2013-03-01
QC Preparation: 2013-03-01

Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000200	mg/L	0.001
Toluene		2	<0.000300	mg/L	0.001
Ethylbenzene		2	<0.000400	mg/L	0.001
Xylene		2	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	0.111	mg/L	1	0.100	111	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0992	mg/L	1	0.100	99	68.1 - 109

Method Blank (1) QC Batch: 99513

QC Batch: 99513
Prep Batch: 84306

Date Analyzed: 2013-03-07
QC Preparation: 2013-03-06

Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0613	mg/L	1	0.0800	77	40 - 110
2-Fluorobiphenyl			0.0592	mg/L	1	0.0800	74	50 - 110
Terphenyl-d14			0.0612	mg/L	1	0.0800	76	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 99374
Prep Batch: 84178

Date Analyzed: 2013-03-01
QC Preparation: 2013-03-01

Analyzed By: AH
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0990	mg/L	1	0.100	<0.000200	99	80 - 120
Toluene		2	0.101	mg/L	1	0.100	<0.000300	101	80 - 120
Ethylbenzene		2	0.105	mg/L	1	0.100	<0.000400	105	70.6 - 120
Xylene		2	0.326	mg/L	1	0.300	<0.00120	109	79.2 - 120

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		2	0.0984	mg/L	1	0.100	<0.000200	98	80 - 120	1	20
Toluene		2	0.100	mg/L	1	0.100	<0.000300	100	80 - 120	1	20
Ethylbenzene		2	0.105	mg/L	1	0.100	<0.000400	105	70.6 - 120	0	20
Xylene		2	0.326	mg/L	1	0.300	<0.00120	109	79.2 - 120	0	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)	Q _{sr}	Q _{sr}	0.112	0.112	mg/L	1	0.100	112	112	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.102	0.102	mg/L	1	0.100	102	102	68.1 - 109

Laboratory Control Spike (LCS-1)

QC Batch: 99513
Prep Batch: 84306

Date Analyzed: 2013-03-07
QC Preparation: 2013-03-06

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0604	mg/L	1	0.0800	<0.000121	76	40 - 100
2-Methylnaphthalene		1	0.0574	mg/L	1	0.0800	<0.0000913	72	45 - 105
1-Methylnaphthalene			0.0592	mg/L	1	0.0800	<0.000109	74	33 - 120
Acenaphthylene		1	0.0681	mg/L	1	0.0800	<0.000100	85	50 - 105
Acenaphthene		1	0.0612	mg/L	1	0.0800	<0.000122	76	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS			Spike	Matrix	Rec.	Rec.	
			Result	Units	Dil.	Amount	Result		Limit	
Dibenzofuran			1	0.0503	mg/L	1	0.0800	<0.000108	63	55 - 105
Fluorene			1	0.0603	mg/L	1	0.0800	<0.000100	75	50 - 110
Anthracene			1	0.0598	mg/L	1	0.0800	<0.0000791	75	55 - 110
Phenanthrene			1	0.0586	mg/L	1	0.0800	<0.0000824	73	50 - 115
Fluoranthene			1	0.0560	mg/L	1	0.0800	<0.000124	70	55 - 115
Pyrene			1	0.0577	mg/L	1	0.0800	<0.0000691	72	50 - 130
Benzo(a)anthracene			1	0.0672	mg/L	1	0.0800	<0.000101	84	55 - 110
Chrysene	Qs	Qs	1	0.112	mg/L	1	0.0800	<0.0000769	140	55 - 110
Benzo(b)fluoranthene			1	0.0594	mg/L	1	0.0800	<0.0000813	74	45 - 120
Benzo(k)fluoranthene			1	0.0731	mg/L	1	0.0800	<0.0000790	91	45 - 125
Benzo(a)pyrene			1	0.0666	mg/L	1	0.0800	<0.0000701	83	55 - 110
Indeno(1,2,3-cd)pyrene			1	0.0694	mg/L	1	0.0800	<0.0000770	87	45 - 125
Dibenzo(a,h)anthracene			1	0.0968	mg/L	1	0.0800	<0.0000851	121	40 - 125
Benzo(g,h,i)perylene			1	0.0660	mg/L	1	0.0800	<0.0000798	82	40 - 125

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

Param	F	C	LCSD			Spike	Matrix		Rec.		RPD	
			Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene		1	0.0592	mg/L	1	0.0800	<0.000121	74	40 - 100	2	20	
2-Methylnaphthalene		1	0.0549	mg/L	1	0.0800	<0.0000913	69	45 - 105	4	20	
1-Methylnaphthalene			0.0557	mg/L	1	0.0800	<0.000109	70	33 - 120	6	20	
Acenaphthylene		1	0.0664	mg/L	1	0.0800	<0.000100	83	50 - 105	2	20	
Acenaphthene		1	0.0588	mg/L	1	0.0800	<0.000122	74	45 - 110	4	20	
Dibenzofuran		1	0.0490	mg/L	1	0.0800	<0.000108	61	55 - 105	3	20	
Fluorene		1	0.0576	mg/L	1	0.0800	<0.000100	72	50 - 110	5	20	
Anthracene		1	0.0578	mg/L	1	0.0800	<0.0000791	72	55 - 110	3	20	
Phenanthrene		1	0.0565	mg/L	1	0.0800	<0.0000824	71	50 - 115	4	20	
Fluoranthene		1	0.0555	mg/L	1	0.0800	<0.000124	69	55 - 115	1	20	
Pyrene		1	0.0578	mg/L	1	0.0800	<0.0000691	72	50 - 130	0	20	
Benzo(a)anthracene		1	0.0658	mg/L	1	0.0800	<0.000101	82	55 - 110	2	20	
Chrysene	Qs	Qs	1	0.110	mg/L	1	0.0800	<0.0000769	138	55 - 110	2	20
Benzo(b)fluoranthene		1	0.0583	mg/L	1	0.0800	<0.0000813	73	45 - 120	2	20	
Benzo(k)fluoranthene		1	0.0721	mg/L	1	0.0800	<0.0000790	90	45 - 125	1	20	
Benzo(a)pyrene		1	0.0640	mg/L	1	0.0800	<0.0000701	80	55 - 110	4	20	
Indeno(1,2,3-cd)pyrene		1	0.0681	mg/L	1	0.0800	<0.0000770	85	45 - 125	2	20	
Dibenzo(a,h)anthracene		1	0.0956	mg/L	1	0.0800	<0.0000851	120	40 - 125	1	20	
Benzo(g,h,i)perylene		1	0.0657	mg/L	1	0.0800	<0.0000798	82	40 - 125	0	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	0.0585	0.0574	mg/L	1	0.0800	73	72	40 - 110
2-Fluorobiphenyl	0.0581	0.0560	mg/L	1	0.0800	73	70	50 - 110
Terphenyl-d14	0.0553	0.0553	mg/L	1	0.0800	69	69	50 - 135

Report Date: March 7, 2013
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Lovington, NM

Matrix Spike (MS-1) Spiked Sample: 322213

QC Batch: 99374
Prep Batch: 84178

Date Analyzed: 2013-03-01
QC Preparation: 2013-03-01

Analyzed By: AH
Prepared By: AH

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Q _s	Q _s	2	0.0214	mg/L	1	0.100	<0.000200	21	25.7 - 139
Toluene	Q _s	Q _s	2	0.0217	mg/L	1	0.100	<0.000300	22	32.7 - 134
Ethylbenzene	Q _s	Q _s	2	0.0275	mg/L	1	0.100	<0.000400	28	45.9 - 120
Xylene	Q _s	Q _s	2	0.0868	mg/L	1	0.300	<0.00120	29	34.9 - 128

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	Q _s	Q _s	2	0.0252	mg/L	1	0.100	<0.000200	25	25.7 - 139	16	20
Toluene	Q _s	Q _s	2	0.0257	mg/L	1	0.100	<0.000300	26	32.7 - 134	17	20
Ethylbenzene	Q _s	Q _s	2	0.0304	mg/L	1	0.100	<0.000400	30	45.9 - 120	10	20
Xylene	Q _s	Q _s	2	0.0951	mg/L	1	0.300	<0.00120	32	34.9 - 128	9	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)	Q _{sr}	Q _{sr}	0.111	0.111	mg/L	1	0.1	111	111	75.7 - 109
4-Bromofluorobenzene (4-BFB)			0.0994	0.0988	mg/L	1	0.1	99	99	68.1 - 109

Calibration Standards

Standard (CCV-1)

QC Batch: 99374

Date Analyzed: 2013-03-01

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0861	86	80 - 120	2013-03-01
Toluene		2	mg/L	0.100	0.0879	88	80 - 120	2013-03-01
Ethylbenzene		2	mg/L	0.100	0.0925	92	80 - 120	2013-03-01
Xylene		2	mg/L	0.300	0.286	95	80 - 120	2013-03-01

Standard (CCV-2)

QC Batch: 99374

Date Analyzed: 2013-03-01

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.101	101	80 - 120	2013-03-01
Toluene		2	mg/L	0.100	0.102	102	80 - 120	2013-03-01
Ethylbenzene		2	mg/L	0.100	0.106	106	80 - 120	2013-03-01
Xylene		2	mg/L	0.300	0.329	110	80 - 120	2013-03-01

Standard (CCV-3)

QC Batch: 99374

Date Analyzed: 2013-03-01

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0814	81	80 - 120	2013-03-01
Toluene		2	mg/L	0.100	0.0829	83	80 - 120	2013-03-01
Ethylbenzene		2	mg/L	0.100	0.0863	86	80 - 120	2013-03-01
Xylene		2	mg/L	0.300	0.270	90	80 - 120	2013-03-01

Report Date: March 7, 2013
TNM 97-04

Work Order: 13022801
TNM 97-04 Townsend

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Standard (CCV-1)

QC Batch: 99513

Date Analyzed: 2013-03-07

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	53.4	89	80 - 120	2013-03-07
2-Methylnaphthalene		1	mg/L	60.0	48.8	81	80 - 120	2013-03-07
1-Methylnaphthalene			mg/L	60.0	50.3	84	80 - 120	2013-03-07
Acenaphthylene		1	mg/L	60.0	54.0	90	80 - 120	2013-03-07
Acenaphthene		1	mg/L	60.0	51.5	86	80 - 120	2013-03-07
Dibenzofuran		1	mg/L	60.0	52.2	87	80 - 120	2013-03-07
Fluorene		1	mg/L	60.0	53.0	88	80 - 120	2013-03-07
Anthracene		1	mg/L	60.0	51.3	86	80 - 120	2013-03-07
Phenanthrene		1	mg/L	60.0	50.8	85	80 - 120	2013-03-07
Fluoranthene		1	mg/L	60.0	51.2	85	80 - 120	2013-03-07
Pyrene		1	mg/L	60.0	52.8	88	80 - 120	2013-03-07
Benzo(a)anthracene		1	mg/L	60.0	58.6	98	80 - 120	2013-03-07
Chrysene		1	mg/L	60.0	59.3	99	80 - 120	2013-03-07
Benzo(b)fluoranthene		1	mg/L	60.0	54.8	91	80 - 120	2013-03-07
Benzo(k)fluoranthene		1	mg/L	60.0	60.0	100	80 - 120	2013-03-07
Benzo(a)pyrene		1	mg/L	60.0	56.7	94	80 - 120	2013-03-07
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	59.5	99	80 - 120	2013-03-07
Dibenzo(a,h)anthracene		1	mg/L	60.0	56.6	94	80 - 120	2013-03-07
Benzo(g,h,i)perylene		1	mg/L	60.0	59.2	99	80 - 120	2013-03-07

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			58.5	mg/L	1	60.0	98	-
2-Fluorobiphenyl			55.1	mg/L	1	60.0	92	-
Terphenyl-d14			56.3	mg/L	1	60.0	94	-

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	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: March 7, 2013
TNM 97-04

Work Order: 13022801
TNM 97-04 Townsend

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Attachments

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

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

04100000 (0000) :

ANALYSIS REQUEST
(Circle or Specify Method)

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

Summary Report

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

Report Date: April 1, 2013

Work Order: 13032901



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
324813	Post Carbon	water	2013-03-28	13:40	2013-03-28

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
324813 - Post Carbon	0.114	0.0406	0.00590	0.0590

Summary Report

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

Report Date: April 22, 2013

Work Order: 13041503



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
326283	Post-Carbon	water	2013-04-12	13:02	2013-04-15

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
326283 - Post-Carbon	<0.00100	<0.00100	<0.00100	<0.00100

Sample: 326283 - Post-Carbon

Param	Flag	Result	Units	RL
Naphthalene		<0.000220	mg/L	0.0002
2-Methylnaphthalene	Qc	<0.000220	mg/L	0.0002
1-Methylnaphthalene	Qc	<0.000220	mg/L	0.0002
Acenaphthylene		<0.000220	mg/L	0.0002
Acenaphthene		<0.000220	mg/L	0.0002
Dibenzofuran		<0.000220	mg/L	0.0002
Fluorene		<0.000220	mg/L	0.0002
Anthracene		<0.000220	mg/L	0.0002
Phenanthrene		<0.000220	mg/L	0.0002
Fluoranthene		<0.000220	mg/L	0.0002
Pyrene		<0.000220	mg/L	0.0002
Benzo(a)anthracene		<0.000220	mg/L	0.0002
Chrysene	Qs	<0.000220	mg/L	0.0002
Benzo(b)fluoranthene		<0.000220	mg/L	0.0002
Benzo(k)fluoranthene		<0.000220	mg/L	0.0002
Benzo(a)pyrene		<0.000220	mg/L	0.0002

continued ...

sample 326283 continued ...

Param	Flag	Result	Units	RL
Indeno(1,2,3-cd)pyrene		<0.000220	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000220	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000220	mg/L	0.0002



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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: April 22, 2013

Work Order: 13041503



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
326283	Post-Carbon	water	2013-04-12	13:02	2013-04-15

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 14 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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-04-15 and assigned to work order 13041503. Samples for work order 13041503 were received intact without headspace and at a temperature of 5.8 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	85143	2013-04-16 at 09:00	100483	2013-04-16 at 09:00
PAH	S 8270D	85320	2013-04-19 at 15:00	100684	2013-04-22 at 12:45

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 13041503 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.

Report Date: April 22, 2013
TNM 97-04

Work Order: 13041503
TNM 97-04 Townsend

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Lovington, NM

Analytical Report

Sample: 326283 - Post-Carbon

Laboratory: Midland
Analysis: BTEX
QC Batch: 100483
Prep Batch: 85143

Analytical Method: S 8021B
Date Analyzed: 2013-04-16
Sample Preparation: 2013-04-15

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0886	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0809	mg/L	1	0.100	81	70 - 130

Sample: 326283 - Post-Carbon

Laboratory: Lubbock
Analysis: PAH
QC Batch: 100684
Prep Batch: 85320

Analytical Method: S 8270D
Date Analyzed: 2013-04-22
Sample Preparation: 2013-04-19

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000220	mg/L	1.099	0.000200
2-Methylnaphthalene	Qc,U	1	<0.000220	mg/L	1.099	0.000200
1-Methylnaphthalene	Qc,U		<0.000220	mg/L	1.099	0.000200
Acenaphthylene	U	1	<0.000220	mg/L	1.099	0.000200
Acenaphthene	U	1	<0.000220	mg/L	1.099	0.000200
Dibenzofuran	U	1	<0.000220	mg/L	1.099	0.000200
Fluorene	U	1	<0.000220	mg/L	1.099	0.000200
Anthracene	U	1	<0.000220	mg/L	1.099	0.000200
Phenanthrene	U	1	<0.000220	mg/L	1.099	0.000200
Fluoranthene	U	1	<0.000220	mg/L	1.099	0.000200
Pyrene	U	1	<0.000220	mg/L	1.099	0.000200
Benzo(a)anthracene	U	1	<0.000220	mg/L	1.099	0.000200
Chrysene	Qs,U	1	<0.000220	mg/L	1.099	0.000200

continued ...

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sample 326283 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000220	mg/L	1.099	0.000200
Benzo(k)fluoranthene	U	1	<0.000220	mg/L	1.099	0.000200
Benzo(a)pyrene	U	1	<0.000220	mg/L	1.099	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000220	mg/L	1.099	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000220	mg/L	1.099	0.000200
Benzo(g,h,i)perylene	U	1	<0.000220	mg/L	1.099	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0702	mg/L	1.099	0.0800	88	40 - 110
2-Fluorobiphenyl			0.0636	mg/L	1.099	0.0800	80	50 - 110
Terphenyl-d14			0.0908	mg/L	1.099	0.0800	114	50 - 135

Method Blanks

Method Blank (1) QC Batch: 100483

QC Batch: 100483 Date Analyzed: 2013-04-16 Analyzed By: AH
Prep Batch: 85143 QC Preparation: 2013-04-16 Prepared By: AH

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000200	mg/L	0.001
Toluene		2	<0.000300	mg/L	0.001
Ethylbenzene		2	<0.000400	mg/L	0.001
Xylene		2	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0870	mg/L	1	0.100	87	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0813	mg/L	1	0.100	81	70 - 130

Method Blank (1) QC Batch: 100684

QC Batch: 100684 Date Analyzed: 2013-04-22 Analyzed By: MN
Prep Batch: 85320 QC Preparation: 2013-04-19 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0846	mg/L	1	0.0800	106	40 - 110
2-Fluorobiphenyl			0.0736	mg/L	1	0.0800	92	50 - 110
Terphenyl-d14			0.0858	mg/L	1	0.0800	107	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 100483
Prep Batch: 85143

Date Analyzed: 2013-04-16
QC Preparation: 2013-04-16

Analyzed By: AH
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0934	mg/L	1	0.100	<0.000200	93	70 - 130
Toluene		2	0.0920	mg/L	1	0.100	<0.000300	92	70 - 130
Ethylbenzene		2	0.0917	mg/L	1	0.100	<0.000400	92	70 - 130
Xylene		2	0.272	mg/L	1	0.300	<0.00120	91	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.0938	mg/L	1	0.100	<0.000200	94	70 - 130	0	20
Toluene		2	0.0917	mg/L	1	0.100	<0.000300	92	70 - 130	0	20
Ethylbenzene		2	0.0914	mg/L	1	0.100	<0.000400	91	70 - 130	0	20
Xylene		2	0.271	mg/L	1	0.300	<0.00120	90	70 - 130	0	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0882	0.0874	mg/L	1	0.100	88	87	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0832	0.0827	mg/L	1	0.100	83	83	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 100684
Prep Batch: 85320

Date Analyzed: 2013-04-22
QC Preparation: 2013-04-19

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0493	mg/L	1	0.0800	<0.000121	62	40 - 100
2-Methylnaphthalene		1	0.0409	mg/L	1	0.0800	<0.0000913	51	45 - 105
1-Methylnaphthalene			0.0409	mg/L	1	0.0800	<0.000109	51	33 - 120
Acenaphthylene		1	0.0591	mg/L	1	0.0800	<0.000100	74	50 - 105
Acenaphthene		1	0.0518	mg/L	1	0.0800	<0.000122	65	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS			Spike	Matrix	Rec.	Rec.	
			Result	Units	Dil.	Amount	Result		Limit	
Dibenzofuran			1	0.0530	mg/L	1	0.0800	<0.000108	66	55 - 105
Fluorene			1	0.0547	mg/L	1	0.0800	<0.000100	68	50 - 110
Anthracene			1	0.0528	mg/L	1	0.0800	<0.0000791	66	55 - 110
Phenanthrene			1	0.0518	mg/L	1	0.0800	<0.0000824	65	50 - 115
Fluoranthene			1	0.0499	mg/L	1	0.0800	<0.000124	62	55 - 115
Pyrene			1	0.0599	mg/L	1	0.0800	<0.0000691	75	50 - 130
Benzo(a)anthracene			1	0.0600	mg/L	1	0.0800	<0.000101	75	55 - 110
Chrysene	Qs	Qs	1	0.103	mg/L	1	0.0800	<0.0000769	129	55 - 110
Benzo(b)fluoranthene			1	0.0469	mg/L	1	0.0800	<0.0000813	59	45 - 120
Benzo(k)fluoranthene			1	0.0600	mg/L	1	0.0800	<0.0000790	75	45 - 125
Benzo(a)pyrene			1	0.0538	mg/L	1	0.0800	<0.0000701	67	55 - 110
Indeno(1,2,3-cd)pyrene			1	0.0526	mg/L	1	0.0800	<0.0000770	66	45 - 125
Dibenzo(a,h)anthracene			1	0.0751	mg/L	1	0.0800	<0.0000851	94	40 - 125
Benzo(g,h,i)perylene			1	0.0505	mg/L	1	0.0800	<0.0000798	63	40 - 125

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

Param	F	C	LCSD			Spike	Matrix		Rec.		RPD	
			Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene		1	0.0521	mg/L	1	0.0800	<0.000121	65	40 - 100	6	20	
2-Methylnaphthalene		1	0.0435	mg/L	1	0.0800	<0.0000913	54	45 - 105	6	20	
1-Methylnaphthalene			0.0435	mg/L	1	0.0800	<0.000109	54	33 - 120	6	20	
Acenaphthylene		1	0.0608	mg/L	1	0.0800	<0.000100	76	50 - 105	3	20	
Acenaphthene		1	0.0547	mg/L	1	0.0800	<0.000122	68	45 - 110	5	20	
Dibenzofuran		1	0.0541	mg/L	1	0.0800	<0.000108	68	55 - 105	2	20	
Fluorene		1	0.0568	mg/L	1	0.0800	<0.000100	71	50 - 110	4	20	
Anthracene		1	0.0552	mg/L	1	0.0800	<0.0000791	69	55 - 110	4	20	
Phenanthrene		1	0.0546	mg/L	1	0.0800	<0.0000824	68	50 - 115	5	20	
Fluoranthene		1	0.0522	mg/L	1	0.0800	<0.000124	65	55 - 115	4	20	
Pyrene		1	0.0628	mg/L	1	0.0800	<0.0000691	78	50 - 130	5	20	
Benzo(a)anthracene		1	0.0642	mg/L	1	0.0800	<0.000101	80	55 - 110	7	20	
Chrysene	Qs	Qs	1	0.110	mg/L	1	0.0800	<0.0000769	138	55 - 110	7	20
Benzo(b)fluoranthene		1	0.0499	mg/L	1	0.0800	<0.0000813	62	45 - 120	6	20	
Benzo(k)fluoranthene		1	0.0646	mg/L	1	0.0800	<0.0000790	81	45 - 125	7	20	
Benzo(a)pyrene		1	0.0553	mg/L	1	0.0800	<0.0000701	69	55 - 110	3	20	
Indeno(1,2,3-cd)pyrene		1	0.0560	mg/L	1	0.0800	<0.0000770	70	45 - 125	6	20	
Dibenzo(a,h)anthracene		1	0.0785	mg/L	1	0.0800	<0.0000851	98	40 - 125	4	20	
Benzo(g,h,i)perylene		1	0.0527	mg/L	1	0.0800	<0.0000798	66	40 - 125	4	20	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0610	0.0646	mg/L	1	0.0800	76	81	40 - 110
2-Fluorobiphenyl	0.0617	0.0633	mg/L	1	0.0800	77	79	50 - 110
Terphenyl-d14	0.0630	0.0675	mg/L	1	0.0800	79	84	50 - 135

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Matrix Spike (MS-1) Spiked Sample: 326283

QC Batch: 100483
Prep Batch: 85143

Date Analyzed: 2013-04-16
QC Preparation: 2013-04-16

Analyzed By: AH
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0977	mg/L	1	0.100	<0.000200	98	70 - 130
Toluene		2	0.0953	mg/L	1	0.100	<0.000300	95	70 - 130
Ethylbenzene		2	0.0947	mg/L	1	0.100	<0.000400	95	70 - 130
Xylene		2	0.282	mg/L	1	0.300	<0.00120	94	70 - 130

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		2	0.0969	mg/L	1	0.100	<0.000200	97	70 - 130	1	20
Toluene		2	0.0944	mg/L	1	0.100	<0.000300	94	70 - 130	1	20
Ethylbenzene		2	0.0929	mg/L	1	0.100	<0.000400	93	70 - 130	2	20
Xylene		2	0.277	mg/L	1	0.300	<0.00120	92	70 - 130	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)	0.0887	0.0870	mg/L	1	0.1	89	87	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0832	0.0810	mg/L	1	0.1	83	81	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 100483

Date Analyzed: 2013-04-16

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0904	90	80 - 120	2013-04-16
Toluene		2	mg/L	0.100	0.0885	88	80 - 120	2013-04-16
Ethylbenzene		2	mg/L	0.100	0.0878	88	80 - 120	2013-04-16
Xylene		2	mg/L	0.300	0.261	87	80 - 120	2013-04-16

Standard (CCV-2)

QC Batch: 100483

Date Analyzed: 2013-04-16

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0963	96	80 - 120	2013-04-16
Toluene		2	mg/L	0.100	0.0945	94	80 - 120	2013-04-16
Ethylbenzene		2	mg/L	0.100	0.0941	94	80 - 120	2013-04-16
Xylene		2	mg/L	0.300	0.279	93	80 - 120	2013-04-16

Standard (CCV-1)

QC Batch: 100684

Date Analyzed: 2013-04-22

Analyzed By: MN

				CCVs	CCVs	CCVs	Percent		
				True	Found	Percent	Recovery	Date	
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Naphthalene			1	mg/L	60.0	50.8	85	80 - 120	2013-04-22
2-Methylnaphthalene	Qc	Qc	1	mg/L	60.0	45.6	76	80 - 120	2013-04-22
1-Methylnaphthalene	Qc	Qc		mg/L	60.0	45.8	76	80 - 120	2013-04-22
Acenaphthylene			1	mg/L	60.0	54.2	90	80 - 120	2013-04-22
Acenaphthene			1	mg/L	60.0	51.2	85	80 - 120	2013-04-22
Dibenzofuran			1	mg/L	60.0	52.1	87	80 - 120	2013-04-22
Fluorene			1	mg/L	60.0	52.1	87	80 - 120	2013-04-22

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standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Anthracene		1	mg/L	60.0	52.5	88	80 - 120	2013-04-22
Phenanthrene		1	mg/L	60.0	50.8	85	80 - 120	2013-04-22
Fluoranthene		1	mg/L	60.0	53.5	89	80 - 120	2013-04-22
Pyrene		1	mg/L	60.0	59.1	98	80 - 120	2013-04-22
Benzo(a)anthracene		1	mg/L	60.0	60.9	102	80 - 120	2013-04-22
Chrysene		1	mg/L	60.0	61.4	102	80 - 120	2013-04-22
Benzo(b)fluoranthene		1	mg/L	60.0	58.1	97	80 - 120	2013-04-22
Benzo(k)fluoranthene		1	mg/L	60.0	61.8	103	80 - 120	2013-04-22
Benzo(a)pyrene		1	mg/L	60.0	58.9	98	80 - 120	2013-04-22
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	59.4	99	80 - 120	2013-04-22
Dibenzo(a,h)anthracene		1	mg/L	60.0	57.7	96	80 - 120	2013-04-22
Benzo(g,h,i)perylene		1	mg/L	60.0	59.2	99	80 - 120	2013-04-22

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			61.2	mg/L	1	60.0	102	-
2-Fluorobiphenyl			60.9	mg/L	1	60.0	102	-
Terphenyl-d14			58.8	mg/L	1	60.0	98	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

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TNM 97-04

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Attachments

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

Carrier # Carzan LS ZP849428

Summary Report

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

Report Date: May 15, 2013

Work Order: 13050702



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
328184	MW-16	water	2013-05-06	13:16	2013-05-07
328185	MW-18	water	2013-05-06	14:09	2013-05-07
328186	MW-14	water	2013-05-06	13:38	2013-05-07
328187	MW-13	water	2013-05-06	13:40	2013-05-07
328188	MW-15	water	2013-05-06	14:00	2013-05-07
328189	MW-4	water	2013-05-06	13:10	2013-05-07

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
328184 - MW-16	<0.00100 ¹	<0.00100	<0.00100	<0.00100
328185 - MW-18	<0.00100	<0.00100	<0.00100	<0.00100
328186 - MW-14	<0.00100	<0.00100	0.00740	0.0204
328187 - MW-13	<0.00100	<0.00100	<0.00100	<0.00100
328188 - MW-15	<0.00100	<0.00100	<0.00100	<0.00100
328189 - MW-4	0.396	<0.00500	0.480	1.55

¹pH > 2.



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		915-585-3443	FAX 915-585-4944
5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com				

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: May 15, 2013

Work Order: 13050702



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
328184	MW-16	water	2013-05-06	13:16	2013-05-07
328185	MW-18	water	2013-05-06	14:09	2013-05-07
328186	MW-14	water	2013-05-06	13:38	2013-05-07
328187	MW-13	water	2013-05-06	13:40	2013-05-07
328188	MW-15	water	2013-05-06	14:00	2013-05-07
328189	MW-4	water	2013-05-06	13:10	2013-05-07

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 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The script is fluid and cursive, with the first name "Michael" and last name "Abel" clearly distinguishable.

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-05-07 and assigned to work order 13050702. Samples for work order 13050702 were received intact without headspace and at a temperature of 2.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	85917	2013-05-09 at 15:25	101375	2013-05-14 at 15:46

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 13050702 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.

Report Date: May 15, 2013
TNM 97-04

Work Order: 13050702
TNM 97-04 Townsend

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Lovington, NM

Analytical Report

Sample: 328184 - MW-16

Laboratory: Midland
Analysis: BTEX
QC Batch: 101375
Prep Batch: 85917

Analytical Method: S 8021B
Date Analyzed: 2013-05-14
Sample Preparation: 2013-05-09

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

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)			0.0954	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0912	mg/L	1	0.100	91	70 - 130

Sample: 328185 - MW-18

Laboratory: Midland
Analysis: BTEX
QC Batch: 101375
Prep Batch: 85917

Analytical Method: S 8021B
Date Analyzed: 2013-05-14
Sample Preparation: 2013-05-09

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

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)			0.101	mg/L	1	0.100	101	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0983	mg/L	1	0.100	98	70 - 130

Report Date: May 15, 2013
TNM 97-04

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TNM 97-04 Townsend

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Lovington, NM

Sample: 328186 - MW-14

Laboratory: Midland

Analysis: BTEX

QC Batch: 101375

Prep Batch: 85917

Analytical Method: S 8021B

Date Analyzed: 2013-05-14

Sample Preparation: 2013-05-09

Prep Method: S 5030B

Analyzed By: AH

Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	<0.00100	mg/L	1	0.00100
Toluene	U	1	<0.00100	mg/L	1	0.00100
Ethylbenzene		1	0.00740	mg/L	1	0.00100
Xylene		1	0.0204	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0936	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0994	mg/L	1	0.100	99	70 - 130

Sample: 328187 - MW-13

Laboratory: Midland

Analysis: BTEX

QC Batch: 101375

Prep Batch: 85917

Analytical Method: S 8021B

Date Analyzed: 2013-05-14

Sample Preparation: 2013-05-09

Prep Method: S 5030B

Analyzed By: AH

Prepared By: AH

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)			0.0999	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.106	mg/L	1	0.100	106	70 - 130

Report Date: May 15, 2013
TNM 97-04

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TNM 97-04 Townsend

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Lovington, NM

Sample: 328188 - MW-15

Laboratory: Midland

Analysis: BTEX

QC Batch: 101375

Prep Batch: 85917

Analytical Method: S 8021B

Date Analyzed: 2013-05-14

Sample Preparation: 2013-05-09

Prep Method: S 5030B

Analyzed By: AH

Prepared By: AH

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)			0.0947	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0940	mg/L	1	0.100	94	70 - 130

Sample: 328189 - MW-4

Laboratory: Midland

Analysis: BTEX

QC Batch: 101375

Prep Batch: 85917

Analytical Method: S 8021B

Date Analyzed: 2013-05-14

Sample Preparation: 2013-05-09

Prep Method: S 5030B

Analyzed By: AH

Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.396	mg/L	5	0.00100
Toluene	U	1	<0.00500	mg/L	5	0.00100
Ethylbenzene		1	0.480	mg/L	5	0.00100
Xylene		1	1.55	mg/L	5	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.498	mg/L	5	0.500	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.560	mg/L	5	0.500	112	70 - 130

Method Blanks

Method Blank (1) QC Batch: 101375

QC Batch: 101375
Prep Batch: 85917

Date Analyzed: 2013-05-14
QC Preparation: 2013-05-09

Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.101	mg/L	1	0.100	101	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0974	mg/L	1	0.100	97	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 101375
Prep Batch: 85917

Date Analyzed: 2013-05-14
QC Preparation: 2013-05-09

Analyzed By: AH
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0945	mg/L	1	0.100	<0.000200	94	70 - 130
Toluene		1	0.0963	mg/L	1	0.100	<0.000300	96	70 - 130
Ethylbenzene		1	0.0947	mg/L	1	0.100	<0.000400	95	70 - 130
Xylene		1	0.278	mg/L	1	0.300	<0.00120	93	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0968	mg/L	1	0.100	<0.000200	97	70 - 130	2	20
Toluene		1	0.0988	mg/L	1	0.100	<0.000300	99	70 - 130	3	20
Ethylbenzene		1	0.0962	mg/L	1	0.100	<0.000400	96	70 - 130	2	20
Xylene		1	0.283	mg/L	1	0.300	<0.00120	94	70 - 130	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.0961	mg/L	1	0.100	101	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.100	0.0970	mg/L	1	0.100	100	97	70 - 130

Matrix Spike (MS-1) Spiked Sample: 327993

QC Batch: 101375
Prep Batch: 85917

Date Analyzed: 2013-05-14
QC Preparation: 2013-05-09

Analyzed By: AH
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0991	mg/L	1	0.100	<0.000200	99	70 - 130
Toluene		1	0.0998	mg/L	1	0.100	<0.000300	100	70 - 130
Ethylbenzene		1	0.0956	mg/L	1	0.100	<0.000400	96	70 - 130
Xylene		1	0.280	mg/L	1	0.300	<0.00120	93	70 - 130

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

Report Date: May 15, 2013
TNM 97-04

Work Order: 13050702
TNM 97-04 Townsend

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Lovington, NM

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.104	mg/L	1	0.100	<0.000200	104	70 - 130	5	20
Toluene		1	0.107	mg/L	1	0.100	<0.000300	107	70 - 130	7	20
Ethylbenzene		1	0.104	mg/L	1	0.100	<0.000400	104	70 - 130	8	20
Xylene		1	0.301	mg/L	1	0.300	<0.00120	100	70 - 130	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)	0.100	0.0960	mg/L	1	0.1	100	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.102	0.0961	mg/L	1	0.1	102	96	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 101375

Date Analyzed: 2013-05-14

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0964	96	80 - 120	2013-05-14
Toluene		1	mg/L	0.100	0.0991	99	80 - 120	2013-05-14
Ethylbenzene		1	mg/L	0.100	0.0970	97	80 - 120	2013-05-14
Xylene		1	mg/L	0.300	0.285	95	80 - 120	2013-05-14

Standard (CCV-2)

QC Batch: 101375

Date Analyzed: 2013-05-14

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.100	100	80 - 120	2013-05-14
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2013-05-14
Ethylbenzene		1	mg/L	0.100	0.102	102	80 - 120	2013-05-14
Xylene		1	mg/L	0.300	0.298	99	80 - 120	2013-05-14

Standard (CCV-3)

QC Batch: 101375

Date Analyzed: 2013-05-14

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.103	103	80 - 120	2013-05-14
Toluene		1	mg/L	0.100	0.106	106	80 - 120	2013-05-14
Ethylbenzene		1	mg/L	0.100	0.103	103	80 - 120	2013-05-14
Xylene		1	mg/L	0.300	0.303	101	80 - 120	2013-05-14

Appendix

Report Definitions

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

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Result Comments

1 pH > 2.

Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

Summary Report

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

Report Date: July 1, 2013

Work Order: 13062605



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
333325	Post-Carbon	water	2013-06-24	12:45	2013-06-26

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
333325 - Post-Carbon	<0.00100	<0.00100	<0.00100	<0.00100

Sample: 333325 - Post-Carbon

Param	Flag	Result	Units	RL
Naphthalene		<0.000211	mg/L	0.0002
2-Methylnaphthalene		<0.000211	mg/L	0.0002
1-Methylnaphthalene		<0.000211	mg/L	0.0002
Acenaphthylene		<0.000211	mg/L	0.0002
Acenaphthene		<0.000211	mg/L	0.0002
Dibenzofuran		<0.000211	mg/L	0.0002
Fluorene	Qs	<0.000211	mg/L	0.0002
Anthracene	Qs	<0.000211	mg/L	0.0002
Phenanthrene		<0.000211	mg/L	0.0002
Fluoranthene	Qs	<0.000211	mg/L	0.0002
Pyrene	Qs	<0.000211	mg/L	0.0002
Benzo(a)anthracene		<0.000211	mg/L	0.0002
Chrysene		<0.000211	mg/L	0.0002
Benzo(b)fluoranthene		<0.000211	mg/L	0.0002
Benzo(k)fluoranthene		<0.000211	mg/L	0.0002
Benzo(a)pyrene		<0.000211	mg/L	0.0002

continued ...

sample 333325 continued . . .

Param	Flag	Result	Units	RL
Indeno(1,2,3-cd)pyrene		<0.000211	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000211	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000211	mg/L	0.0002



TRACEANALYSIS, INC.

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5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com		WEB: www.traceanalysis.com		

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: July 1, 2013

Work Order: 13062605



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
333325	Post-Carbon	water	2013-06-24	12:45	2013-06-26

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 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-06-26 and assigned to work order 13062605. Samples for work order 13062605 were received intact without headspace and at a temperature of 5.2 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	86944	2013-06-26 at 16:14	102637	2013-06-26 at 16:14
PAH	S 8270D	87035	2013-06-28 at 15:00	102739	2013-07-01 at 16:22

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 13062605 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.

Report Date: July 1, 2013
TNM 97-04

Work Order: 13062605
TNM 97-04 Townsend

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Lovington, NM

Analytical Report

Sample: 333325 - Post-Carbon

Laboratory: Lubbock
Analysis: BTEX
QC Batch: 102637
Prep Batch: 86944

Analytical Method: S 8021B
Date Analyzed: 2013-06-26
Sample Preparation: 2013-06-26

Prep Method: S 5030B
Analyzed By: MT
Prepared By: MT

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	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0858	mg/L	1	0.100	86	80 - 120

Sample: 333325 - Post-Carbon

Laboratory: Lubbock
Analysis: PAH
QC Batch: 102739
Prep Batch: 87035

Analytical Method: S 8270D
Date Analyzed: 2013-07-01
Sample Preparation: 2013-06-28

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000211	mg/L	1.053	0.000200
2-Methylnaphthalene	U	1	<0.000211	mg/L	1.053	0.000200
1-Methylnaphthalene	U		<0.000211	mg/L	1.053	0.000200
Acenaphthylene	U	1	<0.000211	mg/L	1.053	0.000200
Acenaphthene	U	1	<0.000211	mg/L	1.053	0.000200
Dibenzofuran	U	1	<0.000211	mg/L	1.053	0.000200
Fluorene	Qs,U	1	<0.000211	mg/L	1.053	0.000200
Anthracene	Qs,U	1	<0.000211	mg/L	1.053	0.000200
Phenanthrene	U	1	<0.000211	mg/L	1.053	0.000200
Fluoranthene	Qs,U	1	<0.000211	mg/L	1.053	0.000200
Pyrene	Qs,U	1	<0.000211	mg/L	1.053	0.000200
Benzo(a)anthracene	U	1	<0.000211	mg/L	1.053	0.000200
Chrysene	U	1	<0.000211	mg/L	1.053	0.000200

continued ...

Report Date: July 1, 2013
TNM 97-04

Work Order: 13062605
TNM 97-04 Townsend

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Lovington, NM

sample 333325 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000211	mg/L	1.053	0.000200
Benzo(k)fluoranthene	U	1	<0.000211	mg/L	1.053	0.000200
Benzo(a)pyrene	U	1	<0.000211	mg/L	1.053	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000211	mg/L	1.053	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000211	mg/L	1.053	0.000200
Benzo(g,h,i)perylene	U	1	<0.000211	mg/L	1.053	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0636	mg/L	1.053	0.0800	80	40 - 110
2-Fluorobiphenyl			0.0492	mg/L	1.053	0.0800	62	50 - 110
Terphenyl-d14			0.0719	mg/L	1.053	0.0800	90	50 - 135

Method Blanks

Method Blank (1) QC Batch: 102637

QC Batch: 102637
Prep Batch: 86944

Date Analyzed: 2013-06-26
QC Preparation: 2013-06-26

Analyzed By: MT
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0941	mg/L	1	0.100	94	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0900	mg/L	1	0.100	90	80 - 120

Method Blank (1) QC Batch: 102739

QC Batch: 102739
Prep Batch: 87035

Date Analyzed: 2013-07-01
QC Preparation: 2013-06-28

Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0780	mg/L	1	0.0800	98	40 - 110
2-Fluorobiphenyl			0.0654	mg/L	1	0.0800	82	50 - 110
Terphenyl-d14			0.0687	mg/L	1	0.0800	86	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 102637
Prep Batch: 86944

Date Analyzed: 2013-06-26
QC Preparation: 2013-06-26

Analyzed By: MT
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0885	mg/L	1	0.100	<0.000567	88	80 - 120
Toluene		1	0.0916	mg/L	1	0.100	<0.000518	92	80 - 120
Ethylbenzene		1	0.0913	mg/L	1	0.100	<0.000518	91	80 - 120
Xylene		1	0.270	mg/L	1	0.300	<0.000548	90	80 - 120

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0878	mg/L	1	0.100	<0.000567	88	80 - 120	1	20
Toluene		1	0.0905	mg/L	1	0.100	<0.000518	90	80 - 120	1	20
Ethylbenzene		1	0.0904	mg/L	1	0.100	<0.000518	90	80 - 120	1	20
Xylene		1	0.268	mg/L	1	0.300	<0.000548	89	80 - 120	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0904	0.0912	mg/L	1	0.100	90	91	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0842	0.0850	mg/L	1	0.100	84	85	80 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 102739
Prep Batch: 87035

Date Analyzed: 2013-07-01
QC Preparation: 2013-06-28

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0421	mg/L	1	0.0800	<0.000121	53	40 - 100
2-Methylnaphthalene		1	0.0406	mg/L	1	0.0800	<0.0000913	51	45 - 105
1-Methylnaphthalene			0.0419	mg/L	1	0.0800	<0.000109	52	33 - 120
Acenaphthylene		1	0.0502	mg/L	1	0.0800	<0.000100	63	50 - 105
Acenaphthene		1	0.0429	mg/L	1	0.0800	<0.000122	54	45 - 110

continued ...

control spikes continued ...

Param			LCS			Spike	Matrix		Rec.	
	F	C	Result	Units	Dil.	Amount	Result	Rec.	Limit	
Dibenzofuran			1	0.0462	mg/L	1	0.0800	<0.000108	58	55 - 105
Fluorene	Qs	Qs	1	0.0392	mg/L	1	0.0800	<0.000100	49	50 - 110
Anthracene	Qs	Qs	1	0.0414	mg/L	1	0.0800	<0.0000791	52	55 - 110
Phenanthrene			1	0.0414	mg/L	1	0.0800	<0.0000824	52	50 - 115
Fluoranthene	Qs	Qs	1	0.0375	mg/L	1	0.0800	<0.000124	47	55 - 115
Pyrene	Qs	Qs	1	0.0400	mg/L	1	0.0800	<0.0000691	50	50 - 130
Benzo(a)anthracene			1	0.0477	mg/L	1	0.0800	<0.000101	60	55 - 110
Chrysene			1	0.0751	mg/L	1	0.0800	<0.0000769	94	55 - 110
Benzo(b)fluoranthene			1	0.0494	mg/L	1	0.0800	<0.0000813	62	45 - 120
Benzo(k)fluoranthene			1	0.0660	mg/L	1	0.0800	<0.0000790	82	45 - 125
Benzo(a)pyrene			1	0.0578	mg/L	1	0.0800	<0.0000701	72	55 - 110
Indeno(1,2,3-cd)pyrene			1	0.0599	mg/L	1	0.0800	<0.0000770	75	45 - 125
Dibenzo(a,h)anthracene			1	0.0858	mg/L	1	0.0800	<0.0000851	107	40 - 125
Benzo(g,h,i)perylene			1	0.0561	mg/L	1	0.0800	<0.0000798	70	40 - 125

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

Param	F	C	LCSD			Spike	Matrix		Rec.		RPD	
			Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene		1	0.0455	mg/L	1	0.0800	<0.000121	57	40 - 100	8	20	
2-Methylnaphthalene		1	0.0418	mg/L	1	0.0800	<0.0000913	52	45 - 105	3	20	
1-Methylnaphthalene			0.0432	mg/L	1	0.0800	<0.000109	54	33 - 120	3	20	
Acenaphthylene		1	0.0539	mg/L	1	0.0800	<0.000100	67	50 - 105	7	20	
Acenaphthene		1	0.0457	mg/L	1	0.0800	<0.000122	57	45 - 110	6	20	
Dibenzofuran		1	0.0475	mg/L	1	0.0800	<0.000108	59	55 - 105	3	20	
Fluorene		1	0.0404	mg/L	1	0.0800	<0.000100	50	50 - 110	3	20	
Anthracene		1	0.0440	mg/L	1	0.0800	<0.0000791	55	55 - 110	6	20	
Phenanthrene		1	0.0427	mg/L	1	0.0800	<0.0000824	53	50 - 115	3	20	
Fluoranthene	Qs	Qs	1	0.0370	mg/L	1	0.0800	<0.000124	46	55 - 115	1	20
Pyrene		1	0.0428	mg/L	1	0.0800	<0.0000691	54	50 - 130	7	20	
Benzo(a)anthracene		1	0.0492	mg/L	1	0.0800	<0.000101	62	55 - 110	3	20	
Chrysene		1	0.0783	mg/L	1	0.0800	<0.0000769	98	55 - 110	4	20	
Benzo(b)fluoranthene		1	0.0477	mg/L	1	0.0800	<0.0000813	60	45 - 120	4	20	
Benzo(k)fluoranthene		1	0.0629	mg/L	1	0.0800	<0.0000790	79	45 - 125	5	20	
Benzo(a)pyrene		1	0.0564	mg/L	1	0.0800	<0.0000701	70	55 - 110	2	20	
Indeno(1,2,3-cd)pyrene		1	0.0590	mg/L	1	0.0800	<0.0000770	74	45 - 125	2	20	
Dibenzo(a,h)anthracene		1	0.0867	mg/L	1	0.0800	<0.0000851	108	40 - 125	1	20	
Benzo(g,h,i)perylene		1	0.0580	mg/L	1	0.0800	<0.0000798	72	40 - 125	3	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	0.0758	0.0818	mg/L	1	0.0800	95	102	40 - 110
2-Fluorobiphenyl	0.0649	0.0673	mg/L	1	0.0800	81	84	50 - 110
Terphenyl-d14	0.0640	0.0664	mg/L	1	0.0800	80	83	50 - 135

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TNM 97-04

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Matrix Spike (MS-1) Spiked Sample: 333045

QC Batch: 102637
Prep Batch: 86944

Date Analyzed: 2013-06-26
QC Preparation: 2013-06-26

Analyzed By: MT
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.471	mg/L	5	0.500	0.0448	85	64.6 - 120
Toluene		1	0.730	mg/L	5	0.500	0.307	85	62.9 - 123
Ethylbenzene		1	0.752	mg/L	5	0.500	0.344	82	64.2 - 123
Xylene		1	3.42	mg/L	5	1.50	2.33	73	63.1 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.459	mg/L	5	0.500	0.0448	83	64.6 - 120	3	20
Toluene		1	0.727	mg/L	5	0.500	0.307	84	62.9 - 123	0	20
Ethylbenzene		1	0.767	mg/L	5	0.500	0.344	85	64.2 - 123	2	20
Xylene		1	3.43	mg/L	5	1.50	2.33	73	63.1 - 121	0	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)			0.442	0.454	mg/L	5	0.5	88	91	80 - 120
4-Bromofluorobenzene (4-BFB)	Q _{sr}	Q _{sr}	0.716	0.714	mg/L	5	0.5	143	143	80 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 102637

Date Analyzed: 2013-06-26

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0895	90	80 - 120	2013-06-26
Toluene		1	mg/L	0.100	0.0918	92	80 - 120	2013-06-26
Ethylbenzene		1	mg/L	0.100	0.0933	93	80 - 120	2013-06-26
Xylene		1	mg/L	0.300	0.270	90	80 - 120	2013-06-26

Standard (CCV-2)

QC Batch: 102637

Date Analyzed: 2013-06-26

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0859	86	80 - 120	2013-06-26
Toluene		1	mg/L	0.100	0.0892	89	80 - 120	2013-06-26
Ethylbenzene		1	mg/L	0.100	0.0895	90	80 - 120	2013-06-26
Xylene		1	mg/L	0.300	0.262	87	80 - 120	2013-06-26

Standard (CCV-3)

QC Batch: 102637

Date Analyzed: 2013-06-26

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0835	84	80 - 120	2013-06-26
Toluene		1	mg/L	0.100	0.0880	88	80 - 120	2013-06-26
Ethylbenzene		1	mg/L	0.100	0.0845	84	80 - 120	2013-06-26
Xylene		1	mg/L	0.300	0.258	86	80 - 120	2013-06-26

Report Date: July 1, 2013
TNM 97-04

Work Order: 13062605
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Standard (CCV-1)

QC Batch: 102739

Date Analyzed: 2013-07-01

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	56.0	93	80 - 120	2013-07-01
2-Methylnaphthalene		1	mg/L	60.0	51.6	86	80 - 120	2013-07-01
1-Methylnaphthalene			mg/L	60.0	50.8	85	80 - 120	2013-07-01
Acenaphthylene		1	mg/L	60.0	57.0	95	80 - 120	2013-07-01
Acenaphthene		1	mg/L	60.0	55.4	92	80 - 120	2013-07-01
Dibenzofuran		1	mg/L	60.0	53.7	90	80 - 120	2013-07-01
Fluorene		1	mg/L	60.0	54.0	90	80 - 120	2013-07-01
Anthracene		1	mg/L	60.0	55.5	92	80 - 120	2013-07-01
Phenanthrene		1	mg/L	60.0	54.1	90	80 - 120	2013-07-01
Fluoranthene		1	mg/L	60.0	55.1	92	80 - 120	2013-07-01
Pyrene		1	mg/L	60.0	57.4	96	80 - 120	2013-07-01
Benzo(a)anthracene		1	mg/L	60.0	63.0	105	80 - 120	2013-07-01
Chrysene		1	mg/L	60.0	63.2	105	80 - 120	2013-07-01
Benzo(b)fluoranthene		1	mg/L	60.0	58.8	98	80 - 120	2013-07-01
Benzo(k)fluoranthene		1	mg/L	60.0	62.4	104	80 - 120	2013-07-01
Benzo(a)pyrene		1	mg/L	60.0	61.0	102	80 - 120	2013-07-01
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	63.0	105	80 - 120	2013-07-01
Dibenzo(a,h)anthracene		1	mg/L	60.0	61.4	102	80 - 120	2013-07-01
Benzo(g,h,i)perylene		1	mg/L	60.0	63.9	106	80 - 120	2013-07-01

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			75.7	mg/L	1	60.0	126	-
2-Fluorobiphenyl			61.4	mg/L	1	60.0	102	-
Terphenyl-d14			59.3	mg/L	1	60.0	99	-

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	T104704219-13-9	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

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TNM 97-04

Work Order: 13062605
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The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

Summary Report

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

Report Date: July 2, 2013

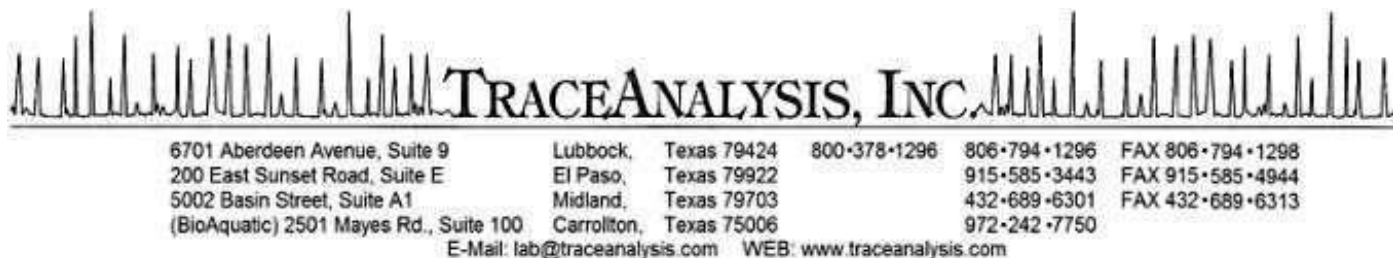
Work Order: 13062607



Project Location: NM
Project Name: Townsend
Project Number: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
333327	Pre	water	2013-06-24	12:49	2013-06-26

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
333327 - Pre	0.0584	0.0224	0.0271	0.0131



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: July 2, 2013

Work Order: 13062607



Project Location: NM
Project Name: Townsend
Project Number: NM-2012

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
333327	Pre	water	2013-06-24	12:49	2013-06-26

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-06-26 and assigned to work order 13062607. Samples for work order 13062607 were received intact without headspace and at a temperature of 5.3 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	87000	2013-06-28 at 16:43	102702	2013-06-28 at 16:43

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 13062607 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.

Report Date: July 2, 2013
NM-2012

Work Order: 13062607
Townsend

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Analytical Report

Sample: 333327 - Pre

Laboratory: Lubbock
Analysis: BTEX
QC Batch: 102702
Prep Batch: 87000

Analytical Method: S 8021B
Date Analyzed: 2013-06-28
Sample Preparation: 2013-06-28

Prep Method: S 5030B
Analyzed By: JS
Prepared By: JS

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.0584	mg/L	1	0.00100
Toluene		1	0.0224	mg/L	1	0.00100
Ethylbenzene		1	0.0271	mg/L	1	0.00100
Xylene		1	0.0131	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0955	mg/L	1	0.100	96	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0890	mg/L	1	0.100	89	80 - 120

Method Blanks

Method Blank (1) QC Batch: 102702

QC Batch: 102702
Prep Batch: 87000

Date Analyzed: 2013-06-28
QC Preparation: 2013-06-28

Analyzed By: JS
Prepared By: JS

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0896	mg/L	1	0.100	90	80 - 120
4-Bromofluorobenzene (4-BFB)			0.0886	mg/L	1	0.100	89	80 - 120

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 102702
Prep Batch: 87000

Date Analyzed: 2013-06-28
QC Preparation: 2013-06-28

Analyzed By: JS
Prepared By: JS

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0854	mg/L	1	0.100	<0.000567	85	80 - 120
Toluene		1	0.0876	mg/L	1	0.100	<0.000518	88	80 - 120
Ethylbenzene		1	0.0886	mg/L	1	0.100	<0.000518	89	80 - 120
Xylene		1	0.262	mg/L	1	0.300	<0.000548	87	80 - 120

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0841	mg/L	1	0.100	<0.000567	84	80 - 120	2	20
Toluene		1	0.0860	mg/L	1	0.100	<0.000518	86	80 - 120	2	20
Ethylbenzene		1	0.0876	mg/L	1	0.100	<0.000518	88	80 - 120	1	20
Xylene		1	0.258	mg/L	1	0.300	<0.000548	86	80 - 120	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0880	0.0866	mg/L	1	0.100	88	87	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0840	0.0838	mg/L	1	0.100	84	84	80 - 120

Matrix Spike (MS-1) Spiked Sample: 333312

QC Batch: 102702
Prep Batch: 87000

Date Analyzed: 2013-06-28
QC Preparation: 2013-06-28

Analyzed By: JS
Prepared By: JS

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0884	mg/L	1	0.100	<0.000567	88	64.6 - 120
Toluene		1	0.0895	mg/L	1	0.100	<0.000518	90	62.9 - 123
Ethylbenzene		1	0.0890	mg/L	1	0.100	<0.000518	89	64.2 - 123
Xylene		1	0.263	mg/L	1	0.300	<0.000548	88	63.1 - 121

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0873	mg/L	1	0.100	<0.000567	87	64.6 - 120	1	20
Toluene		1	0.0879	mg/L	1	0.100	<0.000518	88	62.9 - 123	2	20
Ethylbenzene		1	0.0883	mg/L	1	0.100	<0.000518	88	64.2 - 123	1	20
Xylene		1	0.261	mg/L	1	0.300	<0.000548	87	63.1 - 121	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)	0.0896	0.0874	mg/L	1	0.1	90	87	80 - 120
4-Bromofluorobenzene (4-BFB)	0.0853	0.0842	mg/L	1	0.1	85	84	80 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 102702

Date Analyzed: 2013-06-28

Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0840	84	80 - 120	2013-06-28
Toluene		1	mg/L	0.100	0.0840	84	80 - 120	2013-06-28
Ethylbenzene		1	mg/L	0.100	0.0860	86	80 - 120	2013-06-28
Xylene		1	mg/L	0.300	0.254	85	80 - 120	2013-06-28

Standard (CCV-2)

QC Batch: 102702

Date Analyzed: 2013-06-28

Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0879	88	80 - 120	2013-06-28
Toluene		1	mg/L	0.100	0.0904	90	80 - 120	2013-06-28
Ethylbenzene		1	mg/L	0.100	0.0923	92	80 - 120	2013-06-28
Xylene		1	mg/L	0.300	0.271	90	80 - 120	2013-06-28

Standard (CCV-3)

QC Batch: 102702

Date Analyzed: 2013-06-28

Analyzed By: JS

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0871	87	80 - 120	2013-06-28
Toluene		1	mg/L	0.100	0.0901	90	80 - 120	2013-06-28
Ethylbenzene		1	mg/L	0.100	0.0903	90	80 - 120	2013-06-28
Xylene		1	mg/L	0.300	0.266	89	80 - 120	2013-06-28

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	T104704219-13-9	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: July 2, 2013
NM-2012

Work Order: 13062607
Townsend

Page Number: 10 of 10
NM

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

TraceAnalysis, Inc.

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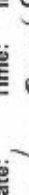
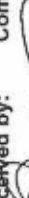
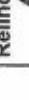
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Address: (Street, City, Zip)
Phone #: (432) 520-7720
Fax #:
E-mail:
Contact Person: CURT STANLEY
Invoice to:
(If different from above)
Project #: NM-2012
Project Location (including state): NM
Project Name: Townsend
Sampler Signature: 

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
	NOVA	6-26-13	0834		TA	6/26/13	8.34	INST 53.0	OBS 53.0	COR 5.2
	TA	6/26/13	15.30					INST	OBS	COR
								INST RS	OBS 3.1	COR 3.4

	MTBE	8021 / 602 / 8260 / 624	X
	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 Volatiles		
	TCLP Semi Volatiles		
	TCLP Pesticides		
	RCI		
	GC/MS Vol.	8260 / 624	
	GC/MS Semi.	Vol. 8270 / 625	
	PCBs	s 8082 / 608	
	Pesticides	8081 / 608	
	BOD, TSS,	pH	
	Moisture Content		
	Cl, F, SO ₄ , NO ₃ -N, NO ₂ -N, PO ₄ -P, Alkalinity		
	Na, Ca, Mg, K, TDS, EC		
	Turn Around Time if different from standard		
	Hold		

LAB USE ONLY	Initials <u>Y / N</u>	Headspace <u>Y / N / NA</u>	☐	☐	☐	REMARKS: <u>Subtract all</u>

Dry Weight Basis Required ☐

TRRP Report Required ☐

Check if Special Reporting Limits Are Needed ☐

Log-in-Review AL

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

ORIGINAL COPY

Summary Report

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

Report Date: August 8, 2013

Work Order: 13073004



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
337055	Pre-Carbon	water	2013-07-29	17:06	2013-07-30
337056	Post-Carbon	water	2013-07-29	17:00	2013-07-30

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
337055 - Pre-Carbon	0.112 Qr,Qs	0.0373 Qr,Qs	0.00470 Qr,Qs	0.0570 Qr,Qs
337056 - Post-Carbon	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs	<0.00100 Qr,Qs

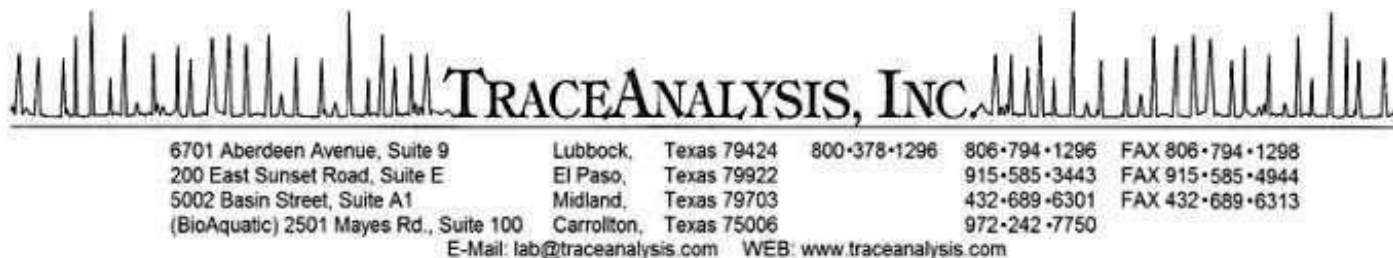
Sample: 337056 - Post-Carbon

Param	Flag	Result	Units	RL
Naphthalene		<0.000201	mg/L	0.0002
2-Methylnaphthalene	Qr	<0.000201	mg/L	0.0002
1-Methylnaphthalene	Qr	<0.000201	mg/L	0.0002
Acenaphthylene	Qr	<0.000201	mg/L	0.0002
Acenaphthene		<0.000201	mg/L	0.0002
Dibenzofuran		<0.000201	mg/L	0.0002
Fluorene		<0.000201	mg/L	0.0002
Anthracene		<0.000201	mg/L	0.0002
Phenanthrene		<0.000201	mg/L	0.0002
Fluoranthene	Qs	<0.000201	mg/L	0.0002
Pyrene	Qr	<0.000201	mg/L	0.0002
Benzo(a)anthracene		<0.000201	mg/L	0.0002
Chrysene	Qs	<0.000201	mg/L	0.0002
Benzo(b)fluoranthene		<0.000201	mg/L	0.0002

continued ...

sample 337056 continued ...

Param	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.000201	mg/L	0.0002
Benzo(a)pyrene		<0.000201	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000201	mg/L	0.0002
Dibenzo(a,h)anthracene	Qs	<0.000201	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000201	mg/L	0.0002



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: August 8, 2013

Work Order: 13073004



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

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
337055	Pre-Carbon	water	2013-07-29	17:06	2013-07-30
337056	Post-Carbon	water	2013-07-29	17:00	2013-07-30

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 14 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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-07-30 and assigned to work order 13073004. Samples for work order 13073004 were received intact without headspace and at a temperature of 5.0 C. 5 VOAs were labeled as Pre-carbon and only one was labeled as Post-carbon. Sampling times were used to identify.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	87742	2013-07-30 at 11:45	103549	2013-07-30 at 16:55
PAH	S 8270D	87925	2013-08-05 at 15:00	103769	2013-08-07 at 10:56

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 13073004 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.

Report Date: August 8, 2013
NM-2012

Work Order: 13073004
Townsend

Page Number: 4 of 14
NM

Analytical Report

Sample: 337055 - Pre-Carbon

Laboratory: Midland
Analysis: BTEX
QC Batch: 103549
Prep Batch: 87742

Analytical Method: S 8021B
Date Analyzed: 2013-07-30
Sample Preparation: 2013-07-30

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs	2	0.112	mg/L	1	0.00100
Toluene	Qr,Qs	2	0.0373	mg/L	1	0.00100
Ethylbenzene	Qr,Qs	2	0.00470	mg/L	1	0.00100
Xylene	Qr,Qs	2	0.0570	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0954	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.101	mg/L	1	0.100	101	70 - 130

Sample: 337056 - Post-Carbon

Laboratory: Midland
Analysis: BTEX
QC Batch: 103549
Prep Batch: 87742

Analytical Method: S 8021B
Date Analyzed: 2013-07-30
Sample Preparation: 2013-07-30

Prep Method: S 5030B
Analyzed By: AH
Prepared By: AH

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs,U	2	<0.00100	mg/L	1	0.00100
Toluene	Qr,Qs,U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs,U	2	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs,U	2	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.102	mg/L	1	0.100	102	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0996	mg/L	1	0.100	100	70 - 130

Report Date: August 8, 2013
NM-2012

Work Order: 13073004
Townsend

Page Number: 5 of 14
NM

Sample: 337056 - Post-Carbon

Laboratory: Lubbock

Analysis: PAH

QC Batch: 103769

Prep Batch: 87925

Analytical Method: S 8270D

Date Analyzed: 2013-08-07

Sample Preparation: 2013-08-05

Prep Method: S 3510C

Analyzed By: MN

Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000201	mg/L	1.005	0.000200
2-Methylnaphthalene	Qr,U	1	<0.000201	mg/L	1.005	0.000200
1-Methylnaphthalene	Qr,U		<0.000201	mg/L	1.005	0.000200
Acenaphthylene	Qr,U	1	<0.000201	mg/L	1.005	0.000200
Acenaphthene	U	1	<0.000201	mg/L	1.005	0.000200
Dibenzofuran	U	1	<0.000201	mg/L	1.005	0.000200
Fluorene	U	1	<0.000201	mg/L	1.005	0.000200
Anthracene	U	1	<0.000201	mg/L	1.005	0.000200
Phenanthrene	U	1	<0.000201	mg/L	1.005	0.000200
Fluoranthene	Qs,U	1	<0.000201	mg/L	1.005	0.000200
Pyrene	Qr,U	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)anthracene	U	1	<0.000201	mg/L	1.005	0.000200
Chrysene	Qs,U	1	<0.000201	mg/L	1.005	0.000200
Benzo(b)fluoranthene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(k)fluoranthene	U	1	<0.000201	mg/L	1.005	0.000200
Benzo(a)pyrene	U	1	<0.000201	mg/L	1.005	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000201	mg/L	1.005	0.000200
Dibenzo(a,h)anthracene	Qs,U	1	<0.000201	mg/L	1.005	0.000200
Benzo(g,h,i)perylene	U	1	<0.000201	mg/L	1.005	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0392	mg/L	1.005	0.0800	49	40 - 110
2-Fluorobiphenyl	Qsr	Qsr	0.0364	mg/L	1.005	0.0800	46	50 - 110
Terphenyl-d14			0.0463	mg/L	1.005	0.0800	58	50 - 135

Method Blanks

Method Blank (1) QC Batch: 103549

QC Batch: 103549 Date Analyzed: 2013-07-30 Analyzed By: AH
Prep Batch: 87742 QC Preparation: 2013-07-30 Prepared By: AH

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000200	mg/L	0.001
Toluene		2	<0.000300	mg/L	0.001
Ethylbenzene		2	<0.000400	mg/L	0.001
Xylene		2	<0.00120	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	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0972	mg/L	1	0.100	97	70 - 130

Method Blank (1) QC Batch: 103769

QC Batch: 103769 Date Analyzed: 2013-08-07 Analyzed By: MN
Prep Batch: 87925 QC Preparation: 2013-08-05 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0508	mg/L	1	0.0800	64	40 - 110
2-Fluorobiphenyl			0.0460	mg/L	1	0.0800	58	50 - 110
Terphenyl-d14			0.0608	mg/L	1	0.0800	76	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 103549
Prep Batch: 87742

Date Analyzed: 2013-07-30
QC Preparation: 2013-07-30

Analyzed By: AH
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.107	mg/L	1	0.100	<0.000200	107	70 - 130
Toluene		2	0.107	mg/L	1	0.100	<0.000300	107	70 - 130
Ethylbenzene		2	0.106	mg/L	1	0.100	<0.000400	106	70 - 130
Xylene		2	0.315	mg/L	1	0.300	<0.00120	105	70 - 130

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		2	0.105	mg/L	1	0.100	<0.000200	105	70 - 130	2	20
Toluene		2	0.105	mg/L	1	0.100	<0.000300	105	70 - 130	2	20
Ethylbenzene		2	0.105	mg/L	1	0.100	<0.000400	105	70 - 130	1	20
Xylene		2	0.312	mg/L	1	0.300	<0.00120	104	70 - 130	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)	0.101	0.0989	mg/L	1	0.100	101	99	70 - 130
4-Bromofluorobenzene (4-BFB)	0.104	0.102	mg/L	1	0.100	104	102	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 103769
Prep Batch: 87925

Date Analyzed: 2013-08-07
QC Preparation: 2013-08-05

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0558	mg/L	1	0.0800	<0.000121	70	40 - 100
2-Methylnaphthalene		1	0.0539	mg/L	1	0.0800	<0.0000913	67	45 - 105
1-Methylnaphthalene			0.0564	mg/L	1	0.0800	<0.000109	70	34.3 - 120
Acenaphthylene		1	0.0600	mg/L	1	0.0800	<0.000100	75	55 - 105
Acenaphthene		1	0.0537	mg/L	1	0.0800	<0.000122	67	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Dibenzofuran		1	0.0531	mg/L	1	0.0800	<0.000108	66	55 - 105	
Fluorene		1	0.0507	mg/L	1	0.0800	<0.000100	63	50 - 110	
Anthracene		1	0.0560	mg/L	1	0.0800	<0.0000791	70	55 - 110	
Phenanthrene		1	0.0532	mg/L	1	0.0800	<0.0000824	66	50 - 115	
Fluoranthene		1	0.0532	mg/L	1	0.0800	<0.000124	66	55 - 115	
Pyrene		1	0.0587	mg/L	1	0.0800	<0.0000691	73	50 - 130	
Benzo(a)anthracene		1	0.0629	mg/L	1	0.0800	<0.000101	79	55 - 110	
Chrysene	Qs	Qs	1	0.116	mg/L	1	0.0800	<0.0000769	145	55 - 110
Benzo(b)fluoranthene		1	0.0646	mg/L	1	0.0800	<0.0000813	81	45 - 120	
Benzo(k)fluoranthene		1	0.0899	mg/L	1	0.0800	<0.0000790	112	45 - 125	
Benzo(a)pyrene		1	0.0756	mg/L	1	0.0800	<0.0000701	94	55 - 110	
Indeno(1,2,3-cd)pyrene		1	0.0791	mg/L	1	0.0800	<0.0000770	99	45 - 125	
Dibenzo(a,h)anthracene	Qs	Qs	1	0.114	mg/L	1	0.0800	<0.0000851	142	40 - 125
Benzo(g,h,i)perylene		1	0.0756	mg/L	1	0.0800	<0.0000798	94	40 - 125	

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

Param			LCSD			Spike	Matrix		Rec.	RPD		
	F	C	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene			1	0.0465	mg/L	1	0.0800	<0.000121	58	40 - 100	18	20
2-Methylnaphthalene	Q _r	Q _r	1	0.0426	mg/L	1	0.0800	<0.0000913	53	45 - 105	23	20
1-Methylnaphthalene	Q _r	Q _r		0.0455	mg/L	1	0.0800	<0.000109	57	34.3 - 120	21	20
Acenaphthylene	Q _r	Q _r	1	0.0490	mg/L	1	0.0800	<0.000100	61	55 - 105	20	20
Acenaphthene			1	0.0458	mg/L	1	0.0800	<0.000122	57	45 - 110	16	20
Dibenzofuran			1	0.0451	mg/L	1	0.0800	<0.000108	56	55 - 105	16	20
Fluorene			1	0.0432	mg/L	1	0.0800	<0.000100	54	50 - 110	16	20
Anthracene			1	0.0462	mg/L	1	0.0800	<0.0000791	58	55 - 110	19	20
Phenanthrene			1	0.0450	mg/L	1	0.0800	<0.0000824	56	50 - 115	17	20
Fluoranthene	Q _s	Q _s	1	0.0437	mg/L	1	0.0800	<0.000124	55	55 - 115	20	20
Pyrene	Q _r	Q _r	1	0.0479	mg/L	1	0.0800	<0.0000691	60	50 - 130	20	20
Benzo(a)anthracene			1	0.0528	mg/L	1	0.0800	<0.000101	66	55 - 110	17	20
Chrysene	Q _s	Q _s	1	0.0958	mg/L	1	0.0800	<0.0000769	120	55 - 110	19	20
Benzo(b)fluoranthene			1	0.0556	mg/L	1	0.0800	<0.0000813	70	45 - 120	15	20
Benzo(k)fluoranthene			1	0.0750	mg/L	1	0.0800	<0.0000790	94	45 - 125	18	20
Benzo(a)pyrene			1	0.0650	mg/L	1	0.0800	<0.0000701	81	55 - 110	15	20
Indeno(1,2,3-cd)pyrene			1	0.0677	mg/L	1	0.0800	<0.0000770	85	45 - 125	16	20
Dibenzo(a,h)anthracene			1	0.0962	mg/L	1	0.0800	<0.0000851	120	40 - 125	17	20
Benzo(g,h,i)perylene			1	0.0656	mg/L	1	0.0800	<0.0000798	82	40 - 125	14	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	0.0754	0.0620	mg/L	1	0.0800	94	78	40 - 110
2-Fluorobiphenyl	0.0695	0.0587	mg/L	1	0.0800	87	73	50 - 110
Terphenyl-d14	0.0810	0.0647	mg/L	1	0.0800	101	81	50 - 135

Report Date: August 8, 2013
NM-2012

Work Order: 13073004
Townsend

Page Number: 10 of 14
NM

Matrix Spike (MS-1) Spiked Sample: 337056

QC Batch: 103549
Prep Batch: 87742

Date Analyzed: 2013-07-30
QC Preparation: 2013-07-30

Analyzed By: AH
Prepared By: AH

Param		F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Q _s	Q _s	2	0.0557	mg/L	1	0.100	<0.000200	56	70 - 130
Toluene	Q _s	Q _s	2	0.0564	mg/L	1	0.100	<0.000300	56	70 - 130
Ethylbenzene	Q _s	Q _s	2	0.0598	mg/L	1	0.100	<0.000400	60	70 - 130
Xylene	Q _s	Q _s	2	0.179	mg/L	1	0.300	<0.00120	60	70 - 130

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	Q _r	Q _r	2	0.0870	mg/L	1	0.100	<0.000200	87	70 - 130	44	20
Toluene		Q _r	Q _r	2	0.0882	mg/L	1	0.100	<0.000300	88	70 - 130	44	20
Ethylbenzene		Q _r	Q _r	2	0.0906	mg/L	1	0.100	<0.000400	91	70 - 130	41	20
Xylene		Q _r	Q _r	2	0.270	mg/L	1	0.300	<0.00120	90	70 - 130	40	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)	0.0961	0.101	mg/L	1	0.1	96	101	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0975	0.105	mg/L	1	0.1	98	105	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 103549

Date Analyzed: 2013-07-30

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.104	104	80 - 120	2013-07-30
Toluene		2	mg/L	0.100	0.104	104	80 - 120	2013-07-30
Ethylbenzene		2	mg/L	0.100	0.104	104	80 - 120	2013-07-30
Xylene		2	mg/L	0.300	0.309	103	80 - 120	2013-07-30

Standard (CCV-2)

QC Batch: 103549

Date Analyzed: 2013-07-30

Analyzed By: AH

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.107	107	80 - 120	2013-07-30
Toluene		2	mg/L	0.100	0.107	107	80 - 120	2013-07-30
Ethylbenzene		2	mg/L	0.100	0.107	107	80 - 120	2013-07-30
Xylene		2	mg/L	0.300	0.320	107	80 - 120	2013-07-30

Standard (CCV-1)

QC Batch: 103769

Date Analyzed: 2013-08-07

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	55.8	93	80 - 120	2013-08-07
2-Methylnaphthalene		1	mg/L	60.0	51.2	85	80 - 120	2013-08-07
1-Methylnaphthalene			mg/L	60.0	52.6	88	80 - 120	2013-08-07
Acenaphthylene		1	mg/L	60.0	54.2	90	80 - 120	2013-08-07
Acenaphthene		1	mg/L	60.0	52.9	88	80 - 120	2013-08-07
Dibenzofuran		1	mg/L	60.0	55.1	92	80 - 120	2013-08-07
Fluorene		1	mg/L	60.0	56.2	94	80 - 120	2013-08-07

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Anthracene		1	mg/L	60.0	54.5	91	80 - 120	2013-08-07
Phenanthrene		1	mg/L	60.0	52.5	88	80 - 120	2013-08-07
Fluoranthene		1	mg/L	60.0	49.6	83	80 - 120	2013-08-07
Pyrene		1	mg/L	60.0	60.8	101	80 - 120	2013-08-07
Benzo(a)anthracene		1	mg/L	60.0	63.9	106	80 - 120	2013-08-07
Chrysene		1	mg/L	60.0	62.5	104	80 - 120	2013-08-07
Benzo(b)fluoranthene		1	mg/L	60.0	60.7	101	80 - 120	2013-08-07
Benzo(k)fluoranthene		1	mg/L	60.0	63.0	105	80 - 120	2013-08-07
Benzo(a)pyrene		1	mg/L	60.0	62.5	104	80 - 120	2013-08-07
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	68.2	114	80 - 120	2013-08-07
Dibenzo(a,h)anthracene		1	mg/L	60.0	67.2	112	80 - 120	2013-08-07
Benzo(g,h,i)perylene		1	mg/L	60.0	69.4	116	80 - 120	2013-08-07

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			68.9	mg/L	1	60.0	115	-
2-Fluorobiphenyl			56.1	mg/L	1	60.0	94	-
Terphenyl-d14			63.0	mg/L	1	60.0	105	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Result Comments

- 1 MS failing due to preparation error, LCS/LCSD show recovery for batch to be under control.

Attachments

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

Summary Report

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

Report Date: August 13, 2013

Work Order: 13080708



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
337646	MW-13	water	2013-08-06	15:10	2013-08-07
337647	MW-14	water	2013-08-06	15:33	2013-08-07
337648	MW-15	water	2013-08-06	15:46	2013-08-07
337649	MW-18	water	2013-08-06	16:08	2013-08-07
337650	MW-4	water	2013-08-06	16:25	2013-08-07

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
337646 - MW-13	<0.00100	<0.00100	<0.00100	<0.00100
337647 - MW-14	<0.00100	<0.00100	0.0169	0.0473
337648 - MW-15	<0.00100	<0.00100	<0.00100	<0.00100
337649 - MW-18	<0.00100	<0.00100	<0.00100	<0.00100
337650 - MW-4	0.259	<0.00500	0.406	1.05



TRACEANALYSIS, INC.

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200 East Sunset Road, Suite E	El Paso, Texas 79922		915-585-3443	FAX 915-585-4944
5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com				

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: August 13, 2013

Work Order: 13080708



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
337646	MW-13	water	2013-08-06	15:10	2013-08-07
337647	MW-14	water	2013-08-06	15:33	2013-08-07
337648	MW-15	water	2013-08-06	15:46	2013-08-07
337649	MW-18	water	2013-08-06	16:08	2013-08-07
337650	MW-4	water	2013-08-06	16:25	2013-08-07

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 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The script is fluid and cursive, with the first name "Michael" and last name "Abel" clearly distinguishable.

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-08-07 and assigned to work order 13080708. Samples for work order 13080708 were received intact without headspace and at a temperature of 4.5 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	87952	2013-08-07 at 16:30	103804	2013-08-08 at 09:39
BTEX	S 8021B	88082	2013-08-12 at 08:00	103957	2013-08-13 at 08:56

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 13080708 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.

Report Date: August 13, 2013
TNM 97-04

Work Order: 13080708
TNM 97-04 Townsend

Page Number: 5 of 15
Lovington, NM

Analytical Report

Sample: 337646 - MW-13

Laboratory: Midland
Analysis: BTEX
QC Batch: 103804
Prep Batch: 87952

Analytical Method: S 8021B
Date Analyzed: 2013-08-08
Sample Preparation: 2013-08-07

Prep Method: S 5030B
Analyzed By: KC
Prepared By: KC

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)			0.0969	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.113	mg/L	1	0.100	113	70 - 130

Sample: 337647 - MW-14

Laboratory: Midland
Analysis: BTEX
QC Batch: 103804
Prep Batch: 87952

Analytical Method: S 8021B
Date Analyzed: 2013-08-08
Sample Preparation: 2013-08-07

Prep Method: S 5030B
Analyzed By: KC
Prepared By: KC

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		1	0.0169	mg/L	1	0.00100
Xylene		1	0.0473	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0943	mg/L	1	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)			0.105	mg/L	1	0.100	105	70 - 130

Report Date: August 13, 2013
TNM 97-04

Work Order: 13080708
TNM 97-04 Townsend

Page Number: 6 of 15
Lovington, NM

Sample: 337648 - MW-15

Laboratory: Midland

Analysis: BTEX

QC Batch: 103804

Prep Batch: 87952

Analytical Method: S 8021B

Date Analyzed: 2013-08-08

Sample Preparation: 2013-08-07

Prep Method: S 5030B

Analyzed By: KC

Prepared By: KC

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)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.102	mg/L	1	0.100	102	70 - 130

Sample: 337649 - MW-18

Laboratory: Midland

Analysis: BTEX

QC Batch: 103804

Prep Batch: 87952

Analytical Method: S 8021B

Date Analyzed: 2013-08-08

Sample Preparation: 2013-08-07

Prep Method: S 5030B

Analyzed By: KC

Prepared By: KC

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)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0995	mg/L	1	0.100	100	70 - 130

Report Date: August 13, 2013
TNM 97-04

Work Order: 13080708
TNM 97-04 Townsend

Page Number: 7 of 15
Lovington, NM

Sample: 337650 - MW-4

Laboratory: Midland

Analysis: BTEX

QC Batch: 103957

Prep Batch: 88082

Analytical Method: S 8021B

Date Analyzed: 2013-08-13

Sample Preparation: 2013-08-12

Prep Method: S 5030B

Analyzed By: KC

Prepared By: KC

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.259	mg/L	5	0.00100
Toluene	u	1	<0.00500	mg/L	5	0.00100
Ethylbenzene		1	0.406	mg/L	5	0.00100
Xylene		1	1.05	mg/L	5	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.497	mg/L	5	0.500	99	70 - 130
4-Bromofluorobenzene (4-BFB)			0.565	mg/L	5	0.500	113	70 - 130

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Method Blanks

Method Blank (1) QC Batch: 103804

QC Batch: 103804
Prep Batch: 87952

Date Analyzed: 2013-08-08
QC Preparation: 2013-08-07

Analyzed By: KC
Prepared By: KC

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0967	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0964	mg/L	1	0.100	96	70 - 130

Method Blank (1) QC Batch: 103957

QC Batch: 103957
Prep Batch: 88082

Date Analyzed: 2013-08-13
QC Preparation: 2013-08-12

Analyzed By: KC
Prepared By: KC

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	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	70 - 130
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 103804
Prep Batch: 87952

Date Analyzed: 2013-08-08
QC Preparation: 2013-08-07

Analyzed By: KC
Prepared By: KC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.115	mg/L	1	0.100	<0.000200	115	70 - 130
Toluene		1	0.113	mg/L	1	0.100	<0.000300	113	70 - 130
Ethylbenzene		1	0.113	mg/L	1	0.100	<0.000400	113	70 - 130
Xylene		1	0.341	mg/L	1	0.300	<0.00120	114	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.116	mg/L	1	0.100	<0.000200	116	70 - 130	1	20
Toluene		1	0.115	mg/L	1	0.100	<0.000300	115	70 - 130	2	20
Ethylbenzene		1	0.114	mg/L	1	0.100	<0.000400	114	70 - 130	1	20
Xylene		1	0.344	mg/L	1	0.300	<0.00120	115	70 - 130	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0963	0.0989	mg/L	1	0.100	96	99	70 - 130
4-Bromofluorobenzene (4-BFB)	0.103	0.105	mg/L	1	0.100	103	105	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 103957
Prep Batch: 88082

Date Analyzed: 2013-08-13
QC Preparation: 2013-08-12

Analyzed By: KC
Prepared By: KC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.112	mg/L	1	0.100	<0.000200	112	70 - 130
Toluene		1	0.112	mg/L	1	0.100	<0.000300	112	70 - 130
Ethylbenzene		1	0.111	mg/L	1	0.100	<0.000400	111	70 - 130
Xylene		1	0.333	mg/L	1	0.300	<0.00120	111	70 - 130

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

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Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.112	mg/L	1	0.100	<0.000200	112	70 - 130	0	20
Toluene		1	0.110	mg/L	1	0.100	<0.000300	110	70 - 130	2	20
Ethylbenzene		1	0.110	mg/L	1	0.100	<0.000400	110	70 - 130	1	20
Xylene		1	0.330	mg/L	1	0.300	<0.00120	110	70 - 130	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)	0.0979	0.102	mg/L	1	0.100	98	102	70 - 130
4-Bromofluorobenzene (4-BFB)	0.105	0.108	mg/L	1	0.100	105	108	70 - 130

Matrix Spike (MS-1) Spiked Sample: 337375

QC Batch: 103804
Prep Batch: 87952

Date Analyzed: 2013-08-08
QC Preparation: 2013-08-07

Analyzed By: KC
Prepared By: KC

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Benzene		1	0.113	mg/L	1	0.100	<0.000200	113	70 - 130
Toluene		1	0.112	mg/L	1	0.100	<0.000300	112	70 - 130
Ethylbenzene		1	0.111	mg/L	1	0.100	<0.000400	111	70 - 130
Xylene		1	0.331	mg/L	1	0.300	<0.00120	110	70 - 130

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

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.113	mg/L	1	0.100	<0.000200	113	70 - 130	0	20
Toluene		1	0.113	mg/L	1	0.100	<0.000300	113	70 - 130	1	20
Ethylbenzene		1	0.112	mg/L	1	0.100	<0.000400	112	70 - 130	1	20
Xylene		1	0.333	mg/L	1	0.300	<0.00120	111	70 - 130	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)	0.0941	0.0936	mg/L	1	0.1	94	94	70 - 130
4-Bromofluorobenzene (4-BFB)	0.101	0.100	mg/L	1	0.1	101	100	70 - 130

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Matrix Spike (MS-1) Spiked Sample: 337801

QC Batch: 103957
Prep Batch: 88082

Date Analyzed: 2013-08-13
QC Preparation: 2013-08-12

Analyzed By: KC
Prepared By: KC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.117	mg/L	1	0.100	<0.000200	117	70 - 130
Toluene		1	0.122	mg/L	1	0.100	<0.000300	122	70 - 130
Ethylbenzene		1	0.112	mg/L	1	0.100	<0.000400	112	70 - 130
Xylene		1	0.337	mg/L	1	0.300	<0.00120	112	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.118	mg/L	1	0.100	<0.000200	118	70 - 130	1	20
Toluene		1	0.121	mg/L	1	0.100	<0.000300	121	70 - 130	1	20
Ethylbenzene		1	0.112	mg/L	1	0.100	<0.000400	112	70 - 130	0	20
Xylene		1	0.336	mg/L	1	0.300	<0.00120	112	70 - 130	0	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)	0.0944	0.0918	mg/L	1	0.1	94	92	70 - 130
4-Bromofluorobenzene (4-BFB)	0.103	0.100	mg/L	1	0.1	103	100	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 103804

Date Analyzed: 2013-08-08

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.116	116	80 - 120	2013-08-08
Toluene		1	mg/L	0.100	0.114	114	80 - 120	2013-08-08
Ethylbenzene		1	mg/L	0.100	0.114	114	80 - 120	2013-08-08
Xylene		1	mg/L	0.300	0.343	114	80 - 120	2013-08-08

Standard (CCV-2)

QC Batch: 103804

Date Analyzed: 2013-08-08

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.112	112	80 - 120	2013-08-08
Toluene		1	mg/L	0.100	0.111	111	80 - 120	2013-08-08
Ethylbenzene		1	mg/L	0.100	0.111	111	80 - 120	2013-08-08
Xylene		1	mg/L	0.300	0.332	111	80 - 120	2013-08-08

Standard (CCV-3)

QC Batch: 103804

Date Analyzed: 2013-08-08

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.112	112	80 - 120	2013-08-08
Toluene		1	mg/L	0.100	0.111	111	80 - 120	2013-08-08
Ethylbenzene		1	mg/L	0.100	0.110	110	80 - 120	2013-08-08
Xylene		1	mg/L	0.300	0.330	110	80 - 120	2013-08-08

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Standard (CCV-1)

QC Batch: 103957

Date Analyzed: 2013-08-13

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.112	112	80 - 120	2013-08-13
Toluene		1	mg/L	0.100	0.112	112	80 - 120	2013-08-13
Ethylbenzene		1	mg/L	0.100	0.110	110	80 - 120	2013-08-13
Xylene		1	mg/L	0.300	0.330	110	80 - 120	2013-08-13

Standard (CCV-2)

QC Batch: 103957

Date Analyzed: 2013-08-13

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.115	115	80 - 120	2013-08-13
Toluene		1	mg/L	0.100	0.115	115	80 - 120	2013-08-13
Ethylbenzene		1	mg/L	0.100	0.114	114	80 - 120	2013-08-13
Xylene		1	mg/L	0.300	0.341	114	80 - 120	2013-08-13

Standard (CCV-3)

QC Batch: 103957

Date Analyzed: 2013-08-13

Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.110	110	80 - 120	2013-08-13
Toluene		1	mg/L	0.100	0.111	111	80 - 120	2013-08-13
Ethylbenzene		1	mg/L	0.100	0.110	110	80 - 120	2013-08-13
Xylene		1	mg/L	0.300	0.329	110	80 - 120	2013-08-13

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	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: August 13, 2013
TNM 97-04

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

Summary Report

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

Report Date: August 29, 2013

Work Order: 13082702



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
340123	Post	water	2013-08-26	10:36	2013-08-27

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
340123 - Post	<0.00100	<0.00100	<0.00100	<0.00100



TRACEANALYSIS, INC.

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200 East Sunset Road, Suite E	El Paso, Texas 79922		915-585-3443	FAX 915-585-4944
5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com		WEB: www.traceanalysis.com		

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: August 29, 2013

Work Order: 13082702



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
340123	Post	water	2013-08-26	10:36	2013-08-27

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-08-27 and assigned to work order 13082702. Samples for work order 13082702 were received intact without headspace and at a temperature of 5.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	88509	2013-08-27 at 10:00	104456	2013-08-27 at 16:55

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 13082702 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.

Report Date: August 29, 2013
TNM 97-04

Work Order: 13082702
TNM 97-04 Townsend

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Analytical Report

Sample: 340123 - Post

Laboratory: Midland
Analysis: BTEX
QC Batch: 104456
Prep Batch: 88509

Analytical Method: S 8021B
Date Analyzed: 2013-08-27
Sample Preparation: 2013-08-27

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

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)			0.0923	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0855	mg/L	1	0.100	86	70 - 130

Method Blanks

Method Blank (1) QC Batch: 104456

QC Batch: 104456
Prep Batch: 88509

Date Analyzed: 2013-08-27
QC Preparation: 2013-08-27

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.121	mg/L	1	0.100	121	70 - 130
4-Bromofluorobenzene (4-BFB)			0.107	mg/L	1	0.100	107	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 104456
Prep Batch: 88509

Date Analyzed: 2013-08-27
QC Preparation: 2013-08-27

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0976	mg/L	1	0.100	<0.000200	98	70 - 130
Toluene		1	0.0957	mg/L	1	0.100	<0.000300	96	70 - 130
Ethylbenzene		1	0.0946	mg/L	1	0.100	<0.000400	95	70 - 130
Xylene		1	0.290	mg/L	1	0.300	<0.00120	97	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0942	mg/L	1	0.100	<0.000200	94	70 - 130	4	20
Toluene		1	0.0933	mg/L	1	0.100	<0.000300	93	70 - 130	2	20
Ethylbenzene		1	0.0942	mg/L	1	0.100	<0.000400	94	70 - 130	0	20
Xylene		1	0.282	mg/L	1	0.300	<0.00120	94	70 - 130	3	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.107	0.0992	mg/L	1	0.100	107	99	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0953	0.0947	mg/L	1	0.100	95	95	70 - 130

Matrix Spike (MS-1) Spiked Sample: 339378

QC Batch: 104456
Prep Batch: 88509

Date Analyzed: 2013-08-27
QC Preparation: 2013-08-27

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.101	mg/L	1	0.100	0.0033	98	70 - 130
Toluene		1	0.0976	mg/L	1	0.100	0.0103	87	70 - 130
Ethylbenzene		1	0.0916	mg/L	1	0.100	0.0032	88	70 - 130
Xylene		1	0.279	mg/L	1	0.300	0.0213	86	70 - 130

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

Report Date: August 29, 2013
TNM 97-04

Work Order: 13082702
TNM 97-04 Townsend

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Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.102	mg/L	1	0.100	0.0033	99	70 - 130	1	20
Toluene		1	0.0983	mg/L	1	0.100	0.0103	88	70 - 130	1	20
Ethylbenzene		1	0.0951	mg/L	1	0.100	0.0032	92	70 - 130	4	20
Xylene		1	0.288	mg/L	1	0.300	0.0213	89	70 - 130	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.112	0.113	mg/L	1	0.1	112	113	70 - 130
4-Bromofluorobenzene (4-BFB)	0.109	0.110	mg/L	1	0.1	109	110	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 104456

Date Analyzed: 2013-08-27

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.107	107	80 - 120	2013-08-27
Toluene		1	mg/L	0.100	0.103	103	80 - 120	2013-08-27
Ethylbenzene		1	mg/L	0.100	0.0985	98	80 - 120	2013-08-27
Xylene		1	mg/L	0.300	0.303	101	80 - 120	2013-08-27

Standard (CCV-2)

QC Batch: 104456

Date Analyzed: 2013-08-27

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.109	109	80 - 120	2013-08-27
Toluene		1	mg/L	0.100	0.106	106	80 - 120	2013-08-27
Ethylbenzene		1	mg/L	0.100	0.0996	100	80 - 120	2013-08-27
Xylene		1	mg/L	0.300	0.305	102	80 - 120	2013-08-27

Standard (CCV-3)

QC Batch: 104456

Date Analyzed: 2013-08-27

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.107	107	80 - 120	2013-08-27
Toluene		1	mg/L	0.100	0.104	104	80 - 120	2013-08-27
Ethylbenzene		1	mg/L	0.100	0.0993	99	80 - 120	2013-08-27
Xylene		1	mg/L	0.300	0.297	99	80 - 120	2013-08-27

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	T104704392-12-4	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: August 29, 2013
TNM 97-04

Work Order: 13082702
TNM 97-04 Townsend

Page Number: 10 of 10
Lovington, NM

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

Summary Report

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

Report Date: September 3, 2013

Work Order: 13082704



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
340127	Pre	water	2013-08-26	10:42	2013-08-27

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
340127 - Pre	0.0321	0.00710	<0.00100	0.00520



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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: September 3, 2013

Work Order: 13082704



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: TNM 97-04

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
340127	Pre	water	2013-08-26	10:42	2013-08-27

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-08-27 and assigned to work order 13082704. Samples for work order 13082704 were received intact without headspace and at a temperature of 5.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	88629	2013-08-29 at 15:57	104615	2013-08-29 at 15:57

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 13082704 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.

Report Date: September 3, 2013
TNM 97-04

Work Order: 13082704
TNM 97-04 Townsend

Page Number: 4 of 10
Lovington, NM

Analytical Report

Sample: 340127 - Pre

Laboratory: Lubbock
Analysis: BTEX
QC Batch: 104615
Prep Batch: 88629

Analytical Method: S 8021B
Date Analyzed: 2013-08-29
Sample Preparation: 2013-08-29

Prep Method: S 5030B
Analyzed By: MT
Prepared By: MT

Parameter	Flag	Cert	RL	Units	Dilution	RL
			Result			
Benzene		1	0.0321	mg/L	1	0.00100
Toluene		1	0.00710	mg/L	1	0.00100
Ethylbenzene		1	<0.00100	mg/L	1	0.00100
Xylene		1	0.00520	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.119	mg/L	1	0.100	119	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0941	mg/L	1	0.100	94	74.6 - 120

Method Blanks

Method Blank (1) QC Batch: 104615

QC Batch: 104615
Prep Batch: 88629

Date Analyzed: 2013-08-29
QC Preparation: 2013-08-29

Analyzed By: MT
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.118	mg/L	1	0.100	118	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0988	mg/L	1	0.100	99	74.6 - 120

Report Date: September 3, 2013
TNM 97-04

Work Order: 13082704
TNM 97-04 Townsend

Page Number: 6 of 10
Lovington, NM

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 104615
Prep Batch: 88629

Date Analyzed: 2013-08-29
QC Preparation: 2013-08-29

Analyzed By: MT
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.107	mg/L	1	0.100	<0.000567	107	74.3 - 120
Toluene		1	0.0957	mg/L	1	0.100	<0.000518	96	77.6 - 120
Ethylbenzene		1	0.0958	mg/L	1	0.100	<0.000518	96	78.5 - 120
Xylene		1	0.287	mg/L	1	0.300	<0.000548	96	77.6 - 120

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	0.110	mg/L	1	0.100	<0.000567	110	74.3 - 120	3	20
Toluene		1	0.0992	mg/L	1	0.100	<0.000518	99	77.6 - 120	4	20
Ethylbenzene		1	0.100	mg/L	1	0.100	<0.000518	100	78.5 - 120	4	20
Xylene		1	0.294	mg/L	1	0.300	<0.000548	98	77.6 - 120	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)	0.112	0.115	mg/L	1	0.100	112	115	75.4 - 120
4-Bromofluorobenzene (4-BFB)	0.0940	0.0962	mg/L	1	0.100	94	96	74.6 - 120

Matrix Spike (MS-1) Spiked Sample: 339930

QC Batch: 104615
Prep Batch: 88629

Date Analyzed: 2013-08-29
QC Preparation: 2013-08-29

Analyzed By: MT
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.116	mg/L	1	0.100	<0.000567	116	50.2 - 129
Toluene		1	0.105	mg/L	1	0.100	<0.000518	105	58.1 - 129
Ethylbenzene		1	0.105	mg/L	1	0.100	<0.000518	105	58.1 - 127
Xylene		1	0.310	mg/L	1	0.300	<0.000548	103	53.1 - 128

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

Report Date: September 3, 2013
TNM 97-04

Work Order: 13082704
TNM 97-04 Townsend

Page Number: 7 of 10
Lovington, NM

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.124	mg/L	1	0.100	<0.000567	124	50.2 - 129	7	20
Toluene		1	0.112	mg/L	1	0.100	<0.000518	112	58.1 - 129	6	20
Ethylbenzene		1	0.111	mg/L	1	0.100	<0.000518	111	58.1 - 127	6	20
Xylene		1	0.329	mg/L	1	0.300	<0.000548	110	53.1 - 128	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)	0.116	0.121	mg/L	1	0.1	116	121	75.4 - 120
4-Bromofluorobenzene (4-BFB)	0.0967	0.102	mg/L	1	0.1	97	102	74.6 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 104615

Date Analyzed: 2013-08-29

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.109	109	80 - 120	2013-08-29
Toluene		1	mg/L	0.100	0.0976	98	80 - 120	2013-08-29
Ethylbenzene		1	mg/L	0.100	0.0968	97	80 - 120	2013-08-29
Xylene		1	mg/L	0.300	0.287	96	80 - 120	2013-08-29

Standard (CCV-2)

QC Batch: 104615

Date Analyzed: 2013-08-29

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.109	109	80 - 120	2013-08-29
Toluene		1	mg/L	0.100	0.0982	98	80 - 120	2013-08-29
Ethylbenzene		1	mg/L	0.100	0.0969	97	80 - 120	2013-08-29
Xylene		1	mg/L	0.300	0.289	96	80 - 120	2013-08-29

Standard (CCV-3)

QC Batch: 104615

Date Analyzed: 2013-08-29

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.111	111	80 - 120	2013-08-29
Toluene		1	mg/L	0.100	0.0963	96	80 - 120	2013-08-29
Ethylbenzene		1	mg/L	0.100	0.0949	95	80 - 120	2013-08-29
Xylene		1	mg/L	0.300	0.283	94	80 - 120	2013-08-29

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	T104704219-13-9	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: September 3, 2013
TNM 97-04

Work Order: 13082704
TNM 97-04 Townsend

Page Number: 10 of 10
Lovington, NM

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

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

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Carrier # Carrym

Summary Report

(Corrected Report)

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

Report Date: September 6, 2013

Work Order: 13090304



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
340770	Post	water	2013-08-29	10:46	2013-08-30

Sample - Field Code	Benzene	Toluene	BTEX	Xylene	MTBE
	(mg/L)	(mg/L)	Ethylbenzene (mg/L)	(mg/L)	MTBE (mg/L)
340770 - Post	<0.00100	<0.00100	<0.00100	<0.00100	

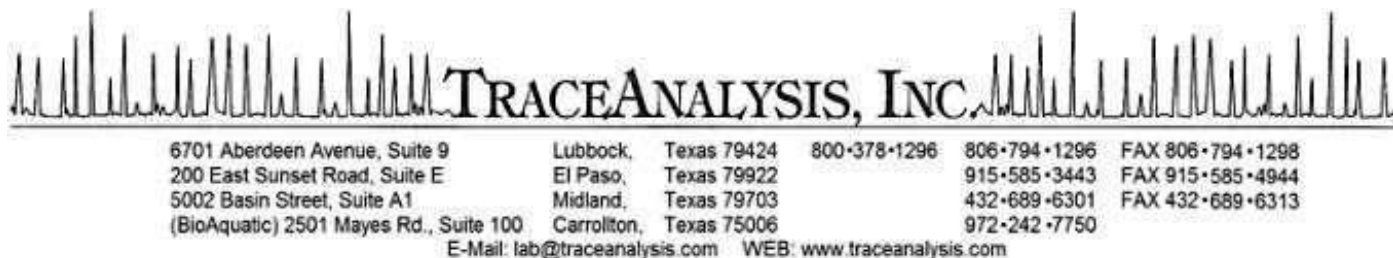
Sample: 340770 - Post

Param	Flag	Result	Units	RL
Naphthalene		<0.000195	mg/L	0.0002
2-Methylnaphthalene		<0.000195	mg/L	0.0002
1-Methylnaphthalene		<0.000195	mg/L	0.0002
Acenaphthylene		<0.000195	mg/L	0.0002
Acenaphthene		<0.000195	mg/L	0.0002
Dibenzofuran		<0.000195	mg/L	0.0002
Fluorene		<0.000195	mg/L	0.0002
Anthracene	Qs	<0.000195	mg/L	0.0002
Phenanthrene		<0.000195	mg/L	0.0002
Fluoranthene	Qs	<0.000195	mg/L	0.0002
Pyrene	Qs	<0.000195	mg/L	0.0002
Benzo(a)anthracene		<0.000195	mg/L	0.0002
Chrysene	Qs	<0.000195	mg/L	0.0002
Benzo(b)fluoranthene		<0.000195	mg/L	0.0002

continued ...

sample 340770 continued ...

Param	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.000195	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000195	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000195	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000195	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000195	mg/L	0.0002



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

(Corrected Report)

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

Report Date: September 6, 2013

Work Order: 13090304



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

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

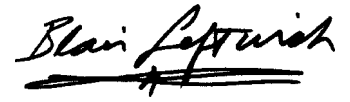
Sample	Description	Matrix	Date Taken	Time Taken	Date Received
340770	Post	water	2013-08-29	10:46	2013-08-30

Report Corrections (Work Order 13090304)

- 9/4/13: Added PAH per client.

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 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink, reading "Blair Leftwich". The signature is written in a cursive style with a prominent horizontal line underneath.

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-08-30 and assigned to work order 13090304. Samples for work order 13090304 were received intact without headspace and at a temperature of 0.9 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	88693	2013-09-03 at 15:13	104683	2013-09-03 at 15:13
PAH	S 8270D	88784	2013-09-04 at 15:00	104781	2013-09-06 at 11:46

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 13090304 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: 340770 - Post

Laboratory:	Lubbock	Analytical Method:	S 8021B	Prep Method:	S 5030B
Analysis:	BTEX	Date Analyzed:	2013-09-03	Analyzed By:	MT
QC Batch:	104683	Sample Preparation:	2013-09-03	Prepared By:	MT
Prep Batch:	88693				

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)			0.0957	mg/L	1	0.100	96	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.0964	mg/L	1	0.100	96	74.6 - 120

Sample: 340770 - Post

Laboratory:	Lubbock	Analytical Method:	S 8270D	Prep Method:	S 3510C
Analysis:	PAH	Date Analyzed:	2013-09-06	Analyzed By:	MN
QC Batch:	104781	Sample Preparation:	2013-09-04	Prepared By:	MN
Prep Batch:	88784				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000195	mg/L	0.976	0.000200
2-Methylnaphthalene	U	1	<0.000195	mg/L	0.976	0.000200
1-Methylnaphthalene	U		<0.000195	mg/L	0.976	0.000200
Acenaphthylene	U	1	<0.000195	mg/L	0.976	0.000200
Acenaphthene	U	1	<0.000195	mg/L	0.976	0.000200
Dibenzofuran	U	1	<0.000195	mg/L	0.976	0.000200
Fluorene	U	1	<0.000195	mg/L	0.976	0.000200
Anthracene	Qs,U	1	<0.000195	mg/L	0.976	0.000200
Phenanthrene	U	1	<0.000195	mg/L	0.976	0.000200
Fluoranthene	Qs,U	1	<0.000195	mg/L	0.976	0.000200
Pyrene	Qs,U	1	<0.000195	mg/L	0.976	0.000200
Benzo(a)anthracene	U	1	<0.000195	mg/L	0.976	0.000200
Chrysene	Qs,U	1	<0.000195	mg/L	0.976	0.000200

continued ...

sample 340770 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000195	mg/L	0.976	0.000200
Benzo(k)fluoranthene	U	1	<0.000195	mg/L	0.976	0.000200
Benzo(a)pyrene	Q _{S,U}	1	<0.000195	mg/L	0.976	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000195	mg/L	0.976	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000195	mg/L	0.976	0.000200
Benzo(g,h,i)perylene	U	1	<0.000195	mg/L	0.976	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Q _{sr}	Q _{sr}	0.105	mg/L	0.976	0.0800	131	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	0.0918	mg/L	0.976	0.0800	115	50 - 110
Terphenyl-d14			0.105	mg/L	0.976	0.0800	131	50 - 135

Method Blanks

Method Blank (1) QC Batch: 104683

QC Batch: 104683
Prep Batch: 88693

Date Analyzed: 2013-09-03
QC Preparation: 2013-09-03

Analyzed By: MT
Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000567	mg/L	0.001
Toluene		1	<0.000518	mg/L	0.001
Ethylbenzene		1	<0.000518	mg/L	0.001
Xylene		1	<0.000548	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0991	mg/L	1	0.100	99	75.4 - 120
4-Bromofluorobenzene (4-BFB)			0.100	mg/L	1	0.100	100	74.6 - 120

Method Blank (1) QC Batch: 104781

QC Batch: 104781
Prep Batch: 88784

Date Analyzed: 2013-09-06
QC Preparation: 2013-09-04

Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0438	mg/L	1	0.0800	55	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	0.0352	mg/L	1	0.0800	44	50 - 110
Terphenyl-d14			0.0428	mg/L	1	0.0800	54	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 104683
Prep Batch: 88693

Date Analyzed: 2013-09-03
QC Preparation: 2013-09-03

Analyzed By: MT
Prepared By: MT

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0957	mg/L	1	0.100	<0.000567	96	74.3 - 120
Toluene		1	0.0874	mg/L	1	0.100	<0.000518	87	77.6 - 120
Ethylbenzene		1	0.0929	mg/L	1	0.100	<0.000518	93	78.5 - 120
Xylene		1	0.285	mg/L	1	0.300	<0.000548	95	77.6 - 120

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	0.0974	mg/L	1	0.100	<0.000567	97	74.3 - 120	2	20
Toluene		1	0.0891	mg/L	1	0.100	<0.000518	89	77.6 - 120	2	20
Ethylbenzene		1	0.0945	mg/L	1	0.100	<0.000518	94	78.5 - 120	2	20
Xylene		1	0.290	mg/L	1	0.300	<0.000548	97	77.6 - 120	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)	0.102	0.103	mg/L	1	0.100	102	103	75.4 - 120
4-Bromofluorobenzene (4-BFB)	0.103	0.104	mg/L	1	0.100	103	104	74.6 - 120

Laboratory Control Spike (LCS-1)

QC Batch: 104781
Prep Batch: 88784

Date Analyzed: 2013-09-06
QC Preparation: 2013-09-04

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0431	mg/L	1	0.0800	<0.000121	54	40 - 100
2-Methylnaphthalene		1	0.0427	mg/L	1	0.0800	<0.0000913	53	45 - 105
1-Methylnaphthalene			0.0441	mg/L	1	0.0800	<0.000109	55	34.3 - 120
Acenaphthylene		1	0.0482	mg/L	1	0.0800	<0.000100	60	55 - 105
Acenaphthene		1	0.0436	mg/L	1	0.0800	<0.000122	54	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Dibenzofuran			1	0.0440	mg/L	1	0.0800	<0.000108	55	55 - 105
Fluorene			1	0.0407	mg/L	1	0.0800	<0.000100	51	50 - 110
Anthracene	Qs	Qs	1	0.0422	mg/L	1	0.0800	<0.0000791	53	55 - 110
Phenanthrene			1	0.0418	mg/L	1	0.0800	<0.0000824	52	50 - 115
Fluoranthene	Qs	Qs	1	0.0354	mg/L	1	0.0800	<0.000124	44	55 - 115
Pyrene	Qs	Qs	1	0.0385	mg/L	1	0.0800	<0.0000691	48	50 - 130
Benzo(a)anthracene			1	0.0503	mg/L	1	0.0800	<0.000101	63	55 - 110
Chrysene			1	0.0816	mg/L	1	0.0800	<0.0000769	102	55 - 110
Benzo(b)fluoranthene			1	0.0385	mg/L	1	0.0800	<0.0000813	48	45 - 120
Benzo(k)fluoranthene			1	0.0511	mg/L	1	0.0800	<0.0000790	64	45 - 125
Benzo(a)pyrene	Qs	Qs	1	0.0439	mg/L	1	0.0800	<0.0000701	55	55 - 110
Indeno(1,2,3-cd)pyrene			1	0.0491	mg/L	1	0.0800	<0.0000770	61	45 - 125
Dibenzo(a,h)anthracene			1	0.0664	mg/L	1	0.0800	<0.0000851	83	40 - 125
Benzo(g,h,i)perylene			1	0.0440	mg/L	1	0.0800	<0.0000798	55	40 - 125

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	0.0450	mg/L	1	0.0800	<0.000121	56	40 - 100	4	20	
2-Methylnaphthalene		1	0.0452	mg/L	1	0.0800	<0.0000913	56	45 - 105	6	20	
1-Methylnaphthalene			0.0468	mg/L	1	0.0800	<0.000109	58	34.3 - 120	6	20	
Acenaphthylene		1	0.0504	mg/L	1	0.0800	<0.000100	63	55 - 105	4	20	
Acenaphthene		1	0.0447	mg/L	1	0.0800	<0.000122	56	45 - 110	2	20	
Dibenzofuran		1	0.0461	mg/L	1	0.0800	<0.000108	58	55 - 105	5	20	
Fluorene		1	0.0427	mg/L	1	0.0800	<0.000100	53	50 - 110	5	20	
Anthracene	Qs	Qs	1	0.0430	mg/L	1	0.0800	<0.0000791	54	55 - 110	2	20
Phenanthrene		1	0.0445	mg/L	1	0.0800	<0.0000824	56	50 - 115	6	20	
Fluoranthene	Qs	Qs	1	0.0358	mg/L	1	0.0800	<0.000124	45	55 - 115	1	20
Pyrene		1	0.0440	mg/L	1	0.0800	<0.0000691	55	50 - 130	13	20	
Benzo(a)anthracene		1	0.0540	mg/L	1	0.0800	<0.000101	68	55 - 110	7	20	
Chrysene	Qs	Qs	1	0.0883	mg/L	1	0.0800	<0.0000769	110	55 - 110	8	20
Benzo(b)fluoranthene		1	0.0401	mg/L	1	0.0800	<0.0000813	50	45 - 120	4	20	
Benzo(k)fluoranthene		1	0.0544	mg/L	1	0.0800	<0.0000790	68	45 - 125	6	20	
Benzo(a)pyrene		1	0.0468	mg/L	1	0.0800	<0.0000701	58	55 - 110	6	20	
Indeno(1,2,3-cd)pyrene		1	0.0548	mg/L	1	0.0800	<0.0000770	68	45 - 125	11	20	
Dibenzo(a,h)anthracene		1	0.0728	mg/L	1	0.0800	<0.0000851	91	40 - 125	9	20	
Benzo(g,h,i)perylene		1	0.0487	mg/L	1	0.0800	<0.0000798	61	40 - 125	10	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	0.0682	0.0721	mg/L	1	0.0800	85	90	40 - 110
2-Fluorobiphenyl	0.0579	0.0584	mg/L	1	0.0800	72	73	50 - 110
Terphenyl-d14	0.0587	0.0645	mg/L	1	0.0800	73	81	50 - 135

Report Date: September 6, 2013
NM-2012

Work Order: 13090304
Townsend

Page Number: 11 of 15
NM

Matrix Spike (MS-1) Spiked Sample: 339397

QC Batch: 104683
Prep Batch: 88693

Date Analyzed: 2013-09-03
QC Preparation: 2013-09-03

Analyzed By: MT
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	1.91	mg/L	10	1.00	0.998	91	50.2 - 129
Toluene		1	0.812	mg/L	10	1.00	<0.00518	81	58.1 - 129
Ethylbenzene		1	0.924	mg/L	10	1.00	0.0259	90	58.1 - 127
Xylene		1	2.65	mg/L	10	3.00	<0.00548	88	53.1 - 128

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	1.89	mg/L	10	1.00	0.998	89	50.2 - 129	1	20
Toluene		1	0.832	mg/L	10	1.00	<0.00518	83	58.1 - 129	2	20
Ethylbenzene		1	0.953	mg/L	10	1.00	0.0259	93	58.1 - 127	3	20
Xylene		1	2.71	mg/L	10	3.00	<0.00548	90	53.1 - 128	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)	0.998	0.959	mg/L	10	1	100	96	75.4 - 120
4-Bromofluorobenzene (4-BFB)	1.03	0.988	mg/L	10	1	103	99	74.6 - 120

Calibration Standards

Standard (CCV-1)

QC Batch: 104683

Date Analyzed: 2013-09-03

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0979	98	80 - 120	2013-09-03
Toluene		1	mg/L	0.100	0.0893	89	80 - 120	2013-09-03
Ethylbenzene		1	mg/L	0.100	0.0950	95	80 - 120	2013-09-03
Xylene		1	mg/L	0.300	0.289	96	80 - 120	2013-09-03

Standard (CCV-2)

QC Batch: 104683

Date Analyzed: 2013-09-03

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0908	91	80 - 120	2013-09-03
Toluene		1	mg/L	0.100	0.0832	83	80 - 120	2013-09-03
Ethylbenzene		1	mg/L	0.100	0.0912	91	80 - 120	2013-09-03
Xylene		1	mg/L	0.300	0.278	93	80 - 120	2013-09-03

Standard (CCV-3)

QC Batch: 104683

Date Analyzed: 2013-09-03

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0889	89	80 - 120	2013-09-03
Toluene		1	mg/L	0.100	0.0800	80	80 - 120	2013-09-03
Ethylbenzene		1	mg/L	0.100	0.0872	87	80 - 120	2013-09-03
Xylene		1	mg/L	0.300	0.269	90	80 - 120	2013-09-03

Standard (CCV-1)

QC Batch: 104781

Date Analyzed: 2013-09-06

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	54.8	91	80 - 120	2013-09-06
2-Methylnaphthalene		1	mg/L	60.0	50.2	84	80 - 120	2013-09-06
1-Methylnaphthalene			mg/L	60.0	50.5	84	80 - 120	2013-09-06
Acenaphthylene		1	mg/L	60.0	54.3	90	80 - 120	2013-09-06
Acenaphthene		1	mg/L	60.0	53.3	89	80 - 120	2013-09-06
Dibenzofuran		1	mg/L	60.0	53.4	89	80 - 120	2013-09-06
Fluorene		1	mg/L	60.0	56.0	93	80 - 120	2013-09-06
Anthracene		1	mg/L	60.0	55.8	93	80 - 120	2013-09-06
Phenanthrene		1	mg/L	60.0	53.2	89	80 - 120	2013-09-06
Fluoranthene		1	mg/L	60.0	53.5	89	80 - 120	2013-09-06
Pyrene		1	mg/L	60.0	59.8	100	80 - 120	2013-09-06
Benzo(a)anthracene		1	mg/L	60.0	63.7	106	80 - 120	2013-09-06
Chrysene		1	mg/L	60.0	61.9	103	80 - 120	2013-09-06
Benzo(b)fluoranthene		1	mg/L	60.0	64.9	108	80 - 120	2013-09-06
Benzo(k)fluoranthene		1	mg/L	60.0	55.8	93	80 - 120	2013-09-06
Benzo(a)pyrene		1	mg/L	60.0	62.0	103	80 - 120	2013-09-06
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	67.6	113	80 - 120	2013-09-06
Dibenzo(a,h)anthracene		1	mg/L	60.0	67.1	112	80 - 120	2013-09-06
Benzo(g,h,i)perylene		1	mg/L	60.0	68.9	115	80 - 120	2013-09-06

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			72.7	mg/L	1	60.0	121	-
2-Fluorobiphenyl			55.9	mg/L	1	60.0	93	-
Terphenyl-d14			61.4	mg/L	1	60.0	102	-

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	T104704219-13-9	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: September 6, 2013
NM-2012

Work Order: 13090304
Townsend

Page Number: 15 of 15
NM

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

Carrier #

Summary Report

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

Report Date: October 1, 2013

Work Order: 13092624



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
342777	Post	water	2013-09-25	13:01	2013-09-26

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
342777 - Post	<0.00100	<0.00100	<0.00100	<0.00100

Sample: 342777 - Post

Param	Flag	Result	Units	RL
Naphthalene		<0.000197	mg/L	0.0002
2-Methylnaphthalene		<0.000197	mg/L	0.0002
1-Methylnaphthalene		<0.000197	mg/L	0.0002
Acenaphthylene		<0.000197	mg/L	0.0002
Acenaphthene		<0.000197	mg/L	0.0002
Dibenzofuran		<0.000197	mg/L	0.0002
Fluorene		<0.000197	mg/L	0.0002
Anthracene	Qs	<0.000197	mg/L	0.0002
Phenanthrene		<0.000197	mg/L	0.0002
Fluoranthene	Qs	<0.000197	mg/L	0.0002
Pyrene		<0.000197	mg/L	0.0002
Benzo(a)anthracene	Qc	<0.000197	mg/L	0.0002
Chrysene		<0.000197	mg/L	0.0002
Benzo(b)fluoranthene		<0.000197	mg/L	0.0002
Benzo(k)fluoranthene		<0.000197	mg/L	0.0002
Benzo(a)pyrene		<0.000197	mg/L	0.0002

continued ...

sample 342777 continued ...

Param	Flag	Result	Units	RL
Indeno(1,2,3-cd)pyrene		<0.000197	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000197	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000197	mg/L	0.0002



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(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com		WEB: www.traceanalysis.com		

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: October 1, 2013

Work Order: 13092624



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: NM-2012

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
342777	Post	water	2013-09-25	13:01	2013-09-26

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 14 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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-09-26 and assigned to work order 13092624. Samples for work order 13092624 were received intact without headspace and at a temperature of 5.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	89356	2013-09-26 at 12:30	105504	2013-09-26 at 06:15
PAH	S 8270D	89440	2013-09-30 at 15:00	105601	2013-10-01 at 10:45

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 13092624 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.

Report Date: October 1, 2013
TNM 97-04

Work Order: 13092624
TNM 97-04 Townsend

Page Number: 4 of 14
Lovington, NM

Analytical Report

Sample: 342777 - Post

Laboratory: Midland
Analysis: BTEX
QC Batch: 105504
Prep Batch: 89356

Analytical Method: S 8021B
Date Analyzed: 2013-09-26
Sample Preparation: 2013-09-26

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00100	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.111	mg/L	1	0.100	111	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0988	mg/L	1	0.100	99	70 - 130

Sample: 342777 - Post

Laboratory: Lubbock
Analysis: PAH
QC Batch: 105601
Prep Batch: 89440

Analytical Method: S 8270D
Date Analyzed: 2013-10-01
Sample Preparation: 2013-09-30

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000197	mg/L	0.985	0.000200
2-Methylnaphthalene	U	1	<0.000197	mg/L	0.985	0.000200
1-Methylnaphthalene	U		<0.000197	mg/L	0.985	0.000200
Acenaphthylene	U	1	<0.000197	mg/L	0.985	0.000200
Acenaphthene	U	1	<0.000197	mg/L	0.985	0.000200
Dibenzofuran	U	1	<0.000197	mg/L	0.985	0.000200
Fluorene	U	1	<0.000197	mg/L	0.985	0.000200
Anthracene	Qs,U	1	<0.000197	mg/L	0.985	0.000200
Phenanthrene	U	1	<0.000197	mg/L	0.985	0.000200
Fluoranthene	Qs,U	1	<0.000197	mg/L	0.985	0.000200
Pyrene	U	1	<0.000197	mg/L	0.985	0.000200
Benzo(a)anthracene	Qc,U	1	<0.000197	mg/L	0.985	0.000200
Chrysene	U	1	<0.000197	mg/L	0.985	0.000200

continued ...

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sample 342777 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000197	mg/L	0.985	0.000200
Benzo(k)fluoranthene	U	1	<0.000197	mg/L	0.985	0.000200
Benzo(a)pyrene	U	1	<0.000197	mg/L	0.985	0.000200
Indeno(1,2,3-cd)pyrene	U	1	<0.000197	mg/L	0.985	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000197	mg/L	0.985	0.000200
Benzo(g,h,i)perylene	U	1	<0.000197	mg/L	0.985	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0769	mg/L	0.985	0.0800	96	40 - 110
2-Fluorobiphenyl			0.0810	mg/L	0.985	0.0800	101	50 - 110
Terphenyl-d14	Q _{sr}	Q _{sr}	0.113	mg/L	0.985	0.0800	141	50 - 135

Method Blanks

Method Blank (1) QC Batch: 105504

QC Batch: 105504 Date Analyzed: 2013-09-26 Analyzed By: AK
Prep Batch: 89356 QC Preparation: 2013-09-26 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000200	mg/L	0.001
Toluene		2	<0.000300	mg/L	0.001
Ethylbenzene		2	<0.000400	mg/L	0.001
Xylene		2	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.127	mg/L	1	0.100	127	70 - 130
4-Bromofluorobenzene (4-BFB)			0.124	mg/L	1	0.100	124	70 - 130

Method Blank (1) QC Batch: 105601

QC Batch: 105601 Date Analyzed: 2013-10-01 Analyzed By: MN
Prep Batch: 89440 QC Preparation: 2013-09-30 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0384	mg/L	1	0.0800	48	40 - 110
2-Fluorobiphenyl			0.0400	mg/L	1	0.0800	50	50 - 110
Terphenyl-d14			0.0530	mg/L	1	0.0800	66	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 105504
Prep Batch: 89356

Date Analyzed: 2013-09-26
QC Preparation: 2013-09-26

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.108	mg/L	1	0.100	<0.000200	108	70 - 130
Toluene		2	0.111	mg/L	1	0.100	<0.000300	111	70 - 130
Ethylbenzene		2	0.119	mg/L	1	0.100	<0.000400	119	70 - 130
Xylene		2	0.364	mg/L	1	0.300	<0.00120	121	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.110	mg/L	1	0.100	<0.000200	110	70 - 130	2	20
Toluene		2	0.118	mg/L	1	0.100	<0.000300	118	70 - 130	6	20
Ethylbenzene		2	0.123	mg/L	1	0.100	<0.000400	123	70 - 130	3	20
Xylene		2	0.374	mg/L	1	0.300	<0.00120	125	70 - 130	3	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.124	0.114	mg/L	1	0.100	124	114	70 - 130
4-Bromofluorobenzene (4-BFB)	0.120	0.129	mg/L	1	0.100	120	129	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 105601
Prep Batch: 89440

Date Analyzed: 2013-10-01
QC Preparation: 2013-09-30

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0447	mg/L	1	0.0800	<0.000121	56	40 - 100
2-Methylnaphthalene		1	0.0398	mg/L	1	0.0800	<0.0000913	50	45 - 105
1-Methylnaphthalene			0.0422	mg/L	1	0.0800	<0.000109	53	34.3 - 120
Acenaphthylene		1	0.0488	mg/L	1	0.0800	<0.000100	61	55 - 105
Acenaphthene		1	0.0461	mg/L	1	0.0800	<0.000122	58	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Dibenzofuran		1	0.0471	mg/L	1	0.0800	<0.000108	59	55 - 105	
Fluorene		1	0.0482	mg/L	1	0.0800	<0.000100	60	50 - 110	
Anthracene	Qs	Qs	1	0.0411	mg/L	1	0.0800	<0.0000791	51	55 - 110
Phenanthrene		1	0.0414	mg/L	1	0.0800	<0.0000824	52	50 - 115	
Fluoranthene	Qs	Qs	1	0.0388	mg/L	1	0.0800	<0.000124	48	55 - 115
Pyrene		1	0.0479	mg/L	1	0.0800	<0.0000691	60	50 - 130	
Benzo(a)anthracene		1	0.0519	mg/L	1	0.0800	<0.000101	65	55 - 110	
Chrysene		1	0.0832	mg/L	1	0.0800	<0.0000769	104	55 - 110	
Benzo(b)fluoranthene		1	0.0447	mg/L	1	0.0800	<0.0000813	56	45 - 120	
Benzo(k)fluoranthene		1	0.0638	mg/L	1	0.0800	<0.0000790	80	45 - 125	
Benzo(a)pyrene		1	0.0495	mg/L	1	0.0800	<0.0000701	62	55 - 110	
Indeno(1,2,3-cd)pyrene		1	0.0587	mg/L	1	0.0800	<0.0000770	73	45 - 125	
Dibenzo(a,h)anthracene		1	0.0819	mg/L	1	0.0800	<0.0000851	102	40 - 125	
Benzo(g,h,i)perylene		1	0.0536	mg/L	1	0.0800	<0.0000798	67	40 - 125	

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

Param	F	C	LCSD			Spike	Matrix		Rec.		RPD	
			Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
Naphthalene		1	0.0441	mg/L	1	0.0800	<0.000121	55	40 - 100	1	20	
2-Methylnaphthalene		1	0.0405	mg/L	1	0.0800	<0.0000913	51	45 - 105	2	20	
1-Methylnaphthalene			0.0436	mg/L	1	0.0800	<0.000109	54	34.3 - 120	3	20	
Acenaphthylene		1	0.0471	mg/L	1	0.0800	<0.000100	59	55 - 105	4	20	
Acenaphthene		1	0.0447	mg/L	1	0.0800	<0.000122	56	45 - 110	3	20	
Dibenzofuran		1	0.0466	mg/L	1	0.0800	<0.000108	58	55 - 105	1	20	
Fluorene		1	0.0469	mg/L	1	0.0800	<0.000100	59	50 - 110	3	20	
Anthracene	Qs	Qs	1	0.0406	mg/L	1	0.0800	<0.0000791	51	55 - 110	1	20
Phenanthrene		1	0.0406	mg/L	1	0.0800	<0.0000824	51	50 - 115	2	20	
Fluoranthene	Qs	Qs	1	0.0381	mg/L	1	0.0800	<0.000124	48	55 - 115	2	20
Pyrene		1	0.0467	mg/L	1	0.0800	<0.0000691	58	50 - 130	2	20	
Benzo(a)anthracene		1	0.0503	mg/L	1	0.0800	<0.000101	63	55 - 110	3	20	
Chrysene		1	0.0814	mg/L	1	0.0800	<0.0000769	102	55 - 110	2	20	
Benzo(b)fluoranthene		1	0.0405	mg/L	1	0.0800	<0.0000813	51	45 - 120	10	20	
Benzo(k)fluoranthene		1	0.0568	mg/L	1	0.0800	<0.0000790	71	45 - 125	12	20	
Benzo(a)pyrene		1	0.0460	mg/L	1	0.0800	<0.0000701	58	55 - 110	7	20	
Indeno(1,2,3-cd)pyrene		1	0.0533	mg/L	1	0.0800	<0.0000770	67	45 - 125	10	20	
Dibenzo(a,h)anthracene		1	0.0748	mg/L	1	0.0800	<0.0000851	94	40 - 125	9	20	
Benzo(g,h,i)perylene		1	0.0492	mg/L	1	0.0800	<0.0000798	62	40 - 125	9	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	0.0564	0.0558	mg/L	1	0.0800	70	70	40 - 110
2-Fluorobiphenyl	0.0611	0.0601	mg/L	1	0.0800	76	75	50 - 110
Terphenyl-d14	0.0707	0.0696	mg/L	1	0.0800	88	87	50 - 135

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Matrix Spike (MS-1) Spiked Sample: 342777

QC Batch: 105504
Prep Batch: 89356

Date Analyzed: 2013-09-26
QC Preparation: 2013-09-26

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0857	mg/L	1	0.100	<0.000200	86	70 - 130
Toluene		2	0.0854	mg/L	1	0.100	<0.000300	85	70 - 130
Ethylbenzene		2	0.0829	mg/L	1	0.100	<0.000400	83	70 - 130
Xylene		2	0.253	mg/L	1	0.300	<0.00120	84	70 - 130

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		2	0.0855	mg/L	1	0.100	<0.000200	86	70 - 130	0	20
Toluene		2	0.0863	mg/L	1	0.100	<0.000300	86	70 - 130	1	20
Ethylbenzene		2	0.0836	mg/L	1	0.100	<0.000400	84	70 - 130	1	20
Xylene		2	0.255	mg/L	1	0.300	<0.00120	85	70 - 130	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)	0.125	0.0998	mg/L	1	0.1	125	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.129	0.0974	mg/L	1	0.1	129	97	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 105504

Date Analyzed: 2013-09-26

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0861	86	80 - 120	2013-09-26
Toluene		2	mg/L	0.100	0.0882	88	80 - 120	2013-09-26
Ethylbenzene		2	mg/L	0.100	0.0840	84	80 - 120	2013-09-26
Xylene		2	mg/L	0.300	0.260	87	80 - 120	2013-09-26

Standard (CCV-2)

QC Batch: 105504

Date Analyzed: 2013-09-26

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0857	86	80 - 120	2013-09-26
Toluene		2	mg/L	0.100	0.0863	86	80 - 120	2013-09-26
Ethylbenzene		2	mg/L	0.100	0.0834	83	80 - 120	2013-09-26
Xylene		2	mg/L	0.300	0.255	85	80 - 120	2013-09-26

Standard (CCV-1)

QC Batch: 105601

Date Analyzed: 2013-10-01

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	68.8	115	80 - 120	2013-10-01
2-Methylnaphthalene		1	mg/L	60.0	62.7	104	80 - 120	2013-10-01
1-Methylnaphthalene			mg/L	60.0	64.7	108	80 - 120	2013-10-01
Acenaphthylene		1	mg/L	60.0	67.6	113	80 - 120	2013-10-01
Acenaphthene		1	mg/L	60.0	64.6	108	80 - 120	2013-10-01
Dibenzofuran		1	mg/L	60.0	63.4	106	80 - 120	2013-10-01
Fluorene		1	mg/L	60.0	68.0	113	80 - 120	2013-10-01

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Anthracene		1	mg/L	60.0	63.0	105	80 - 120	2013-10-01
Phenanthrene		1	mg/L	60.0	60.9	102	80 - 120	2013-10-01
Fluoranthene		1	mg/L	60.0	61.3	102	80 - 120	2013-10-01
Pyrene		1	mg/L	60.0	71.9	120	80 - 120	2013-10-01
Benzo(a)anthracene	Qc	Qc	mg/L	60.0	73.6	123	80 - 120	2013-10-01
Chrysene		1	mg/L	60.0	68.5	114	80 - 120	2013-10-01
Benzo(b)fluoranthene		1	mg/L	60.0	62.1	104	80 - 120	2013-10-01
Benzo(k)fluoranthene		1	mg/L	60.0	69.1	115	80 - 120	2013-10-01
Benzo(a)pyrene		1	mg/L	60.0	65.7	110	80 - 120	2013-10-01
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	69.8	116	80 - 120	2013-10-01
Dibenzo(a,h)anthracene		1	mg/L	60.0	62.3	104	80 - 120	2013-10-01
Benzo(g,h,i)perylene		1	mg/L	60.0	71.3	119	80 - 120	2013-10-01

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			65.9	mg/L	1	60.0	110	-
2-Fluorobiphenyl			66.5	mg/L	1	60.0	111	-
Terphenyl-d14			73.3	mg/L	1	60.0	122	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

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Attachments

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

COPY

Cut cell - 432-559-3296

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LAB Order ID # 13092624

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) 689-4301
Fax (432) 689-4343

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

Company Name: **NOVA**
Address: **2057 Commerce**
Contact Person: **RICHARD BAKER**
E-mail: **CURT STANLEY**
Phone #: **(432) 520-7720**
Fax #: **(432) 520-7720**
Project #: **NM-2012**
Project Location (including state): **NM**

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD						SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME	
342m	post	4	100g	X				X							9-25-13	0130
							</									

ANALYSIS REQUEST

(Circle or Specify Method No.)

TPH 8015 GRO / DRO / TVHC	PAH 8270 625 - HAD: per: cu	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	PCBs 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO ₄ , NO ₃ -N, NO ₂ -N, PO ₄ -P, Alkalinity	Na, Ca, Mg, K, TDS, EC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

Relinquished by: **NOVA** Date: **9-26-13** Time: **12:21** Received by: **Don TA** Date: **9/26/13** Time: **12:21** INST: **51.0** OBS: **51.0** COR: **5.0**

Relinquished by: **NOVA** Date: **9-26-13** Time: **12:21** Received by: **Don TA** Date: **9/26/13** Time: **12:21** INST: **51.0** OBS: **51.0** COR: **5.0**

Relinquished by: **NOVA** Date: **9-26-13** Time: **12:21** Received by: **Don TA** Date: **9/26/13** Time: **12:21** INST: **51.0** OBS: **51.0** COR: **5.0**

REMARKS: **Stex 24 hrs hold PAH for Results**

LAB USE ONLY

Headspace Y/N ☒ N

Log-In-Review ☐

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 # **Carry**

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Summary Report

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

Report Date: September 30, 2013

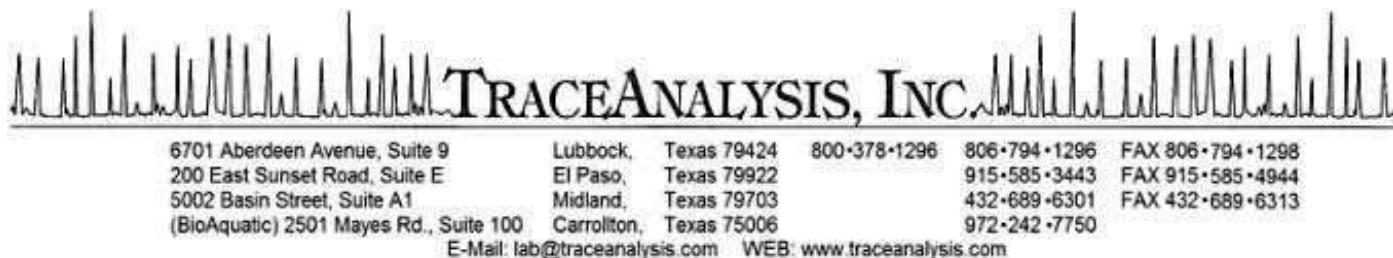
Work Order: 13092625



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
342778	Pre	water	2013-09-25	13:05	2013-09-26

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
342778 - Pre	0.0694	0.0183	0.00490	0.0371



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: September 30, 2013

Work Order: 13092625



Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: NM-2012

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
342778	Pre	water	2013-09-25	13:05	2013-09-26

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-09-26 and assigned to work order 13092625. Samples for work order 13092625 were received intact without headspace and at a temperature of 5.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	89359	2013-09-27 at 09:14	105541	2013-09-27 at 04:30

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 13092625 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.

Report Date: September 30, 2013
TNM 97-04

Work Order: 13092625
TNM 97-04 Townsend

Page Number: 4 of 10
Lovington, NM

Analytical Report

Sample: 342778 - Pre

Laboratory: Midland
Analysis: BTEX
QC Batch: 105541
Prep Batch: 89359

Analytical Method: S 8021B
Date Analyzed: 2013-09-27
Sample Preparation: 2013-09-27

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.0694	mg/L	1	0.00100
Toluene		1	0.0183	mg/L	1	0.00100
Ethylbenzene		1	0.00490	mg/L	1	0.00100
Xylene		1	0.0371	mg/L	1	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0973	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0953	mg/L	1	0.100	95	70 - 130

Method Blanks

Method Blank (1) QC Batch: 105541

QC Batch: 105541
Prep Batch: 89359

Date Analyzed: 2013-09-27
QC Preparation: 2013-09-27

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0901	mg/L	1	0.100	90	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 105541
Prep Batch: 89359

Date Analyzed: 2013-09-27
QC Preparation: 2013-09-27

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0848	mg/L	1	0.100	<0.000200	85	70 - 130
Toluene		1	0.0869	mg/L	1	0.100	<0.000300	87	70 - 130
Ethylbenzene		1	0.0846	mg/L	1	0.100	<0.000400	85	70 - 130
Xylene		1	0.258	mg/L	1	0.300	<0.00120	86	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0843	mg/L	1	0.100	<0.000200	84	70 - 130	1	20
Toluene		1	0.0872	mg/L	1	0.100	<0.000300	87	70 - 130	0	20
Ethylbenzene		1	0.0855	mg/L	1	0.100	<0.000400	86	70 - 130	1	20
Xylene		1	0.261	mg/L	1	0.300	<0.00120	87	70 - 130	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0959	0.102	mg/L	1	0.100	96	102	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0937	0.102	mg/L	1	0.100	94	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 342600

QC Batch: 105541
Prep Batch: 89359

Date Analyzed: 2013-09-27
QC Preparation: 2013-09-27

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0779	mg/L	1	0.100	<0.000200	78	70 - 130
Toluene		1	0.0801	mg/L	1	0.100	<0.000300	80	70 - 130
Ethylbenzene		1	0.0766	mg/L	1	0.100	<0.000400	77	70 - 130
Xylene		1	0.232	mg/L	1	0.300	<0.00120	77	70 - 130

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

Report Date: September 30, 2013
TNM 97-04

Work Order: 13092625
TNM 97-04 Townsend

Page Number: 7 of 10
Lovington, NM

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	0.0782	mg/L	1	0.100	<0.000200	78	70 - 130	0	20
Toluene		1	0.0808	mg/L	1	0.100	<0.000300	81	70 - 130	1	20
Ethylbenzene		1	0.0775	mg/L	1	0.100	<0.000400	78	70 - 130	1	20
Xylene		1	0.236	mg/L	1	0.300	<0.00120	79	70 - 130	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)	0.129	0.0955	mg/L	1	0.1	129	96	70 - 130
4-Bromofluorobenzene (4-BFB)	0.130	0.0946	mg/L	1	0.1	130	95	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 105541

Date Analyzed: 2013-09-27

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0826	83	80 - 120	2013-09-27
Toluene		1	mg/L	0.100	0.0848	85	80 - 120	2013-09-27
Ethylbenzene		1	mg/L	0.100	0.0820	82	80 - 120	2013-09-27
Xylene		1	mg/L	0.300	0.253	84	80 - 120	2013-09-27

Standard (CCV-2)

QC Batch: 105541

Date Analyzed: 2013-09-27

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0834	83	80 - 120	2013-09-27
Toluene		1	mg/L	0.100	0.0833	83	80 - 120	2013-09-27
Ethylbenzene		1	mg/L	0.100	0.0811	81	80 - 120	2013-09-27
Xylene		1	mg/L	0.300	0.248	83	80 - 120	2013-09-27

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	T104704392-12-4	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: September 30, 2013
TNM 97-04

Work Order: 13092625
TNM 97-04 Townsend

Page Number: 10 of 10
Lovington, NM

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

TraceAnalysis, Inc.

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Fax (806) 794-1298
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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
Address: (Street, City, Zip)
2057 Commerce Dr
Contact Person: Ricardo Baer Curt Stanley
Invoice to:
(If different from above)
Project #: NM-2012
Project Location (including state): NM

Phone #: (432) 520-7720
Fax #:
E-mail:
Project Name: 97-04 Townsend
Sampler Signature: [Signature]

[illegible]

Relinquished by:	Date:	Time:	Received by:	Company:	Date:	Time:	INST
[Signature]	9-26-13	1221	[Signature]	Nova	7A	9/26/13	OBS 51° COR 50°
Relinquished by:	Date:	Time:	Received by:	Company:	Date:	Time:	INST
[Signature]			[Signature]				OBS ° COR °
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							OBS ° COR °

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Summary Report

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

Report Date: November 4, 2013

Work Order: 13103104



Project Location: Townsend
Project Name: Townsend
Project Number: TNM-9704

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
345264	Post Carbon	water	2013-10-30	14:32	2013-10-31

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
345264 - Post Carbon	<0.00100	<0.00100	<0.00100 Qs	<0.00300 Qs

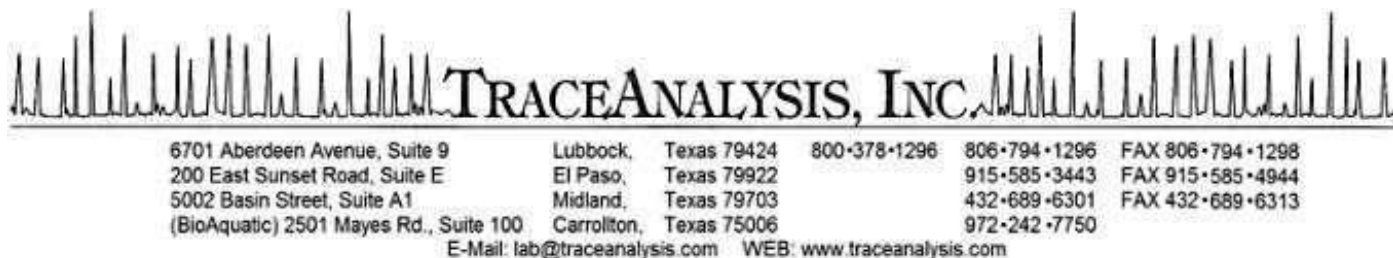
Sample: 345264 - Post Carbon

Param	Flag	Result	Units	RL
Naphthalene		<0.000184	mg/L	0.0002
2-Methylnaphthalene		<0.000184	mg/L	0.0002
1-Methylnaphthalene		<0.000184	mg/L	0.0002
Acenaphthylene		<0.000184	mg/L	0.0002
Acenaphthene		<0.000184	mg/L	0.0002
Dibenzofuran		<0.000184	mg/L	0.0002
Fluorene		<0.000184	mg/L	0.0002
Anthracene		<0.000184	mg/L	0.0002
Phenanthrene		<0.000184	mg/L	0.0002
Fluoranthene		<0.000184	mg/L	0.0002
Pyrene		<0.000184	mg/L	0.0002
Benzo(a)anthracene		<0.000184	mg/L	0.0002
Chrysene		<0.000184	mg/L	0.0002
Benzo(b)fluoranthene		<0.000184	mg/L	0.0002
Benzo(k)fluoranthene		<0.000184	mg/L	0.0002
Benzo(a)pyrene		<0.000184	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.000184	mg/L	0.0002

continued ...

sample 345264 continued ...

Param	Flag	Result	Units	RL
Dibenzo(a,h)anthracene		<0.000184	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000184	mg/L	0.0002



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: November 4, 2013

Work Order: 13103104



Project Location: Townsend
Project Name: Townsend
Project Number: TNM-9704

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
345264	Post Carbon	water	2013-10-30	14:32	2013-10-31

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 14 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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-10-31 and assigned to work order 13103104. Samples for work order 13103104 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	90156	2013-11-01 at 12:38	106459	2013-11-01 at 15:39
PAH	S 8270D	90183	2013-11-03 at 15:00	106485	2013-11-04 at 10:32

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 13103104 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: 345264 - Post Carbon

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5030B
Analysis:	BTEX	Date Analyzed:	2013-11-01	Analyzed By:	AK
QC Batch:	106459	Sample Preparation:	2013-11-01	Prepared By:	AK
Prep Batch:	90156				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qs,U	2	<0.00100	mg/L	1	0.00100
Xylene	Qs,U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0858	mg/L	1	0.100	86	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0780	mg/L	1	0.100	78	70 - 130

Sample: 345264 - Post Carbon

Laboratory:	Lubbock	Analytical Method:	S 8270D	Prep Method:	S 3510C
Analysis:	PAH	Date Analyzed:	2013-11-04	Analyzed By:	MN
QC Batch:	106485	Sample Preparation:	2013-11-03	Prepared By:	MN
Prep Batch:	90183				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000184	mg/L	0.922	0.000200
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	1	<0.000184	mg/L	0.922	0.000200
Fluoranthene	U	1	<0.000184	mg/L	0.922	0.000200
Pyrene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(a)anthracene	U	1	<0.000184	mg/L	0.922	0.000200
Chrysene	U	1	<0.000184	mg/L	0.922	0.000200

continued ...

sample 345264 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	U	1	<0.000184	mg/L	0.922	0.000200
Benzo(k)fluoranthene	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	1	<0.000184	mg/L	0.922	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0654	mg/L	0.922	0.0800	82	40 - 110
2-Fluorobiphenyl			0.0863	mg/L	0.922	0.0800	108	50 - 110
Terphenyl-d14			0.0871	mg/L	0.922	0.0800	109	50 - 135

Method Blanks

Method Blank (1) QC Batch: 106459

QC Batch: 106459 Date Analyzed: 2013-11-01 Analyzed By: AK
Prep Batch: 90156 QC Preparation: 2013-11-01 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000600	mg/L	0.001
Toluene		2	<0.000400	mg/L	0.001
Ethylbenzene		2	<0.000600	mg/L	0.001
Xylene		2	<0.00130	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0881	mg/L	1	0.100	88	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0780	mg/L	1	0.100	78	70 - 130

Method Blank (1) QC Batch: 106485

QC Batch: 106485 Date Analyzed: 2013-11-04 Analyzed By: MN
Prep Batch: 90183 QC Preparation: 2013-11-03 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			0.0498	mg/L	1	0.0800	62	40 - 110
2-Fluorobiphenyl			0.0494	mg/L	1	0.0800	62	50 - 110
Terphenyl-d14			0.0658	mg/L	1	0.0800	82	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 106459
Prep Batch: 90156

Date Analyzed: 2013-11-01
QC Preparation: 2013-11-01

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0900	mg/L	1	0.100	<0.000600	90	70 - 130
Toluene		2	0.0892	mg/L	1	0.100	<0.000400	89	70 - 130
Ethylbenzene		2	0.0872	mg/L	1	0.100	<0.000600	87	70 - 130
Xylene		2	0.266	mg/L	1	0.300	<0.00130	89	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.0895	mg/L	1	0.100	<0.000600	90	70 - 130	1	20
Toluene		2	0.0892	mg/L	1	0.100	<0.000400	89	70 - 130	0	20
Ethylbenzene		2	0.0868	mg/L	1	0.100	<0.000600	87	70 - 130	0	20
Xylene		2	0.265	mg/L	1	0.300	<0.00130	88	70 - 130	0	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0899	0.0914	mg/L	1	0.100	90	91	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0936	0.0945	mg/L	1	0.100	94	94	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 106485
Prep Batch: 90183

Date Analyzed: 2013-11-04
QC Preparation: 2013-11-03

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	0.0612	mg/L	1	0.0800	<0.000121	76	40 - 100
2-Methylnaphthalene		1	0.0554	mg/L	1	0.0800	<0.0000913	69	45 - 105
1-Methylnaphthalene			0.0596	mg/L	1	0.0800	<0.000109	74	34.3 - 120
Acenaphthylene		1	0.0662	mg/L	1	0.0800	<0.000100	83	55 - 105
Acenaphthene		1	0.0610	mg/L	1	0.0800	<0.000122	76	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dibenzofuran		1	0.0700	mg/L	1	0.0800	<0.000108	88	55 - 105
Fluorene		1	0.0658	mg/L	1	0.0800	<0.000100	82	50 - 110
Anthracene		1	0.0598	mg/L	1	0.0800	<0.0000791	75	55 - 110
Phenanthrene		1	0.0618	mg/L	1	0.0800	<0.0000824	77	50 - 115
Fluoranthene		1	0.0564	mg/L	1	0.0800	<0.000124	70	55 - 115
Pyrene		1	0.0656	mg/L	1	0.0800	<0.0000691	82	50 - 130
Benzo(a)anthracene		1	0.0583	mg/L	1	0.0800	<0.000101	73	55 - 110
Chrysene		1	0.0572	mg/L	1	0.0800	<0.0000769	72	55 - 110
Benzo(b)fluoranthene		1	0.0640	mg/L	1	0.0800	<0.0000813	80	45 - 120
Benzo(k)fluoranthene		1	0.0792	mg/L	1	0.0800	<0.0000790	99	45 - 125
Benzo(a)pyrene		1	0.0723	mg/L	1	0.0800	<0.0000701	90	55 - 110
Indeno(1,2,3-cd)pyrene		1	0.0577	mg/L	1	0.0800	<0.0000770	72	45 - 125
Dibenzo(a,h)anthracene		1	0.0413	mg/L	1	0.0800	<0.0000851	52	40 - 125
Benzo(g,h,i)perylene		1	0.0640	mg/L	1	0.0800	<0.0000798	80	40 - 125

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene		1	0.0595	mg/L	1	0.0800	<0.000121	74	40 - 100	3	20
2-Methylnaphthalene		1	0.0544	mg/L	1	0.0800	<0.0000913	68	45 - 105	2	20
1-Methylnaphthalene			0.0591	mg/L	1	0.0800	<0.000109	74	34.3 - 120	1	20
Acenaphthylene		1	0.0698	mg/L	1	0.0800	<0.000100	87	55 - 105	5	20
Acenaphthene		1	0.0659	mg/L	1	0.0800	<0.000122	82	45 - 110	8	20
Dibenzofuran		1	0.0758	mg/L	1	0.0800	<0.000108	95	55 - 105	8	20
Fluorene		1	0.0677	mg/L	1	0.0800	<0.000100	85	50 - 110	3	20
Anthracene		1	0.0578	mg/L	1	0.0800	<0.0000791	72	55 - 110	3	20
Phenanthrene		1	0.0612	mg/L	1	0.0800	<0.0000824	76	50 - 115	1	20
Fluoranthene		1	0.0549	mg/L	1	0.0800	<0.000124	69	55 - 115	3	20
Pyrene		1	0.0636	mg/L	1	0.0800	<0.0000691	80	50 - 130	3	20
Benzo(a)anthracene		1	0.0578	mg/L	1	0.0800	<0.000101	72	55 - 110	1	20
Chrysene		1	0.0495	mg/L	1	0.0800	<0.0000769	62	55 - 110	14	20
Benzo(b)fluoranthene		1	0.0620	mg/L	1	0.0800	<0.0000813	78	45 - 120	3	20
Benzo(k)fluoranthene		1	0.0810	mg/L	1	0.0800	<0.0000790	101	45 - 125	2	20
Benzo(a)pyrene		1	0.0691	mg/L	1	0.0800	<0.0000701	86	55 - 110	4	20
Indeno(1,2,3-cd)pyrene		1	0.0659	mg/L	1	0.0800	<0.0000770	82	45 - 125	13	20
Dibenzo(a,h)anthracene		1	0.0404	mg/L	1	0.0800	<0.0000851	50	40 - 125	2	20
Benzo(g,h,i)perylene		1	0.0659	mg/L	1	0.0800	<0.0000798	82	40 - 125	3	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Nitrobenzene-d5	0.0475	0.0499	mg/L	1	0.0800	59	62	40 - 110
2-Fluorobiphenyl	0.0609	0.0666	mg/L	1	0.0800	76	83	50 - 110
Terphenyl-d14	0.0678	0.0673	mg/L	1	0.0800	85	84	50 - 135

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Matrix Spike (MS-1) Spiked Sample: 345371

QC Batch: 106459
Prep Batch: 90156

Date Analyzed: 2013-11-01
QC Preparation: 2013-11-01

Analyzed By: AK
Prepared By: AK

Param			MS			Spike	Matrix		Rec.
	F	C	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene			2	0.0833	mg/L	1	0.100	<0.000600	83
Toluene			2	0.0783	mg/L	1	0.100	<0.000400	78
Ethylbenzene	Qs	Qs	2	0.0693	mg/L	1	0.100	<0.000600	69
Xylene	Qs	Qs	2	0.207	mg/L	1	0.300	<0.00130	69

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

Param	F	C	MSD		Dil.	Spike	Matrix	Rec.	Rec.	RPD	RPD	
			Result	Units		Amount	Result		Limit		Limit	
Benzene			2	0.0836	mg/L	1	0.100	<0.000600	84	70 - 130	0	20
Toluene			2	0.0793	mg/L	1	0.100	<0.000400	79	70 - 130	1	20
Ethylbenzene	Q _s	Q _s	2	0.0696	mg/L	1	0.100	<0.000600	70	70 - 130	0	20
Xylene			2	0.211	mg/L	1	0.300	<0.00130	70	70 - 130	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)	0.0833	0.0825	mg/L	1	0.1	83	82	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0863	0.0870	mg/L	1	0.1	86	87	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0895	90	80 - 120	2013-11-01
Toluene		2	mg/L	0.100	0.0887	89	80 - 120	2013-11-01
Ethylbenzene		2	mg/L	0.100	0.0871	87	80 - 120	2013-11-01
Xylene		2	mg/L	0.300	0.264	88	80 - 120	2013-11-01

Standard (CCV-2)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0855	86	80 - 120	2013-11-01
Toluene		2	mg/L	0.100	0.0853	85	80 - 120	2013-11-01
Ethylbenzene		2	mg/L	0.100	0.0851	85	80 - 120	2013-11-01
Xylene		2	mg/L	0.300	0.256	85	80 - 120	2013-11-01

Standard (CCV-3)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0898	90	80 - 120	2013-11-01
Toluene		2	mg/L	0.100	0.0877	88	80 - 120	2013-11-01
Ethylbenzene		2	mg/L	0.100	0.0871	87	80 - 120	2013-11-01
Xylene		2	mg/L	0.300	0.263	88	80 - 120	2013-11-01

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Standard (CCV-4)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0905	90	80 - 120	2013-11-01
Toluene		2	mg/L	0.100	0.0889	89	80 - 120	2013-11-01
Ethylbenzene		2	mg/L	0.100	0.0872	87	80 - 120	2013-11-01
Xylene		2	mg/L	0.300	0.263	88	80 - 120	2013-11-01

Standard (CCV-1)

QC Batch: 106485

Date Analyzed: 2013-11-04

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	61.3	102	80 - 120	2013-11-04
2-Methylnaphthalene		1	mg/L	60.0	57.2	95	80 - 120	2013-11-04
1-Methylnaphthalene			mg/L	60.0	60.1	100	80 - 120	2013-11-04
Acenaphthylene		1	mg/L	60.0	60.6	101	80 - 120	2013-11-04
Acenaphthene		1	mg/L	60.0	60.6	101	80 - 120	2013-11-04
Dibenzofuran		1	mg/L	60.0	68.7	114	80 - 120	2013-11-04
Fluorene		1	mg/L	60.0	64.2	107	80 - 120	2013-11-04
Anthracene		1	mg/L	60.0	58.2	97	80 - 120	2013-11-04
Phenanthrene		1	mg/L	60.0	59.0	98	80 - 120	2013-11-04
Fluoranthene		1	mg/L	60.0	56.6	94	80 - 120	2013-11-04
Pyrene		1	mg/L	60.0	57.8	96	80 - 120	2013-11-04
Benzo(a)anthracene		1	mg/L	60.0	57.2	95	80 - 120	2013-11-04
Chrysene		1	mg/L	60.0	59.6	99	80 - 120	2013-11-04
Benzo(b)fluoranthene		1	mg/L	60.0	56.9	95	80 - 120	2013-11-04
Benzo(k)fluoranthene		1	mg/L	60.0	63.4	106	80 - 120	2013-11-04
Benzo(a)pyrene		1	mg/L	60.0	56.6	94	80 - 120	2013-11-04
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	58.8	98	80 - 120	2013-11-04
Dibenzo(a,h)anthracene		1	mg/L	60.0	55.5	92	80 - 120	2013-11-04
Benzo(g,h,i)perylene		1	mg/L	60.0	49.4	82	80 - 120	2013-11-04

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			53.8	mg/L	1	60.0	90	-
2-Fluorobiphenyl			60.4	mg/L	1	60.0	101	-
Terphenyl-d14			57.7	mg/L	1	60.0	96	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-12-4	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

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Attachments

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

Summary Report

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

Report Date: November 1, 2013

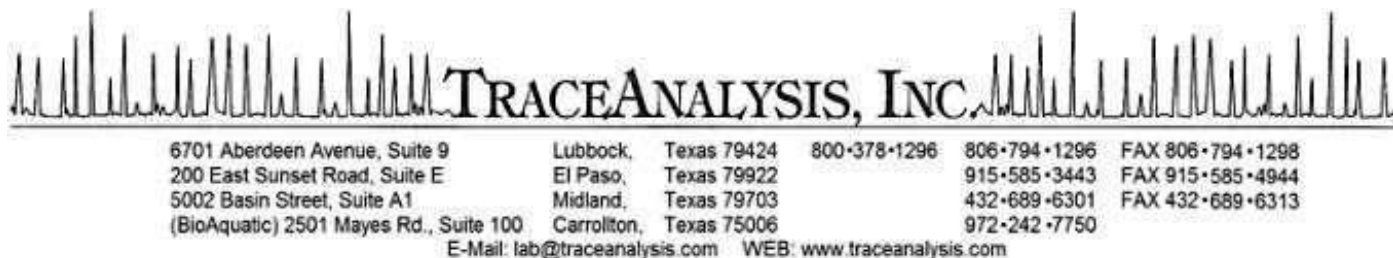
Work Order: 13103105



Project Location: Townsend
Project Name: Townsend
Project Number: TNM-9704

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
345265	Pre Carbon	water	2013-10-30	14:25	2013-10-31

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
345265 - Pre Carbon	<0.00100	<0.00100	<0.00100 Q _s	<0.00300 Q _s



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: November 1, 2013

Work Order: 13103105



Project Location: Townsend
Project Name: Townsend
Project Number: TNM-9704

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
345265	Pre Carbon	water	2013-10-30	14:25	2013-10-31

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-10-31 and assigned to work order 13103105. Samples for work order 13103105 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	90156	2013-11-01 at 12:38	106459	2013-11-01 at 15:39

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 13103105 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.

Report Date: November 1, 2013
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Work Order: 13103105
Townsend

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Analytical Report

Sample: 345265 - Pre Carbon

Laboratory: Midland
Analysis: BTEX
QC Batch: 106459
Prep Batch: 90156

Analytical Method: S 8021B
Date Analyzed: 2013-11-01
Sample Preparation: 2013-11-01

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

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	Qs,U	1	<0.00100	mg/L	1	0.00100
Xylene	Qs,U	1	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0891	mg/L	1	0.100	89	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0788	mg/L	1	0.100	79	70 - 130

Method Blanks

Method Blank (1) QC Batch: 106459

QC Batch: 106459
Prep Batch: 90156

Date Analyzed: 2013-11-01
QC Preparation: 2013-11-01

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000600	mg/L	0.001
Toluene		1	<0.000400	mg/L	0.001
Ethylbenzene		1	<0.000600	mg/L	0.001
Xylene		1	<0.00130	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0881	mg/L	1	0.100	88	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0780	mg/L	1	0.100	78	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 106459
Prep Batch: 90156

Date Analyzed: 2013-11-01
QC Preparation: 2013-11-01

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0900	mg/L	1	0.100	<0.000600	90	70 - 130
Toluene		1	0.0892	mg/L	1	0.100	<0.000400	89	70 - 130
Ethylbenzene		1	0.0872	mg/L	1	0.100	<0.000600	87	70 - 130
Xylene		1	0.266	mg/L	1	0.300	<0.00130	89	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0895	mg/L	1	0.100	<0.000600	90	70 - 130	1	20
Toluene		1	0.0892	mg/L	1	0.100	<0.000400	89	70 - 130	0	20
Ethylbenzene		1	0.0868	mg/L	1	0.100	<0.000600	87	70 - 130	0	20
Xylene		1	0.265	mg/L	1	0.300	<0.00130	88	70 - 130	0	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0899	0.0914	mg/L	1	0.100	90	91	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0936	0.0945	mg/L	1	0.100	94	94	70 - 130

Matrix Spike (MS-1) Spiked Sample: 345371

QC Batch: 106459
Prep Batch: 90156

Date Analyzed: 2013-11-01
QC Preparation: 2013-11-01

Analyzed By: AK
Prepared By: AK

Param			MS			Spike	Matrix		Rec.
	F	C	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene			1	0.0833	mg/L	1	0.100	<0.000600	83
Toluene			1	0.0783	mg/L	1	0.100	<0.000400	78
Ethylbenzene	Qs	Qs	1	0.0693	mg/L	1	0.100	<0.000600	69
Xylene	Qs	Qs	1	0.207	mg/L	1	0.300	<0.00130	69

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

Report Date: November 1, 2013
TNM-9704

Work Order: 13103105
Townsend

Page Number: 7 of 10
Townsend

Param	F	C	MSD		Dil.	Spike	Matrix	Rec.	Rec.	RPD	RPD	
			Result	Units		Amount	Result		Limit		Limit	
Benzene			1	0.0836	mg/L	1	0.100	<0.000600	84	70 - 130	0	20
Toluene			1	0.0793	mg/L	1	0.100	<0.000400	79	70 - 130	1	20
Ethylbenzene	Qs	Qs	1	0.0696	mg/L	1	0.100	<0.000600	70	70 - 130	0	20
Xylene			1	0.211	mg/L	1	0.300	<0.00130	70	70 - 130	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)	0.0833	0.0825	mg/L	1	0.1	83	82	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0863	0.0870	mg/L	1	0.1	86	87	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0895	90	80 - 120	2013-11-01
Toluene		1	mg/L	0.100	0.0887	89	80 - 120	2013-11-01
Ethylbenzene		1	mg/L	0.100	0.0871	87	80 - 120	2013-11-01
Xylene		1	mg/L	0.300	0.264	88	80 - 120	2013-11-01

Standard (CCV-2)

QC Batch: 106459

Date Analyzed: 2013-11-01

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0855	86	80 - 120	2013-11-01
Toluene		1	mg/L	0.100	0.0853	85	80 - 120	2013-11-01
Ethylbenzene		1	mg/L	0.100	0.0851	85	80 - 120	2013-11-01
Xylene		1	mg/L	0.300	0.256	85	80 - 120	2013-11-01

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	T104704392-12-4	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: November 1, 2013
TNM-9704

Work Order: 13103105
Townsend

Page Number: 10 of 10
Townsend

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

TraceAnalysis, Inc.

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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 Drive	Fax #:	
Contact Person:	~~Ricardo Baer~~ Kurt Stanley	E-mail:	
Invoice to: (If different from above)		Project Name:	Townsend
Project #:		Sampler Signature:	
Project Location (including state):	New Mexico		

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST OBS COR
Jana Flores	Nova	10/31/13		[Signature]	7A	10/31/13	8:03	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST OBS COR
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST OBS COR

ANALYSIS REQUEST (Circle or Specify Method No.)		Hold
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, F, S04, NO3, NO2, Alkalinity		
Na, Ca, Mg, K, TDS, EC		
Turn Around Time	if different from standard	

11K-1 2.3°C 2.2°C	LAB USE ONLY Intact <u>Y / N</u> Headspace <u>Y / N / NA</u>	REMARKS: <i>Medicaid app</i>
☐	☐ Dry Weight Basis Required	
☐	☐ TRRP Report Required	
☐	☐ Check If Special Reporting Limits Are Needed	
☐	Log-in-Review _____	

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

ORIGINAL COPY

Summary Report

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

Report Date: December 3, 2013

Work Order: 13112007



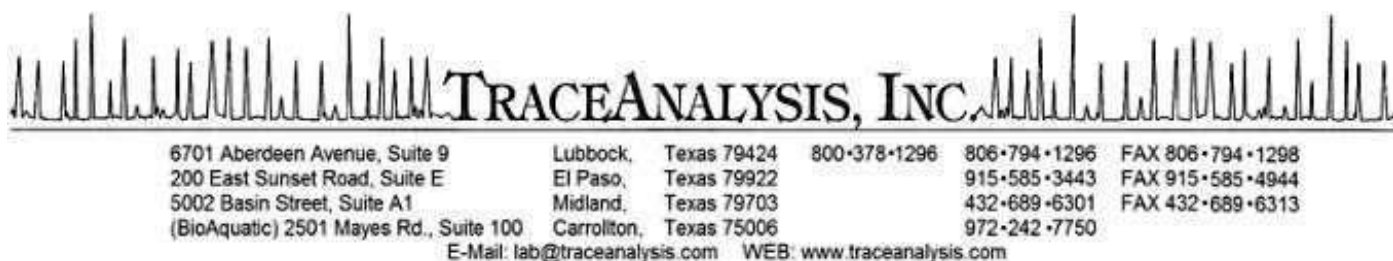
Project Location: Lovington, NM
Project Name: TNM 97-04 Townsend
Project Number: TNM 97-04
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
347039	MW-10	water	2013-11-18	12:37	2013-11-20
347040	MW-11	water	2013-11-18	12:55	2013-11-20
347041	MW-12	water	2013-11-18	13:10	2013-11-20
347042	MW-7	water	2013-11-19	09:15	2013-11-20
347043	MW-16	water	2013-11-19	09:32	2013-11-20
347044	MW-13	water	2013-11-19	10:00	2013-11-20
347045	MW-14	water	2013-11-19	10:19	2013-11-20
347046	MW-15	water	2013-11-19	10:45	2013-11-20
347047	MW-18	water	2013-11-19	11:02	2013-11-20
347048	MW-4	water	2013-11-19	11:31	2013-11-20

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
347039 - MW-10	<0.00100	<0.00100	<0.00100	<0.00300
347040 - MW-11	0.00230	<0.00100	<0.00100	<0.00300
347041 - MW-12	0.386	<0.00100	0.0412	0.00580
347042 - MW-7	0.0729	0.00230	0.0788	0.202
347043 - MW-16	<0.00100 _{Qr,Qs}	<0.00100 _{Qr,Qs}	<0.00100 _{Qr,Qs}	<0.00300 _{Qr,Qs}
347044 - MW-13	<0.00100 _{Qr,Qs}	<0.00100 _{Qr,Qs}	<0.00100 _{Qr,Qs}	<0.00300 _{Qr,Qs}
347045 - MW-14	0.00190	<0.00100	<0.00100	<0.00300
347046 - MW-15	0.0194	<0.00100	0.00310	<0.00300
347047 - MW-18	<0.00100	<0.00100	<0.00100	<0.00300
347048 - MW-4	<0.00100	<0.00100	<0.00100	<0.00300

Sample: 347048 - MW-4

Param	Flag	Result	Units	RL
Naphthalene	Qs	0.0877	mg/L	0.0002
2-Methylnaphthalene	Qs	0.121	mg/L	0.0002
1-Methylnaphthalene	Qs	0.109	mg/L	0.0002
Acenaphthylene	Qs	<0.000200	mg/L	0.0002
Acenaphthene	Qs	<0.000200	mg/L	0.0002
Dibenzofuran	Qs	12.6	mg/L	0.0002
Fluorene	Qs	<0.000200	mg/L	0.0002
Anthracene	Qs	<0.000200	mg/L	0.0002
Phenanthrene	Qs	<0.000200	mg/L	0.0002
Fluoranthene	Qr, Qs	<0.000200	mg/L	0.0002
Pyrene	Qs	<0.000200	mg/L	0.0002
Benzo(a)anthracene	Qs	<0.000200	mg/L	0.0002
Chrysene	Qs	<0.000200	mg/L	0.0002
Benzo(b)fluoranthene	Qs	<0.000200	mg/L	0.0002
Benzo(k)fluoranthene	Qs	<0.000200	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000200	mg/L	0.0002
Indeno(1,2,3-cd)pyrene	Qs	<0.000200	mg/L	0.0002
Dibenzo(a,h)anthracene	Qs	<0.000200	mg/L	0.0002
Benzo(g,h,i)perylene	Qs	<0.000200	mg/L	0.0002



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: December 3, 2013

Work Order: 13112007



Project Location: Lovington, NM
 Project Name: TNM 97-04 Townsend
 Project Number: TNM 97-04
 SRS #: NM-2012

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
347039	MW-10	water	2013-11-18	12:37	2013-11-20
347040	MW-11	water	2013-11-18	12:55	2013-11-20
347041	MW-12	water	2013-11-18	13:10	2013-11-20
347042	MW-7	water	2013-11-19	09:15	2013-11-20
347043	MW-16	water	2013-11-19	09:32	2013-11-20
347044	MW-13	water	2013-11-19	10:00	2013-11-20
347045	MW-14	water	2013-11-19	10:19	2013-11-20
347046	MW-15	water	2013-11-19	10:45	2013-11-20
347047	MW-18	water	2013-11-19	11:02	2013-11-20
347048	MW-4	water	2013-11-19	11:31	2013-11-20

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 23 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The signature is written in a cursive, flowing style.

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

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Case Narrative

Samples for project TNM 97-04 Townsend were received by TraceAnalysis, Inc. on 2013-11-20 and assigned to work order 13112007. Samples for work order 13112007 were received intact without headspace and at a temperature of 1.7 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	90602	2013-11-22 at 13:56	107033	2013-11-25 at 10:59
BTEX	S 8021B	90698	2013-11-27 at 09:01	107164	2013-11-29 at 11:27
PAH	S 8270D	90788	2013-11-26 at 15:00	107220	2013-12-03 at 13:09

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 13112007 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: 347039 - MW-10

Laboratory: Midland
Analysis: BTEX
QC Batch: 107033
Prep Batch: 90602

Analytical Method: S 8021B
Date Analyzed: 2013-11-25
Sample Preparation: 2013-11-22

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0973	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0818	mg/L	1	0.100	82	70 - 130

Sample: 347040 - MW-11

Laboratory: Midland
Analysis: BTEX
QC Batch: 107033
Prep Batch: 90602

Analytical Method: S 8021B
Date Analyzed: 2013-11-25
Sample Preparation: 2013-11-22

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	0.00230	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0971	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0806	mg/L	1	0.100	81	70 - 130

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

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Lovington, NM

Sample: 347041 - MW-12

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	0.386	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene		2	0.0412	mg/L	1	0.00100
Xylene		2	0.00580	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0999	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0862	mg/L	1	0.100	86	70 - 130

Sample: 347042 - MW-7

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	0.0729	mg/L	1	0.00100
Toluene	B	2	0.00230	mg/L	1	0.00100
Ethylbenzene		2	0.0788	mg/L	1	0.00100
Xylene		2	0.202	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0996	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0938	mg/L	1	0.100	94	70 - 130

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

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Lovington, NM

Sample: 347043 - MW-16

Laboratory: Midland

Analysis: BTEX

QC Batch: 107164

Prep Batch: 90698

Analytical Method: S 8021B

Date Analyzed: 2013-11-29

Sample Preparation: 2013-11-27

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs, U	2	<0.00100	mg/L	1	0.00100
Toluene	Qr, Qs, U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs, U	2	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0971	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0833	mg/L	1	0.100	83	70 - 130

Sample: 347044 - MW-13

Laboratory: Midland

Analysis: BTEX

QC Batch: 107164

Prep Batch: 90698

Analytical Method: S 8021B

Date Analyzed: 2013-11-29

Sample Preparation: 2013-11-27

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr, Qs, U	2	<0.00100	mg/L	1	0.00100
Toluene	Qr, Qs, U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr, Qs	2	<0.00100	mg/L	1	0.00100
Xylene	Qr, Qs, U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.101	mg/L	1	0.100	101	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0932	mg/L	1	0.100	93	70 - 130

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

Page Number: 8 of 23
Lovington, NM

Sample: 347045 - MW-14

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	0.00190	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene		2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0876	mg/L	1	0.100	88	70 - 130

Sample: 347046 - MW-15

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		2	0.0194	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene		2	0.00310	mg/L	1	0.00100
Xylene		2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.101	mg/L	1	0.100	101	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0939	mg/L	1	0.100	94	70 - 130

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

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Lovington, NM

Sample: 347047 - MW-18

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0808	mg/L	1	0.100	81	70 - 130

Sample: 347048 - MW-4

Laboratory: Midland

Analysis: BTEX

QC Batch: 107033

Prep Batch: 90602

Analytical Method: S 8021B

Date Analyzed: 2013-11-25

Sample Preparation: 2013-11-22

Prep Method: S 5030B

Analyzed By: AK

Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene	U	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0969	mg/L	1	0.100	97	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0808	mg/L	1	0.100	81	70 - 130

Sample: 347048 - MW-4

Laboratory: Lubbock

Analysis: PAH

QC Batch: 107220

Prep Batch: 90788

Analytical Method: S 8270D

Date Analyzed: 2013-12-03

Sample Preparation: 2013-11-26

Prep Method: S 3510C

Analyzed By: MN

Prepared By: MN

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	Qs	1	0.0877	mg/L	1	0.000200
2-Methylnaphthalene	Qs	1	0.121	mg/L	1	0.000200
1-Methylnaphthalene	Qs		0.109	mg/L	1	0.000200
Acenaphthylene	Qs,U	1	<0.000200	mg/L	1	0.000200
Acenaphthene	Qs,U	1	<0.000200	mg/L	1	0.000200
Dibenzofuran	Qs	1	12.6	mg/L	1	0.000200
Fluorene	Qs,U	1	<0.000200	mg/L	1	0.000200
Anthracene	Qs,U	1	<0.000200	mg/L	1	0.000200
Phenanthrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Fluoranthene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Pyrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(a)anthracene	Qs,U	1	<0.000200	mg/L	1	0.000200
Chrysene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(b)fluoranthene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(a)pyrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene	Qs,U	1	<0.000200	mg/L	1	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Qsr	Qsr	2.97	mg/L	1	8.00	37	40 - 110
2-Fluorobiphenyl			4.11	mg/L	1	8.00	51	50 - 110
Terphenyl-d14	Qsr	Qsr	2.91	mg/L	1	8.00	36	50 - 135

Method Blanks

Method Blank (1) QC Batch: 107033

QC Batch: 107033 Date Analyzed: 2013-11-25 Analyzed By: AK
Prep Batch: 90602 QC Preparation: 2013-11-22 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000238	mg/L	0.001
Toluene		2	0.000400	mg/L	0.001
Ethylbenzene		2	<0.000247	mg/L	0.001
Xylene		2	<0.000189	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0992	mg/L	1	0.100	99	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0813	mg/L	1	0.100	81	70 - 130

Method Blank (1) QC Batch: 107164

QC Batch: 107164 Date Analyzed: 2013-11-29 Analyzed By: AK
Prep Batch: 90698 QC Preparation: 2013-11-27 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000238	mg/L	0.001
Toluene		2	<0.000181	mg/L	0.001
Ethylbenzene		2	<0.000247	mg/L	0.001
Xylene		2	<0.000189	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0985	mg/L	1	0.100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0821	mg/L	1	0.100	82	70 - 130

Method Blank (1) QC Batch: 107220

QC Batch: 107220 Date Analyzed: 2013-12-03 Analyzed By: MN
Prep Batch: 90788 QC Preparation: 2013-11-26 Prepared By: MN

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Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		1	0.00248	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			4.83	mg/L	1	8.00	60	40 - 110
2-Fluorobiphenyl			5.98	mg/L	1	8.00	75	50 - 110
Terphenyl-d14			4.76	mg/L	1	8.00	60	50 - 135

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Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 107033
Prep Batch: 90602

Date Analyzed: 2013-11-25
QC Preparation: 2013-11-22

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.103	mg/L	1	0.100	<0.000238	103	70 - 130
Toluene		2	0.103	mg/L	1	0.100	0.0004	103	70 - 130
Ethylbenzene		2	0.108	mg/L	1	0.100	<0.000247	108	70 - 130
Xylene		2	0.329	mg/L	1	0.300	<0.000189	110	70 - 130

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		2	0.102	mg/L	1	0.100	<0.000238	102	70 - 130	1	20
Toluene		2	0.101	mg/L	1	0.100	0.0004	101	70 - 130	2	20
Ethylbenzene		2	0.107	mg/L	1	0.100	<0.000247	107	70 - 130	1	20
Xylene		2	0.323	mg/L	1	0.300	<0.000189	108	70 - 130	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)	0.102	0.103	mg/L	1	0.100	102	103	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0992	0.0985	mg/L	1	0.100	99	98	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 107164
Prep Batch: 90698

Date Analyzed: 2013-11-29
QC Preparation: 2013-11-27

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.102	mg/L	1	0.100	<0.000238	102	70 - 130
Toluene		2	0.100	mg/L	1	0.100	<0.000181	100	70 - 130
Ethylbenzene		2	0.107	mg/L	1	0.100	<0.000247	107	70 - 130
Xylene		2	0.323	mg/L	1	0.300	<0.000189	108	70 - 130

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

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Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.106	mg/L	1	0.100	<0.000238	106	70 - 130	4	20
Toluene		2	0.104	mg/L	1	0.100	<0.000181	104	70 - 130	4	20
Ethylbenzene		2	0.111	mg/L	1	0.100	<0.000247	111	70 - 130	4	20
Xylene		2	0.337	mg/L	1	0.300	<0.000189	112	70 - 130	4	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0996	0.100	mg/L	1	0.100	100	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.100	0.103	mg/L	1	0.100	100	103	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 107220
Prep Batch: 90788

Date Analyzed: 2013-12-03
QC Preparation: 2013-11-26

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Naphthalene			1	5.38	mg/L	1	8.00	<0.000121	67	40 - 100
2-Methylnaphthalene			1	5.26	mg/L	1	8.00	<0.0000913	66	45 - 105
1-Methylnaphthalene				5.33	mg/L	1	8.00	<0.000109	67	34.3 - 120
Acenaphthylene			1	6.81	mg/L	1	8.00	<0.000100	85	55 - 105
Acenaphthene	Qs	Qs	1	1.61	mg/L	1	8.00	<0.000122	20	45 - 110
Dibenzofuran			1	5.19	mg/L	1	8.00	<0.000108	65	55 - 105
Fluorene			1	6.22	mg/L	1	8.00	<0.000100	78	50 - 110
Anthracene	Qs	Qs	1	4.08	mg/L	1	8.00	<0.0000791	51	55 - 110
Phenanthrene			1	4.24	mg/L	1	8.00	<0.0000824	53	50 - 115
Fluoranthene	Qs	Qs	1	4.29	mg/L	1	8.00	<0.000124	54	55 - 115
Pyrene			1	5.36	mg/L	1	8.00	<0.0000691	67	50 - 130
Benzo(a)anthracene			1	5.70	mg/L	1	8.00	<0.000101	71	55 - 110
Chrysene	Qs	Qs	1	4.00	mg/L	1	8.00	<0.0000769	50	55 - 110
Benzo(b)fluoranthene			1	4.88	mg/L	1	8.00	<0.0000813	61	45 - 120
Benzo(k)fluoranthene			1	4.64	mg/L	1	8.00	<0.0000790	58	45 - 125
Benzo(a)pyrene			1	5.22	mg/L	1	8.00	<0.0000701	65	55 - 110
Indeno(1,2,3-cd)pyrene			1	4.64	mg/L	1	8.00	<0.0000770	58	45 - 125
Dibenzo(a,h)anthracene			1	5.09	mg/L	1	8.00	<0.0000851	64	40 - 125
Benzo(g,h,i)perylene			1	4.91	mg/L	1	8.00	<0.0000798	61	40 - 125

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene		1	5.19	mg/L	1	8.00	<0.000121	65	40 - 100	4	20

continued ...

control spikes continued ...

Param	F	C	LCSD			Spike Amount	Matrix Result	Rec.	Rec.		RPD Limit	
			Result	Units	Dil.				Limit	RPD		
2-Methylnaphthalene		1	5.20	mg/L	1	8.00	<0.0000913	65	45 - 105	1	20	
1-Methylnaphthalene			5.29	mg/L	1	8.00	<0.000109	66	34.3 - 120	1	20	
Acenaphthylene		1	5.90	mg/L	1	8.00	<0.000100	74	55 - 105	14	20	
Acenaphthene	Q _s	Q _s	1	1.63	mg/L	1	8.00	<0.000122	20	45 - 110	1	20
Dibenzofuran		1	4.59	mg/L	1	8.00	<0.000108	57	55 - 105	12	20	
Fluorene		1	5.96	mg/L	1	8.00	<0.000100	74	50 - 110	4	20	
Anthracene	Q _s	Q _s	1	3.86	mg/L	1	8.00	<0.0000791	48	55 - 110	6	20
Phenanthrene		1	4.00	mg/L	1	8.00	<0.0000824	50	50 - 115	6	20	
Fluoranthene	Q _r , Q _s	Q _r , Q _s	1	3.28	mg/L	1	8.00	<0.000124	41	55 - 115	27	20
Pyrene		1	4.93	mg/L	1	8.00	<0.0000691	62	50 - 130	8	20	
Benzo(a)anthracene		1	5.49	mg/L	1	8.00	<0.000101	69	55 - 110	4	20	
Chrysene	Q _s	Q _s	1	3.83	mg/L	1	8.00	<0.0000769	48	55 - 110	4	20
Benzo(b)fluoranthene		1	4.14	mg/L	1	8.00	<0.0000813	52	45 - 120	16	20	
Benzo(k)fluoranthene		1	4.33	mg/L	1	8.00	<0.0000790	54	45 - 125	7	20	
Benzo(a)pyrene		1	4.85	mg/L	1	8.00	<0.0000701	61	55 - 110	7	20	
Indeno(1,2,3-cd)pyrene		1	4.29	mg/L	1	8.00	<0.0000770	54	45 - 125	8	20	
Dibenzo(a,h)anthracene		1	4.72	mg/L	1	8.00	<0.0000851	59	40 - 125	8	20	
Benzo(g,h,i)perylene		1	4.52	mg/L	1	8.00	<0.0000798	56	40 - 125	8	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	6.39	6.11	mg/L	1	8.00	80	76	40 - 110
2-Fluorobiphenyl	8.12	8.40	mg/L	1	8.00	102	105	50 - 110
Terphenyl-d14	6.70	6.33	mg/L	1	8.00	84	79	50 - 135

Matrix Spike (MS-1) Spiked Sample: 347243

QC Batch: 107033
Prep Batch: 90602

Date Analyzed: 2013-11-25
QC Preparation: 2013-11-22

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0951	mg/L	1	0.100	<0.000238	95	70 - 130
Toluene		2	0.0921	mg/L	1	0.100	<0.000181	92	70 - 130
Ethylbenzene		2	0.0971	mg/L	1	0.100	<0.000247	97	70 - 130
Xylene		2	0.295	mg/L	1	0.300	<0.000189	98	70 - 130

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

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matrix spikes continued ...

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.0983	mg/L	1	0.100	<0.000238	98	70 - 130	3	20
Toluene		2	0.0952	mg/L	1	0.100	<0.000181	95	70 - 130	3	20
Ethylbenzene		2	0.0999	mg/L	1	0.100	<0.000247	100	70 - 130	3	20
Xylene		2	0.303	mg/L	1	0.300	<0.000189	101	70 - 130	3	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.103	mg/L	1	0.1	103	103	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0982	0.0984	mg/L	1	0.1	98	98	70 - 130

Matrix Spike (MS-1) Spiked Sample: 347263

QC Batch: 107164
Prep Batch: 90698

Date Analyzed: 2013-11-29
QC Preparation: 2013-11-27

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0718	mg/L	1	0.100	<0.000238	72	70 - 130
Toluene	Qs	Qs	2	0.0688	mg/L	1	<0.000181	69	70 - 130
Ethylbenzene		2	0.0720	mg/L	1	0.100	<0.000247	72	70 - 130
Xylene		2	0.218	mg/L	1	0.300	<0.000189	73	70 - 130

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

Param			MSD			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit	
	F	C	Result	Units	Dil.							
Benzene	Qr, Qs	Qr, Qs	2	0.0484	mg/L	1	0.100	<0.000238	48	70 - 130	39	20
Toluene	Qr, Qs	Qr, Qs	2	0.0450	mg/L	1	0.100	<0.000181	45	70 - 130	42	20
Ethylbenzene	Qr, Qs	Qr, Qs	2	0.0450	mg/L	1	0.100	<0.000247	45	70 - 130	46	20
Xylene	Qr, Qs	Qr, Qs	2	0.137	mg/L	1	0.300	<0.000189	46	70 - 130	46	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)	0.101	0.0995	mg/L	1	0.1	101	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0999	0.0965	mg/L	1	0.1	100	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 347010

QC Batch: 107220
Prep Batch: 90788

Date Analyzed: 2013-12-03
QC Preparation: 2013-11-26

Analyzed By: MN
Prepared By: MN

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	Qs	Qs	1	2.31	mg/L	1	8.00	<0.000121	29 40 - 100
2-Methylnaphthalene	Qs	Qs	1	2.31	mg/L	1	8.00	<0.0000913	29 45 - 105
1-Methylnaphthalene	Qs	Qs		2.30	mg/L	1	8.00	<0.000109	29 34.3 - 120
Acenaphthylene	Qs	Qs	1	3.80	mg/L	1	8.00	<0.000100	48 55 - 105
Acenaphthene	Qs	Qs	1	0.809	mg/L	1	8.00	<0.000122	10 45 - 110
Dibenzofuran			1	4.44	mg/L	1	8.00	<0.000108	56 55 - 105
Fluorene	Qs	Qs	1	2.54	mg/L	1	8.00	<0.000100	32 50 - 110
Anthracene	Qs	Qs	1	1.68	mg/L	1	8.00	<0.0000791	21 55 - 110
Phenanthrene	Qs	Qs	1	1.81	mg/L	1	8.00	<0.0000824	23 50 - 115
Fluoranthene	Qs	Qs	1	2.97	mg/L	1	8.00	<0.000124	37 55 - 115
Pyrene	Qs	Qs	1	2.15	mg/L	1	8.00	<0.0000691	27 50 - 130
Benzo(a)anthracene	Qs	Qs	1	2.39	mg/L	1	8.00	0.015	30 55 - 110
Chrysene	Qs	Qs	1	1.58	mg/L	1	8.00	<0.0000769	20 55 - 110
Benzo(b)fluoranthene	Qs	Qs	1	1.81	mg/L	1	8.00	<0.0000813	23 45 - 120
Benzo(k)fluoranthene	Qs	Qs	1	1.97	mg/L	1	8.00	<0.0000790	25 45 - 125
Benzo(a)pyrene	Qs	Qs	1	2.12	mg/L	1	8.00	<0.0000701	26 55 - 110
Indeno(1,2,3-cd)pyrene	Qs	Qs	1	1.82	mg/L	1	8.00	0.00239	23 45 - 125
Dibenzo(a,h)anthracene	Qs	Qs	1	1.58	mg/L	1	8.00	<0.0000851	20 40 - 125
Benzo(g,h,i)perylene	Qs	Qs	1	1.96	mg/L	1	8.00	<0.0000798	24 40 - 125

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
Naphthalene	Qs	Qs	1	2.35	mg/L	1	8.00	<0.000121	29 40 - 100	2	20
2-Methylnaphthalene	Qs	Qs	1	2.36	mg/L	1	8.00	<0.0000913	30 45 - 105	2	20
1-Methylnaphthalene	Qs	Qs		2.31	mg/L	1	8.00	<0.000109	29 34.3 - 120	0	20
Acenaphthylene	Qs	Qs	1	3.96	mg/L	1	8.00	<0.000100	50 55 - 105	4	20
Acenaphthene	Qs	Qs	1	0.824	mg/L	1	8.00	<0.000122	10 45 - 110	2	20
Dibenzofuran	Qs	Qs	1	4.20	mg/L	1	8.00	<0.000108	52 55 - 105	6	20
Fluorene	Qs	Qs	1	2.61	mg/L	1	8.00	<0.000100	33 50 - 110	3	20
Anthracene	Qs	Qs	1	1.73	mg/L	1	8.00	<0.0000791	22 55 - 110	3	20
Phenanthrene	Qs	Qs	1	1.86	mg/L	1	8.00	<0.0000824	23 50 - 115	3	20
Fluoranthene	Qs	Qs	1	2.90	mg/L	1	8.00	<0.000124	36 55 - 115	2	20
Pyrene	Qs	Qs	1	2.19	mg/L	1	8.00	<0.0000691	27 50 - 130	2	20
Benzo(a)anthracene	Qs	Qs	1	2.44	mg/L	1	8.00	0.015	30 55 - 110	2	20
Chrysene	Qs	Qs	1	1.62	mg/L	1	8.00	<0.0000769	20 55 - 110	2	20
Benzo(b)fluoranthene	Qs	Qs	1	2.00	mg/L	1	8.00	<0.0000813	25 45 - 120	10	20
Benzo(k)fluoranthene	Qs	Qs	1	1.83	mg/L	1	8.00	<0.0000790	23 45 - 125	7	20
Benzo(a)pyrene	Qs	Qs	1	2.13	mg/L	1	8.00	<0.0000701	27 55 - 110	0	20

continued ...

matrix spikes continued . . .

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit	
			Result	Units								
Indeno(1,2,3-cd)pyrene	Qs	Qs	1	1.85	mg/L	1	8.00	0.00239	23	45 - 125	2	20
Dibenzo(a,h)anthracene	Qs	Qs	1	1.46	mg/L	1	8.00	<0.0000851	18	40 - 125	8	20
Benzo(g,h,i)perylene	Qs	Qs	1	1.96	mg/L	1	8.00	<0.0000798	24	40 - 125	0	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
Nitrobenzene-d5	Q _{sr}	Q _{sr}	1.62	1.70	mg/L	1	8	20	21	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	2.24	2.33	mg/L	1	8	28	29	50 - 110
Terphenyl-d14	Q _{sr}	Q _{sr}	1.68	1.72	mg/L	1	8	21	22	50 - 135

Calibration Standards

Standard (CCV-1)

QC Batch: 107033

Date Analyzed: 2013-11-25

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.106	106	80 - 120	2013-11-25
Toluene		2	mg/L	0.100	0.105	105	80 - 120	2013-11-25
Ethylbenzene		2	mg/L	0.100	0.111	111	80 - 120	2013-11-25
Xylene		2	mg/L	0.300	0.336	112	80 - 120	2013-11-25

Standard (CCV-2)

QC Batch: 107033

Date Analyzed: 2013-11-25

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.102	102	80 - 120	2013-11-25
Toluene		2	mg/L	0.100	0.101	101	80 - 120	2013-11-25
Ethylbenzene		2	mg/L	0.100	0.107	107	80 - 120	2013-11-25
Xylene		2	mg/L	0.300	0.325	108	80 - 120	2013-11-25

Standard (CCV-3)

QC Batch: 107033

Date Analyzed: 2013-11-25

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.104	104	80 - 120	2013-11-25
Toluene		2	mg/L	0.100	0.104	104	80 - 120	2013-11-25
Ethylbenzene		2	mg/L	0.100	0.109	109	80 - 120	2013-11-25
Xylene		2	mg/L	0.300	0.332	111	80 - 120	2013-11-25

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

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Lovington, NM

Standard (CCV-1)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.104	104	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.101	101	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.110	110	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.330	110	80 - 120	2013-11-29

Standard (CCV-2)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.101	101	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.0993	99	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.106	106	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.320	107	80 - 120	2013-11-29

Standard (CCV-3)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0990	99	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.0969	97	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.103	103	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.315	105	80 - 120	2013-11-29

Standard (CCV-1)

QC Batch: 107220

Date Analyzed: 2013-12-03

Analyzed By: MN

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		1	mg/L	60.0	60.2	100	80 - 120	2013-12-03
2-Methylnaphthalene		1	mg/L	60.0	58.2	97	80 - 120	2013-12-03
1-Methylnaphthalene			mg/L	60.0	59.2	99	80 - 120	2013-12-03
Acenaphthylene		1	mg/L	60.0	56.5	94	80 - 120	2013-12-03
Acenaphthene		1	mg/L	60.0	63.5	106	80 - 120	2013-12-03
Dibenzofuran		1	mg/L	60.0	55.4	92	80 - 120	2013-12-03
Fluorene		1	mg/L	60.0	59.3	99	80 - 120	2013-12-03
Anthracene		1	mg/L	60.0	71.3	119	80 - 120	2013-12-03
Phenanthrene		1	mg/L	60.0	68.7	114	80 - 120	2013-12-03
Fluoranthene		1	mg/L	60.0	60.9	102	80 - 120	2013-12-03
Pyrene		1	mg/L	60.0	56.8	95	80 - 120	2013-12-03
Benzo(a)anthracene		1	mg/L	60.0	57.4	96	80 - 120	2013-12-03
Chrysene		1	mg/L	60.0	57.0	95	80 - 120	2013-12-03
Benzo(b)fluoranthene		1	mg/L	60.0	56.8	95	80 - 120	2013-12-03
Benzo(k)fluoranthene		1	mg/L	60.0	51.2	85	80 - 120	2013-12-03
Benzo(a)pyrene		1	mg/L	60.0	58.5	98	80 - 120	2013-12-03
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	56.7	94	80 - 120	2013-12-03
Dibenzo(a,h)anthracene		1	mg/L	60.0	51.6	86	80 - 120	2013-12-03
Benzo(g,h,i)perylene		1	mg/L	60.0	57.8	96	80 - 120	2013-12-03

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			58.5	mg/L	1	60.0	98	-
2-Fluorobiphenyl			63.0	mg/L	1	60.0	105	-
Terphenyl-d14			57.2	mg/L	1	60.0	95	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-13-7	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: December 3, 2013
TNM 97-04

Work Order: 13112007
TNM 97-04 Townsend

Page Number: 23 of 23
Lovington, NM

Attachments

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

TraceAnalysis, Inc.

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Fax (806) 794-1298
1 (800) 378-1296

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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
Fax (972) 242-7750

Brandon & Clark
3403 Industrial Blvd.
Hobbs, NM 88240
Tel (575) 392-7561
Fax (575) 392-4508

email: lab@traceanalysis.com

Company Name: Nova Phone #: 432 520 7720

Address: 2051 Commerce Dr (Street, City, Zip)

Contact Person: Curt Stanley

Invoice to:

(If different from above)

Project #:

Project Name: Townsend

Sampler Signature: [Signature]

Project Location (including state): NM

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD						SAMPLING		DATE	TIME
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE				
347039	MW-10	3	10A	X				X								11/18/13	1257
040	MW-11																1255
041	MW-12																1310
042	MW-7															11/19/13	915
043	MW-16																932
044	MW-13																1000
045	MW-14																1019
046	MW-15																1045
047	MW-18																1102
048	MW-4	6															1131

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021 / 602 / 8260 / 624	X	TPH 418.1 / TX1005 / TX1005 Ex(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 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, F, SO ₄ , NO ₃ -N, NO ₂ -N, PO ₄ -P, Alkalinity		Na, Ca, Mg, K, TDS, EC		Turn Around Time if different from standard	

LAB USE ONLY

REMARKS:

Midland-DTEX
Lubbock-PAT

Inst Y N
Headspace N/A
Log-in-Review Y

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

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
David Fletcher	Nova	11/20/13	0700	Don TA	TA	11/20/13	8:57	INST	OBS	COR
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
John Flores	Nova	11/20/13		Don TA	TA	11/20/13	9:00	INST	OBS	COR
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	INST	OBS	COR
				Don TA	TA	11/20/13	9:00	INST	OBS	COR

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

ORIGINAL COPY

Carrier # [Signature]

Summary Report

(Corrected Report)

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

Report Date: December 10, 2013

Work Order: 13112716



Project Location: NM
Project Name: Townsend
SRS #: TNM-9704

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
347631	Post	water	2013-11-26	14:57	2013-11-27

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
347631 - Post	0.00150 Qr, Qs	<0.00100 Qr, Qs	<0.00100 Qr, Qs	<0.00300 Qr, Qs

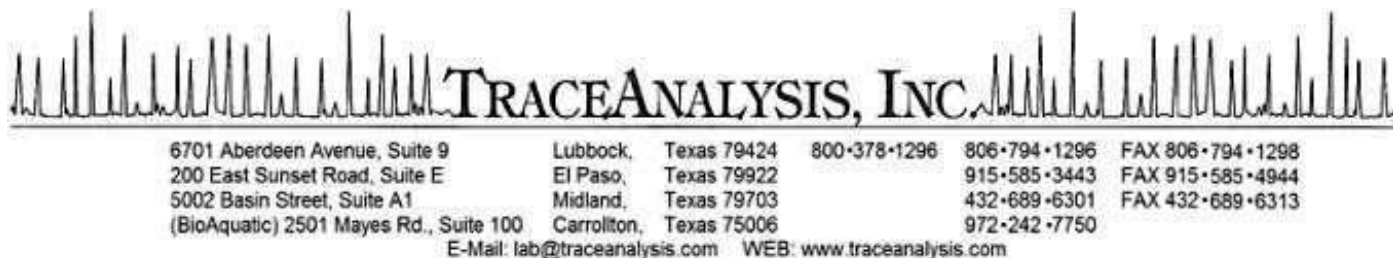
Sample: 347631 - Post

Param	Flag	Result	Units	RL
Naphthalene		<0.000200	mg/L	0.0002
2-Methylnaphthalene	Qr, Qs	<0.000200	mg/L	0.0002
1-Methylnaphthalene	Qr	<0.000200	mg/L	0.0002
Acenaphthylene		<0.000200	mg/L	0.0002
Acenaphthene	Qr, Qs	<0.000200	mg/L	0.0002
Dibenzofuran	Qr, Qs	<0.000200	mg/L	0.0002
Fluorene	Qc, Qr, Qs	<0.000200	mg/L	0.0002
Anthracene	Qr, Qs	<0.000200	mg/L	0.0002
Phenanthrene	Qr, Qs	<0.000200	mg/L	0.0002
Fluoranthene	Qr, Qs	<0.000200	mg/L	0.0002
Pyrene	Qc, Qr, Qs	<0.000200	mg/L	0.0002
Benzo(a)anthracene	Qr	<0.000200	mg/L	0.0002
Chrysene	Qr, Qs	<0.000200	mg/L	0.0002
Benzo(b)fluoranthene	Qr	<0.000200	mg/L	0.0002
Benzo(k)fluoranthene	Qc, Qr	<0.000200	mg/L	0.0002

continued ...

sample 347631 continued ...

Param	Flag	Result	Units	RL
Benzo(a)pyrene	Qr	<0.000200	mg/L	0.0002
Indeno(1,2,3-cd)pyrene	Qc,Qr,Qs	<0.000200	mg/L	0.0002
Dibenzo(a,h)anthracene	Qr,Qs	<0.000200	mg/L	0.0002
Benzo(g,h,i)perylene	Qc,Qr,Qs	<0.000200	mg/L	0.0002



Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

(Corrected Report)

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

Report Date: December 10, 2013

Work Order: 13112716



Project Location: NM
Project Name: Townsend
Project Number: Townsend
SRS #: TNM-9704

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
347631	Post	water	2013-11-26	14:57	2013-11-27

Report Corrections (Work Order 13112716)

- 12/10/13: Corrected PAH.

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 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The signature is written in a cursive, slightly slanted style.

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-11-27 and assigned to work order 13112716. Samples for work order 13112716 were received intact without headspace and at a temperature of 4.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	90698	2013-11-27 at 09:01	107164	2013-11-29 at 11:27
PAH	S 8270D	90876	2013-11-27 at 15:00	107323	2013-12-05 at 15:10

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 13112716 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: 347631 - Post

Laboratory: Midland
Analysis: BTEX
QC Batch: 107164
Prep Batch: 90698

Analytical Method: S 8021B
Date Analyzed: 2013-11-29
Sample Preparation: 2013-11-27

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qr,Qs	2	0.00150	mg/L	1	0.00100
Toluene	Qr,Qs,U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	Qr,Qs	2	<0.00100	mg/L	1	0.00100
Xylene	Qr,Qs	2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.100	mg/L	1	0.100	100	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0881	mg/L	1	0.100	88	70 - 130

Sample: 347631 - Post

Laboratory: Lubbock
Analysis: PAH
QC Batch: 107323
Prep Batch: 90876

Analytical Method: S 8270D
Date Analyzed: 2013-12-05
Sample Preparation: 2013-11-27

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000200	mg/L	1	0.000200
2-Methylnaphthalene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
1-Methylnaphthalene	Qr,U		<0.000200	mg/L	1	0.000200
Acenaphthylene	U	1	<0.000200	mg/L	1	0.000200
Acenaphthene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Dibenzofuran	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Fluorene	Qc,Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Anthracene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Phenanthrene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Fluoranthene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Pyrene	Qc,Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(a)anthracene	Qr,U	1	<0.000200	mg/L	1	0.000200
Chrysene	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200

continued ...

sample 347631 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	Q _r ,U	1	<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene	Q _c ,Q _r ,U	1	<0.000200	mg/L	1	0.000200
Benzo(a)pyrene	Q _r ,U	1	<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene	Q _c ,Q _r ,Q _s ,U	1	<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene	Q _r ,Q _s ,U	1	<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene	Q _c ,Q _r ,Q _s ,U	1	<0.000200	mg/L	1	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Q _{sr}	Q _{sr}	2.92	mg/L	1	8.00	36	40 - 110
2-Fluorobiphenyl			6.87	mg/L	1	8.00	86	50 - 110
Terphenyl-d14	Q _{sr}	Q _{sr}	2.90	mg/L	1	8.00	36	50 - 135

Method Blanks

Method Blank (1) QC Batch: 107164

QC Batch: 107164
Prep Batch: 90698

Date Analyzed: 2013-11-29
QC Preparation: 2013-11-27

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000238	mg/L	0.001
Toluene		2	<0.000181	mg/L	0.001
Ethylbenzene		2	<0.000247	mg/L	0.001
Xylene		2	<0.000189	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0985	mg/L	1	0.100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0821	mg/L	1	0.100	82	70 - 130

Method Blank (1) QC Batch: 107323

QC Batch: 107323
Prep Batch: 90876

Date Analyzed: 2013-12-05
QC Preparation: 2013-11-27

Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	0.00733	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

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method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	0.0250	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	0.0305	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Q _{sr}	Q _{sr}	12.5	mg/L	1	8.00	156	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	9.21	mg/L	1	8.00	115	50 - 110
Terphenyl-d14			5.34	mg/L	1	8.00	67	50 - 135

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 107164
Prep Batch: 90698

Date Analyzed: 2013-11-29
QC Preparation: 2013-11-27

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.102	mg/L	1	0.100	<0.000238	102	70 - 130
Toluene		2	0.100	mg/L	1	0.100	<0.000181	100	70 - 130
Ethylbenzene		2	0.107	mg/L	1	0.100	<0.000247	107	70 - 130
Xylene		2	0.323	mg/L	1	0.300	<0.000189	108	70 - 130

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		2	0.106	mg/L	1	0.100	<0.000238	106	70 - 130	4	20
Toluene		2	0.104	mg/L	1	0.100	<0.000181	104	70 - 130	4	20
Ethylbenzene		2	0.111	mg/L	1	0.100	<0.000247	111	70 - 130	4	20
Xylene		2	0.337	mg/L	1	0.300	<0.000189	112	70 - 130	4	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0996	0.100	mg/L	1	0.100	100	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.100	0.103	mg/L	1	0.100	100	103	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 107323
Prep Batch: 90876

Date Analyzed: 2013-12-05
QC Preparation: 2013-11-27

Analyzed By: MN
Prepared By: MN

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene		1	6.36	mg/L	1	8.00	<0.000121	80	40 - 100
2-Methylnaphthalene		1	5.52	mg/L	1	8.00	<0.0000913	69	45 - 105
1-Methylnaphthalene			4.94	mg/L	1	8.00	<0.000109	62	34.3 - 120
Acenaphthylene		1	6.41	mg/L	1	8.00	<0.000100	80	55 - 105
Acenaphthene	Qs	Qs	1.78	mg/L	1	8.00	<0.000122	22	45 - 110

continued ...

control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dibenzofuran		1	5.05	mg/L	1	8.00	<0.000108	63	55 - 105
Fluorene		1	6.78	mg/L	1	8.00	<0.000100	85	50 - 110
Anthracene		1	5.41	mg/L	1	8.00	<0.0000791	68	55 - 110
Phenanthrene		1	5.67	mg/L	1	8.00	<0.0000824	71	50 - 115
Fluoranthene		1	5.21	mg/L	1	8.00	<0.000124	65	55 - 115
Pyrene		1	9.33	mg/L	1	8.00	0.00733	116	50 - 130
Benzo(a)anthracene		1	7.10	mg/L	1	8.00	<0.000101	89	55 - 110
Chrysene		1	4.68	mg/L	1	8.00	<0.0000769	58	55 - 110
Benzo(b)fluoranthene		1	6.16	mg/L	1	8.00	<0.0000813	77	45 - 120
Benzo(k)fluoranthene		1	6.23	mg/L	1	8.00	<0.0000790	78	45 - 125
Benzo(a)pyrene		1	6.82	mg/L	1	8.00	<0.0000701	85	55 - 110
Indeno(1,2,3-cd)pyrene		1	6.00	mg/L	1	8.00	0.025	75	45 - 125
Dibenzo(a,h)anthracene		1	3.21	mg/L	1	8.00	<0.0000851	40	40 - 125
Benzo(g,h,i)perylene		1	9.02	mg/L	1	8.00	0.0305	112	40 - 125

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	5.77	mg/L	1	8.00	<0.000121	72	40 - 100	10	20
2-Methylnaphthalene	Q _r	Q _r	7.16	mg/L	1	8.00	<0.0000913	90	45 - 105	26	20
1-Methylnaphthalene	Q _r	Q _r	6.99	mg/L	1	8.00	<0.000109	87	34.3 - 120	34	20
Acenaphthylene		1	6.31	mg/L	1	8.00	<0.000100	79	55 - 105	2	20
Acenaphthene	Q _r , Q _s	Q _r , Q _s	1.26	mg/L	1	8.00	<0.000122	16	45 - 110	34	20
Dibenzofuran		1	4.95	mg/L	1	8.00	<0.000108	62	55 - 105	2	20
Fluorene	Q _r , Q _s	Q _r , Q _s	11.3	mg/L	1	8.00	<0.000100	141	50 - 110	50	20
Anthracene		1	6.08	mg/L	1	8.00	<0.0000791	76	55 - 110	12	20
Phenanthrene		1	5.11	mg/L	1	8.00	<0.0000824	64	50 - 115	10	20
Fluoranthene		1	5.66	mg/L	1	8.00	<0.000124	71	55 - 115	8	20
Pyrene	Q _r	Q _r	6.41	mg/L	1	8.00	0.00733	80	50 - 130	37	20
Benzo(a)anthracene		1	6.55	mg/L	1	8.00	<0.000101	82	55 - 110	8	20
Chrysene		1	4.42	mg/L	1	8.00	<0.0000769	55	55 - 110	6	20
Benzo(b)fluoranthene		1	6.00	mg/L	1	8.00	<0.0000813	75	45 - 120	3	20
Benzo(k)fluoranthene		1	6.65	mg/L	1	8.00	<0.0000790	83	45 - 125	6	20
Benzo(a)pyrene		1	6.18	mg/L	1	8.00	<0.0000701	77	55 - 110	10	20
Indeno(1,2,3-cd)pyrene	Q _r	Q _r	4.49	mg/L	1	8.00	0.025	56	45 - 125	29	20
Dibenzo(a,h)anthracene	Q _s	Q _s	2.84	mg/L	1	8.00	<0.0000851	36	40 - 125	12	20
Benzo(g,h,i)perylene	Q _r	Q _r	4.88	mg/L	1	8.00	0.0305	61	40 - 125	60	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	6.20	7.15	mg/L	1	8.00	78	89	40 - 110
2-Fluorobiphenyl	5.40	7.50	mg/L	1	8.00	68	94	50 - 110
Terphenyl-d14	5.70	3.74	mg/L	1	8.00	71	47	50 - 135

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Matrix Spike (MS-1) Spiked Sample: 347263

QC Batch: 107164
Prep Batch: 90698

Date Analyzed: 2013-11-29
QC Preparation: 2013-11-27

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	
Benzene		2	0.0718	mg/L	1	0.100	<0.000238	72	70 - 130	
Toluene	Qs	Qs	2	0.0688	mg/L	1	0.100	<0.000181	69	70 - 130
Ethylbenzene		2	0.0720	mg/L	1	0.100	<0.000247	72	70 - 130	
Xylene		2	0.218	mg/L	1	0.300	<0.000189	73	70 - 130	

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

Param			MSD			Dil.	Spike Amount	Matrix Result	Rec.	Rec.		RPD Limit
	F	C	Result	Units	Limit					RPD		
Benzene	Qr,Qs	Qr,Qs	2	0.0484	mg/L	1	0.100	<0.000238	48	70 - 130	39	20
Toluene	Qr,Qs	Qr,Qs	2	0.0450	mg/L	1	0.100	<0.000181	45	70 - 130	42	20
Ethylbenzene	Qr,Qs	Qr,Qs	2	0.0450	mg/L	1	0.100	<0.000247	45	70 - 130	46	20
Xylene	Qr,Qs	Qr,Qs	2	0.137	mg/L	1	0.300	<0.000189	46	70 - 130	46	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)	0.101	0.0995	mg/L	1	0.1	101	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0999	0.0965	mg/L	1	0.1	100	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 347145

QC Batch: 107323
Prep Batch: 90876

Date Analyzed: 2013-12-05
QC Preparation: 2013-11-27

Analyzed By: MN
Prepared By: MN

Param			F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene				1	5.39	mg/L	1	8.00	<0.000121	67	40 - 100
2-Methylnaphthalene				1	4.77	mg/L	1	8.00	0.124	58	45 - 105
1-Methylnaphthalene					4.79	mg/L	1	8.00	0.22	57	34.3 - 120
Acenaphthylene				1	6.38	mg/L	1	8.00	<0.000100	80	55 - 105
Acenaphthene	Qs	Qs		1	1.62	mg/L	1	8.00	<0.000122	20	45 - 110
Dibenzofuran	Qs	Qs		1	20.6	mg/L	1	8.00	<0.000108	258	55 - 105
Fluorene				1	5.83	mg/L	1	8.00	<0.000100	73	50 - 110
Anthracene	Qs	Qs		1	1.78	mg/L	1	8.00	<0.0000791	22	55 - 110
Phenanthrene	Qs	Qs		1	1.90	mg/L	1	8.00	0.0326	23	50 - 115
Fluoranthene	Qs	Qs		1	3.64	mg/L	1	8.00	<0.000124	46	55 - 115

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyrene	Qs	Qs	1	3.58	mg/L	1	8.00	<0.0000691	45 50 - 130
Benzo(a)anthracene			1	5.13	mg/L	1	8.00	<0.000101	64 55 - 110
Chrysene	Qs	Qs	1	3.76	mg/L	1	8.00	<0.0000769	47 55 - 110
Benzo(b)fluoranthene			1	4.47	mg/L	1	8.00	<0.0000813	56 45 - 120
Benzo(k)fluoranthene			1	4.74	mg/L	1	8.00	<0.0000790	59 45 - 125
Benzo(a)pyrene			1	4.41	mg/L	1	8.00	<0.0000701	55 55 - 110
Indeno(1,2,3-cd)pyrene	Qs	Qs	1	3.02	mg/L	1	8.00	<0.0000770	38 45 - 125
Dibenzo(a,h)anthracene	Qs	Qs	1	1.63	mg/L	1	8.00	<0.0000851	20 40 - 125
Benzo(g,h,i)perylene	Qs	Qs	1	3.17	mg/L	1	8.00	<0.0000798	40 40 - 125

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
Naphthalene			1	6.00	mg/L	1	8.00	<0.000121	75 40 - 100	11	20
2-Methylnaphthalene	Qr, Qs	Qr, Qs	1	9.66	mg/L	1	8.00	0.124	121 45 - 105	68	20
1-Methylnaphthalene	Qr	Qr		9.60	mg/L	1	8.00	0.22	120 34.3 - 120	67	20
Acenaphthylene			1	5.22	mg/L	1	8.00	<0.000100	65 55 - 105	20	20
Acenaphthene	Qs	Qs	1	1.56	mg/L	1	8.00	<0.000122	20 45 - 110	4	20
Dibenzofuran	Qr, Qs	Qr, Qs	1	26.7	mg/L	1	8.00	<0.000108	334 55 - 105	26	20
Fluorene			1	6.42	mg/L	1	8.00	<0.000100	80 50 - 110	10	20
Anthracene	Qr	Qr	1	4.82	mg/L	1	8.00	<0.0000791	60 55 - 110	92	20
Phenanthrene	Qr	Qr	1	4.94	mg/L	1	8.00	0.0326	62 50 - 115	89	20
Fluoranthene	Qr, Qs	Qr, Qs	1	2.53	mg/L	1	8.00	<0.000124	32 55 - 115	36	20
Pyrene	Qr	Qr	1	7.47	mg/L	1	8.00	<0.0000691	93 50 - 130	70	20
Benzo(a)anthracene	Qr	Qr	1	6.88	mg/L	1	8.00	<0.000101	86 55 - 110	29	20
Chrysene	Qr	Qr	1	5.18	mg/L	1	8.00	<0.0000769	65 55 - 110	32	20
Benzo(b)fluoranthene	Qr	Qr	1	5.98	mg/L	1	8.00	<0.0000813	75 45 - 120	29	20
Benzo(k)fluoranthene	Qr	Qr	1	6.17	mg/L	1	8.00	<0.0000790	77 45 - 125	26	20
Benzo(a)pyrene	Qr	Qr	1	6.48	mg/L	1	8.00	<0.0000701	81 55 - 110	38	20
Indeno(1,2,3-cd)pyrene			1	3.66	mg/L	1	8.00	<0.0000770	46 45 - 125	19	20
Dibenzo(a,h)anthracene	Qr	Qr	1	3.81	mg/L	1	8.00	<0.0000851	48 40 - 125	80	20
Benzo(g,h,i)perylene			1	3.84	mg/L	1	8.00	<0.0000798	48 40 - 125	19	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
Nitrobenzene-d5	4.52	4.78	mg/L	1	8	56	60	40 - 110
2-Fluorobiphenyl	4.23	3.70	mg/L	1	8	53	46	50 - 110
Terphenyl-d14	Qsr	Qsr	2.48	4.00	mg/L	1	8	31 50 - 135

Calibration Standards

Standard (CCV-1)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.104	104	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.101	101	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.110	110	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.330	110	80 - 120	2013-11-29

Standard (CCV-2)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.101	101	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.0993	99	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.106	106	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.320	107	80 - 120	2013-11-29

Standard (CCV-3)

QC Batch: 107164

Date Analyzed: 2013-11-29

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0990	99	80 - 120	2013-11-29
Toluene		2	mg/L	0.100	0.0969	97	80 - 120	2013-11-29
Ethylbenzene		2	mg/L	0.100	0.103	103	80 - 120	2013-11-29
Xylene		2	mg/L	0.300	0.315	105	80 - 120	2013-11-29

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Standard (CCV-1)

QC Batch: 107323

Date Analyzed: 2013-12-05

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	68.8	115	80 - 120	2013-12-05
2-Methylnaphthalene		1	mg/L	60.0	64.4	107	80 - 120	2013-12-05
1-Methylnaphthalene			mg/L	60.0	57.9	96	80 - 120	2013-12-05
Acenaphthylene		1	mg/L	60.0	67.4	112	80 - 120	2013-12-05
Acenaphthene		1	mg/L	60.0	71.8	120	80 - 120	2013-12-05
Dibenzofuran		1	mg/L	60.0	66.0	110	80 - 120	2013-12-05
Fluorene	Qc	Qc	mg/L	60.0	80.8	135	80 - 120	2013-12-05
Anthracene		1	mg/L	60.0	65.8	110	80 - 120	2013-12-05
Phenanthrene		1	mg/L	60.0	63.8	106	80 - 120	2013-12-05
Fluoranthene		1	mg/L	60.0	48.4	81	80 - 120	2013-12-05
Pyrene		1	mg/L	60.0	69.3	116	80 - 120	2013-12-05
Benzo(a)anthracene		1	mg/L	60.0	61.9	103	80 - 120	2013-12-05
Chrysene		1	mg/L	60.0	62.4	104	80 - 120	2013-12-05
Benzo(b)fluoranthene		1	mg/L	60.0	61.4	102	80 - 120	2013-12-05
Benzo(k)fluoranthene		1	mg/L	60.0	62.1	104	80 - 120	2013-12-05
Benzo(a)pyrene		1	mg/L	60.0	66.9	112	80 - 120	2013-12-05
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	56.2	94	80 - 120	2013-12-05
Dibenzo(a,h)anthracene		1	mg/L	60.0	48.6	81	80 - 120	2013-12-05
Benzo(g,h,i)perylene		1	mg/L	60.0	57.1	95	80 - 120	2013-12-05

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			101	mg/L	1	60.0	168	-
2-Fluorobiphenyl			84.4	mg/L	1	60.0	141	-
Terphenyl-d14			67.3	mg/L	1	60.0	112	-

Standard (CCV-2)

QC Batch: 107323

Date Analyzed: 2013-12-05

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	64.1	107	80 - 120	2013-12-05
2-Methylnaphthalene		1	mg/L	60.0	68.6	114	80 - 120	2013-12-05
1-Methylnaphthalene			mg/L	60.0	52.4	87	80 - 120	2013-12-05
Acenaphthylene		1	mg/L	60.0	59.1	98	80 - 120	2013-12-05
Acenaphthene		1	mg/L	60.0	63.1	105	80 - 120	2013-12-05

continued ...

standard continued ...

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dibenzofuran		1	mg/L	60.0	55.8	93	80 - 120	2013-12-05
Fluorene	Qc	Qc	1	mg/L	60.0	76.8	128	80 - 120
Anthracene		1	mg/L	60.0	61.2	102	80 - 120	2013-12-05
Phenanthrene		1	mg/L	60.0	66.7	111	80 - 120	2013-12-05
Fluoranthene		1	mg/L	60.0	56.2	94	80 - 120	2013-12-05
Pyrene	Qc	Qc	1	mg/L	60.0	94.2	157	80 - 120
Benzo(a)anthracene		1	mg/L	60.0	60.4	101	80 - 120	2013-12-05
Chrysene		1	mg/L	60.0	51.6	86	80 - 120	2013-12-05
Benzo(b)fluoranthene		1	mg/L	60.0	49.0	82	80 - 120	2013-12-05
Benzo(k)fluoranthene	Qc	Qc	1	mg/L	60.0	36.2	60	80 - 120
Benzo(a)pyrene		1	mg/L	60.0	69.9	116	80 - 120	2013-12-05
Indeno(1,2,3-cd)pyrene	Qc	Qc	1	mg/L	60.0	46.2	77	80 - 120
Dibenzo(a,h)anthracene		1	mg/L	60.0	50.4	84	80 - 120	2013-12-05
Benzo(g,h,i)perylene	Qc	Qc	1	mg/L	60.0	46.9	78	80 - 120

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			88.8	mg/L	1	60.0	148	-
2-Fluorobiphenyl			65.3	mg/L	1	60.0	109	-
Terphenyl-d14			91.1	mg/L	1	60.0	152	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-13-7	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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.

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Suite 9
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BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

email: lab@traceanalysis.com

Company Name:

Company Name:	NOVA
Address:	(Street, City, Zip)

Phone #

#1 (432) 520-7770

Fax #:

Contact Person: Curt Stanley E-mail: _____

Invoice to:

(If different from above)

Project #:

Project Name: for me

Project Location (including state):

Sampler Signature:

[illegible]

Summary Report

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

Report Date: December 5, 2013

Work Order: 13112717



Project Location: NM
Project Name: Townsend
SRS #: TNM-9704

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
347640	Pre	water	2013-11-26	15:04	2013-11-27

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
347640 - Pre	0.721 Qs	0.508 Qs	0.158 Qs	0.616 Qs



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		915-585-3443	FAX 915-585-4944
5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	

E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: December 5, 2013

Work Order: 13112717



Project Location: NM
Project Name: Townsend
Project Number: Townsend
SRS #: TNM-9704

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
347640	Pre	water	2013-11-26	15:04	2013-11-27

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-11-27 and assigned to work order 13112717. Samples for work order 13112717 were received intact without headspace and at a temperature of 4.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	90804	2013-12-04 at 09:16	107280	2013-12-04 at 08:12

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 13112717 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: 347640 - Pre

Laboratory: Midland
Analysis: BTEX
QC Batch: 107280
Prep Batch: 90804

Analytical Method: S 8021B
Date Analyzed: 2013-12-04
Sample Preparation: 2013-12-04

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	Qs	1	0.721	mg/L	50	0.00100
Toluene	Qs	1	0.508	mg/L	50	0.00100
Ethylbenzene	Qs	1	0.158	mg/L	50	0.00100
Xylene	Qs	1	0.616	mg/L	50	0.00100

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	Qsr	Qsr	4.54	mg/L	50	0.100	4540	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	4.42	mg/L	50	0.100	4420	70 - 130

Method Blanks

Method Blank (1) QC Batch: 107280

QC Batch: 107280
Prep Batch: 90804

Date Analyzed: 2013-12-04
QC Preparation: 2013-12-04

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000200	mg/L	0.001
Toluene		1	<0.000300	mg/L	0.001
Ethylbenzene		1	<0.000400	mg/L	0.001
Xylene		1	<0.00120	mg/L	0.001

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0958	mg/L	1	0.100	96	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0909	mg/L	1	0.100	91	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 107280
Prep Batch: 90804

Date Analyzed: 2013-12-04
QC Preparation: 2013-12-04

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0976	mg/L	1	0.100	<0.000200	98	70 - 130
Toluene		1	0.0953	mg/L	1	0.100	<0.000300	95	70 - 130
Ethylbenzene		1	0.0922	mg/L	1	0.100	<0.000400	92	70 - 130
Xylene		1	0.281	mg/L	1	0.300	<0.00120	94	70 - 130

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	0.100	mg/L	1	0.100	<0.000200	100	70 - 130	2	20
Toluene		1	0.0987	mg/L	1	0.100	<0.000300	99	70 - 130	4	20
Ethylbenzene		1	0.0960	mg/L	1	0.100	<0.000400	96	70 - 130	4	20
Xylene		1	0.291	mg/L	1	0.300	<0.00120	97	70 - 130	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0934	0.0953	mg/L	1	0.100	93	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0950	0.0960	mg/L	1	0.100	95	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 347640

QC Batch: 107280
Prep Batch: 90804

Date Analyzed: 2013-12-04
QC Preparation: 2013-12-04

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	Qs	Qs	1	5.55	mg/L	50	0.100	0.721	4829
Toluene	Qs	Qs	1	5.25	mg/L	50	0.100	0.508	4742
Ethylbenzene	Qs	Qs	1	4.72	mg/L	50	0.100	0.158	4562
Xylene	Qs	Qs	1	14.4	mg/L	50	0.300	0.616	4595

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

Report Date: December 5, 2013
Townsend

Work Order: 13112717
Townsend

Page Number: 7 of 10
NM

Param				MSD				Spike	Matrix	Rec.		RPD
	F	C		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	Q _s	Q _s	1	5.58	mg/L	50	0.100	0.721	4859	70 - 130	0	20
Toluene	Q _s	Q _s	1	5.34	mg/L	50	0.100	0.508	4832	70 - 130	2	20
Ethylbenzene	Q _s	Q _s	1	4.83	mg/L	50	0.100	0.158	4672	70 - 130	2	20
Xylene	Q _s	Q _s	1	14.7	mg/L	50	0.300	0.616	4695	70 - 130	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)	Q _{sr}	Q _{sr}	4.44	4.51	mg/L	50	0.1	4440	4510	70 - 130
4-Bromofluorobenzene (4-BFB)	Q _{sr}	Q _{sr}	4.67	4.74	mg/L	50	0.1	4670	4740	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 107280

Date Analyzed: 2013-12-04

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0973	97	80 - 120	2013-12-04
Toluene		1	mg/L	0.100	0.0955	96	80 - 120	2013-12-04
Ethylbenzene		1	mg/L	0.100	0.0924	92	80 - 120	2013-12-04
Xylene		1	mg/L	0.300	0.280	93	80 - 120	2013-12-04

Standard (CCV-2)

QC Batch: 107280

Date Analyzed: 2013-12-04

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0973	97	80 - 120	2013-12-04
Toluene		1	mg/L	0.100	0.0956	96	80 - 120	2013-12-04
Ethylbenzene		1	mg/L	0.100	0.0922	92	80 - 120	2013-12-04
Xylene		1	mg/L	0.300	0.277	92	80 - 120	2013-12-04

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	T104704392-13-7	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: December 5, 2013
Townsend

Work Order: 13112717
Townsend

Page Number: 10 of 10
NM

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

TraceAnalysis, Inc.

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Lubbock, Texas 79424
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1 (888) 588-3443

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

Company Name:	NOVUS	Phone #:	(432) 520-7720
Address:	(Street, City, Zip)	Fax #:	
Contact Person:	Curt Stanley	E-mail:	
Invoice to:			
(if different from above)			
Project #:		Project Name:	Townsend
Project Location (including state):	NM	Sampler Signature:	

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

REMARKS:					
Medicaid at					
LAB USE ONLY					
Infect Y N Headspace Y N NA					
Log-In-Review					
Dry Weight Basis Required					
TRRP Report Required					
Check if Special Reporting Limits Are Needed					
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[Signature]	NOVA	11-27-13	Dm	11/27/13	08:38
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[Signature]					
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

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

ORIGINAL COPY

Summary Report

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

Report Date: January 2, 2014

Work Order: 13123004



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
350218	Pre	water	2013-12-26	12:09	2013-12-30

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
350218 - Pre	0.194	0.0713	0.0248	0.116



TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9	Lubbock, Texas 79424	800-378-1296	806-794-1296	FAX 806-794-1298
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5002 Basin Street, Suite A1	Midland, Texas 79703		432-689-6301	FAX 432-689-6313
(BioAquatic) 2501 Mayes Rd., Suite 100	Carrollton, Texas 75006		972-242-7750	
E-Mail: lab@traceanalysis.com		WEB: www.traceanalysis.com		

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: January 2, 2014

Work Order: 13123004



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

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
350218	Pre	water	2013-12-26	12:09	2013-12-30

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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-12-30 and assigned to work order 13123004. Samples for work order 13123004 were received intact without headspace and at a temperature of 5.9 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	91309	2013-12-30 at 14:58	107901	2013-12-31 at 04:20

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 13123004 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.

Report Date: January 2, 2014
NM-2012

Work Order: 13123004
Townsend

Page Number: 4 of 10
NM

Analytical Report

Sample: 350218 - Pre

Laboratory: Midland
Analysis: BTEX
QC Batch: 107901
Prep Batch: 91309

Analytical Method: S 8021B
Date Analyzed: 2013-12-31
Sample Preparation: 2013-12-30

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene		1	0.194	mg/L	1	0.00100
Toluene		1	0.0713	mg/L	1	0.00100
Ethylbenzene		1	0.0248	mg/L	1	0.00100
Xylene		1	0.116	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0950	mg/L	1	0.100	95	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0994	mg/L	1	0.100	99	70 - 130

Method Blanks

Method Blank (1) QC Batch: 107901

QC Batch: 107901
Prep Batch: 91309

Date Analyzed: 2013-12-31
QC Preparation: 2013-12-30

Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.000238	mg/L	0.001
Toluene		1	<0.000181	mg/L	0.001
Ethylbenzene		1	<0.000247	mg/L	0.001
Xylene		1	<0.000189	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0903	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0805	mg/L	1	0.100	80	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 107901
Prep Batch: 91309

Date Analyzed: 2013-12-31
QC Preparation: 2013-12-30

Analyzed By: AK
Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0930	mg/L	1	0.100	<0.000238	93	70 - 130
Toluene		1	0.0907	mg/L	1	0.100	<0.000181	91	70 - 130
Ethylbenzene		1	0.0961	mg/L	1	0.100	<0.000247	96	70 - 130
Xylene		1	0.290	mg/L	1	0.300	<0.000189	97	70 - 130

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	0.0890	mg/L	1	0.100	<0.000238	89	70 - 130	4	20
Toluene		1	0.0857	mg/L	1	0.100	<0.000181	86	70 - 130	6	20
Ethylbenzene		1	0.0918	mg/L	1	0.100	<0.000247	92	70 - 130	5	20
Xylene		1	0.279	mg/L	1	0.300	<0.000189	93	70 - 130	4	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0986	0.0953	mg/L	1	0.100	99	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.102	0.101	mg/L	1	0.100	102	101	70 - 130

Matrix Spike (MS-1) Spiked Sample: 350229

QC Batch: 107901
Prep Batch: 91309

Date Analyzed: 2013-12-31
QC Preparation: 2013-12-30

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		1	0.0890	mg/L	1	0.100	<0.000238	89	70 - 130
Toluene		1	0.0863	mg/L	1	0.100	<0.000181	86	70 - 130
Ethylbenzene		1	0.0907	mg/L	1	0.100	<0.000247	91	70 - 130
Xylene		1	0.274	mg/L	1	0.300	<0.000189	91	70 - 130

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

Report Date: January 2, 2014
NM-2012

Work Order: 13123004
Townsend

Page Number: 7 of 10
NM

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene		1	0.0939	mg/L	1	0.100	<0.000238	94	70 - 130	5	20
Toluene		1	0.0917	mg/L	1	0.100	<0.000181	92	70 - 130	6	20
Ethylbenzene		1	0.0972	mg/L	1	0.100	<0.000247	97	70 - 130	7	20
Xylene		1	0.294	mg/L	1	0.300	<0.000189	98	70 - 130	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)	0.0961	0.0967	mg/L	1	0.1	96	97	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0995	0.101	mg/L	1	0.1	100	101	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0909	91	80 - 120	2013-12-31
Toluene		1	mg/L	0.100	0.0876	88	80 - 120	2013-12-31
Ethylbenzene		1	mg/L	0.100	0.0932	93	80 - 120	2013-12-31
Xylene		1	mg/L	0.300	0.285	95	80 - 120	2013-12-31

Standard (CCV-2)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0928	93	80 - 120	2013-12-31
Toluene		1	mg/L	0.100	0.0908	91	80 - 120	2013-12-31
Ethylbenzene		1	mg/L	0.100	0.0959	96	80 - 120	2013-12-31
Xylene		1	mg/L	0.300	0.290	97	80 - 120	2013-12-31

Standard (CCV-3)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/L	0.100	0.0923	92	80 - 120	2013-12-31
Toluene		1	mg/L	0.100	0.0890	89	80 - 120	2013-12-31
Ethylbenzene		1	mg/L	0.100	0.0950	95	80 - 120	2013-12-31
Xylene		1	mg/L	0.300	0.287	96	80 - 120	2013-12-31

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	T104704392-13-7	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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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

Report Date: January 2, 2014
NM-2012

Work Order: 13123004
Townsend

Page Number: 10 of 10
NM

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

Summary Report

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

Report Date: January 3, 2014

Work Order: 13123002



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
350217	Post	water	2013-12-26	11:59	2013-12-30

Sample - Field Code	BTEX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
350217 - Post	<0.00100	<0.00100	<0.00100	<0.00300

Sample: 350217 - Post

Param	Flag	Result	Units	RL
Naphthalene		<0.000200	mg/L	0.0002
2-Methylnaphthalene	Qs	<0.000200	mg/L	0.0002
1-Methylnaphthalene	Qr, Qs	<0.000200	mg/L	0.0002
Acenaphthylene	Qs	<0.000200	mg/L	0.0002
Acenaphthene	Qs	<0.000200	mg/L	0.0002
Dibenzofuran	Qr, Qs	<0.000200	mg/L	0.0002
Fluorene	Qs	<0.000200	mg/L	0.0002
Anthracene	Qs	<0.000200	mg/L	0.0002
Phenanthrene	Qs	<0.000200	mg/L	0.0002
Fluoranthene	Qs	<0.000200	mg/L	0.0002
Pyrene	Qs	<0.000200	mg/L	0.0002
Benzo(a)anthracene		<0.000200	mg/L	0.0002
Chrysene		<0.000200	mg/L	0.0002
Benzo(b)fluoranthene	Qs	<0.000200	mg/L	0.0002
Benzo(k)fluoranthene	Qs	<0.000200	mg/L	0.0002
Benzo(a)pyrene	Qs	<0.000200	mg/L	0.0002

continued ...

sample 350217 continued ...

Param	Flag	Result	Units	RL
Indeno(1,2,3-cd)pyrene	Qs	<0.000200	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.0002
Benzo(g,h,i)perylene		<0.000200	mg/L	0.0002



TRACEANALYSIS, INC.

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		FAX 432-689-6313
		972-242-7750
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Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

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

Report Date: January 3, 2014

Work Order: 13123002



Project Location: NM
Project Name: Townsend
Project Number: NM-2012
SRS #: NM-2012

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
350217	Post	water	2013-12-26	11:59	2013-12-30

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 15 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

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Case Narrative

Samples for project Townsend were received by TraceAnalysis, Inc. on 2013-12-30 and assigned to work order 13123002. Samples for work order 13123002 were received intact without headspace and at a temperature of 5.9 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	91309	2013-12-30 at 14:58	107901	2013-12-31 at 04:20
PAH	S 8270D	91403	2013-12-31 at 15:00	108003	2014-01-03 at 14:12

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 13123002 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: 350217 - Post

Laboratory: Midland
Analysis: BTEX
QC Batch: 107901
Prep Batch: 91309

Analytical Method: S 8021B
Date Analyzed: 2013-12-31
Sample Preparation: 2013-12-30

Prep Method: S 5030B
Analyzed By: AK
Prepared By: AK

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	U	2	<0.00100	mg/L	1	0.00100
Toluene	U	2	<0.00100	mg/L	1	0.00100
Ethylbenzene	U	2	<0.00100	mg/L	1	0.00100
Xylene		2	<0.00300	mg/L	1	0.00300

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0919	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0812	mg/L	1	0.100	81	70 - 130

Sample: 350217 - Post

Laboratory: Lubbock
Analysis: PAH
QC Batch: 108003
Prep Batch: 91403

Analytical Method: S 8270D
Date Analyzed: 2014-01-03
Sample Preparation: 2013-12-31

Prep Method: S 3510C
Analyzed By: MN
Prepared By: MN

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Naphthalene	U	1	<0.000200	mg/L	1	0.000200
2-Methylnaphthalene	Qs,U	1	<0.000200	mg/L	1	0.000200
1-Methylnaphthalene	Qr,Qs,U		<0.000200	mg/L	1	0.000200
Acenaphthylene	Qs,U	1	<0.000200	mg/L	1	0.000200
Acenaphthene	Qs,U	1	<0.000200	mg/L	1	0.000200
Dibenzofuran	Qr,Qs,U	1	<0.000200	mg/L	1	0.000200
Fluorene	Qs,U	1	<0.000200	mg/L	1	0.000200
Anthracene	Qs,U	1	<0.000200	mg/L	1	0.000200
Phenanthrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Fluoranthene	Qs,U	1	<0.000200	mg/L	1	0.000200
Pyrene	Qs,U	1	<0.000200	mg/L	1	0.000200
Benzo(a)anthracene	U	1	<0.000200	mg/L	1	0.000200
Chrysene	U	1	<0.000200	mg/L	1	0.000200

continued ...

sample 350217 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzo(b)fluoranthene	Q _{sr} , U	1	<0.000200	mg/L	1	0.000200
Benzo(k)fluoranthene	Q _{sr} , U	1	<0.000200	mg/L	1	0.000200
Benzo(a)pyrene	Q _{sr} , U	1	<0.000200	mg/L	1	0.000200
Indeno(1,2,3-cd)pyrene	Q _{sr} , U	1	<0.000200	mg/L	1	0.000200
Dibenzo(a,h)anthracene	U	1	<0.000200	mg/L	1	0.000200
Benzo(g,h,i)perylene	U	1	<0.000200	mg/L	1	0.000200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	Q _{sr}	Q _{sr}	2.91	mg/L	1	8.00	36	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	8.93	mg/L	1	8.00	112	50 - 110
Terphenyl-d14	Q _{sr}	Q _{sr}	2.70	mg/L	1	8.00	34	50 - 135

Method Blanks

Method Blank (1) QC Batch: 107901

QC Batch: 107901 Date Analyzed: 2013-12-31 Analyzed By: AK
Prep Batch: 91309 QC Preparation: 2013-12-30 Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		2	<0.000238	mg/L	0.001
Toluene		2	<0.000181	mg/L	0.001
Ethylbenzene		2	<0.000247	mg/L	0.001
Xylene		2	<0.000189	mg/L	0.003

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			0.0903	mg/L	1	0.100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			0.0805	mg/L	1	0.100	80	70 - 130

Method Blank (1) QC Batch: 108003

QC Batch: 108003 Date Analyzed: 2014-01-03 Analyzed By: MN
Prep Batch: 91403 QC Preparation: 2013-12-31 Prepared By: MN

Parameter	Flag	Cert	MDL Result	Units	RL
Naphthalene		1	<0.000121	mg/L	0.0002
2-Methylnaphthalene		1	<0.0000913	mg/L	0.0002
1-Methylnaphthalene			<0.000109	mg/L	0.0002
Acenaphthylene		1	<0.000100	mg/L	0.0002
Acenaphthene		1	<0.000122	mg/L	0.0002
Dibenzofuran		1	<0.000108	mg/L	0.0002
Fluorene		1	<0.000100	mg/L	0.0002
Anthracene		1	<0.0000791	mg/L	0.0002
Phenanthrene		1	<0.0000824	mg/L	0.0002
Fluoranthene		1	<0.000124	mg/L	0.0002
Pyrene		1	<0.0000691	mg/L	0.0002
Benzo(a)anthracene		1	<0.000101	mg/L	0.0002
Chrysene		1	<0.0000769	mg/L	0.0002
Benzo(b)fluoranthene		1	<0.0000813	mg/L	0.0002
Benzo(k)fluoranthene		1	<0.0000790	mg/L	0.0002
Benzo(a)pyrene		1	<0.0000701	mg/L	0.0002

continued ...

method blank continued ...

Parameter	Flag	Cert	MDL Result	Units	RL
Indeno(1,2,3-cd)pyrene		1	<0.0000770	mg/L	0.0002
Dibenzo(a,h)anthracene		1	<0.0000851	mg/L	0.0002
Benzo(g,h,i)perylene		1	<0.0000798	mg/L	0.0002

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5			3.98	mg/L	1	8.00	50	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	3.74	mg/L	1	8.00	47	50 - 110
Terphenyl-d14	Q _{sr}	Q _{sr}	3.90	mg/L	1	8.00	49	50 - 135

Matrix Spike (MS-1) Spiked Sample: 350229

QC Batch: 107901
Prep Batch: 91309

Date Analyzed: 2013-12-31
QC Preparation: 2013-12-30

Analyzed By: AK
Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene		2	0.0890	mg/L	1	0.100	<0.000238	89	70 - 130
Toluene		2	0.0863	mg/L	1	0.100	<0.000181	86	70 - 130
Ethylbenzene		2	0.0907	mg/L	1	0.100	<0.000247	91	70 - 130
Xylene		2	0.274	mg/L	1	0.300	<0.000189	91	70 - 130

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		2	0.0939	mg/L	1	0.100	<0.000238	94	70 - 130	5	20
Toluene		2	0.0917	mg/L	1	0.100	<0.000181	92	70 - 130	6	20
Ethylbenzene		2	0.0972	mg/L	1	0.100	<0.000247	97	70 - 130	7	20
Xylene		2	0.294	mg/L	1	0.300	<0.000189	98	70 - 130	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)	0.0961	0.0967	mg/L	1	0.1	96	97	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0995	0.101	mg/L	1	0.1	100	101	70 - 130

Matrix Spike (MS-1) Spiked Sample: 350217

QC Batch: 108003
Prep Batch: 91403

Date Analyzed: 2014-01-03
QC Preparation: 2013-12-31

Analyzed By: MN
Prepared By: MN

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene			4.07	mg/L	1	8.00	<0.000121	51	40 - 100
2-Methylnaphthalene	Q _S	Q _S	<0.0000913	mg/L	1	8.00	<0.0000913	0	45 - 105
1-Methylnaphthalene	Q _S	Q _S	0.293	mg/L	1	8.00	<0.000109	4	34.3 - 120
Acenaphthylene	Q _S	Q _S	284	mg/L	1	8.00	<0.000100	3550	55 - 105
Acenaphthene	Q _S	Q _S	1.16	mg/L	1	8.00	<0.000122	14	45 - 110
Dibenzofuran	Q _S	Q _S	1.92	mg/L	1	8.00	<0.000108	24	55 - 105
Fluorene	Q _S	Q _S	11.3	mg/L	1	8.00	<0.000100	141	50 - 110
Anthracene			4.65	mg/L	1	8.00	<0.0000791	58	55 - 110
Phenanthrene			4.38	mg/L	1	8.00	<0.0000824	55	50 - 115
Fluoranthene	Q _S	Q _S	<0.000124	mg/L	1	8.00	<0.000124	0	55 - 115

continued ...

matrix spikes continued ...

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyrene	Q _s	Q _s	1	3.90	mg/L	1	8.00	<0.0000691	49 50 - 130
Benzo(a)anthracene			1	4.61	mg/L	1	8.00	<0.000101	58 55 - 110
Chrysene			1	4.57	mg/L	1	8.00	<0.0000769	57 55 - 110
Benzo(b)fluoranthene	Q _s	Q _s	1	2.95	mg/L	1	8.00	<0.0000813	37 45 - 120
Benzo(k)fluoranthene	Q _s	Q _s	1	3.04	mg/L	1	8.00	<0.0000790	38 45 - 125
Benzo(a)pyrene	Q _s	Q _s	1	3.66	mg/L	1	8.00	<0.0000701	46 55 - 110
Indeno(1,2,3-cd)pyrene	Q _s	Q _s	1	3.54	mg/L	1	8.00	<0.0000770	44 45 - 125
Dibenzo(a,h)anthracene			1	3.74	mg/L	1	8.00	<0.0000851	47 40 - 125
Benzo(g,h,i)perylene			1	3.64	mg/L	1	8.00	<0.0000798	46 40 - 125

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
Naphthalene			1	4.10	mg/L	1	8.00	<0.000121	51 40 - 100	1	20
2-Methylnaphthalene	Q _s	Q _s	1	<0.0000913	mg/L	1	8.00	<0.0000913	0 45 - 105	0	20
1-Methylnaphthalene	Q _r , Q _s	Q _r , Q _s		0.0589	mg/L	1	8.00	<0.000109	1 34.3 - 120	133	20
Acenaphthylene	Q _s	Q _s	1	301	mg/L	1	8.00	<0.000100	3762 55 - 105	6	20
Acenaphthene	Q _s	Q _s	1	1.22	mg/L	1	8.00	<0.000122	15 45 - 110	5	20
Dibenzofuran	Q _r , Q _s	Q _r , Q _s	1	2.46	mg/L	1	8.00	<0.000108	31 55 - 105	25	20
Fluorene	Q _s	Q _s	1	12.6	mg/L	1	8.00	<0.000100	158 50 - 110	11	20
Anthracene			1	4.84	mg/L	1	8.00	<0.0000791	60 55 - 110	4	20
Phenanthrene			1	4.90	mg/L	1	8.00	<0.0000824	61 50 - 115	11	20
Fluoranthene	Q _s	Q _s	1	<0.000124	mg/L	1	8.00	<0.000124	0 55 - 115	0	20
Pyrene			1	4.03	mg/L	1	8.00	<0.0000691	50 50 - 130	3	20
Benzo(a)anthracene			1	4.59	mg/L	1	8.00	<0.000101	57 55 - 110	0	20
Chrysene			1	4.51	mg/L	1	8.00	<0.0000769	56 55 - 110	1	20
Benzo(b)fluoranthene	Q _s	Q _s	1	3.41	mg/L	1	8.00	<0.0000813	43 45 - 120	14	20
Benzo(k)fluoranthene	Q _s	Q _s	1	2.95	mg/L	1	8.00	<0.0000790	37 45 - 125	3	20
Benzo(a)pyrene	Q _s	Q _s	1	3.63	mg/L	1	8.00	<0.0000701	45 55 - 110	1	20
Indeno(1,2,3-cd)pyrene	Q _s	Q _s	1	3.58	mg/L	1	8.00	<0.0000770	45 45 - 125	1	20
Dibenzo(a,h)anthracene			1	3.64	mg/L	1	8.00	<0.0000851	46 40 - 125	3	20
Benzo(g,h,i)perylene			1	3.51	mg/L	1	8.00	<0.0000798	44 40 - 125	4	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
Nitrobenzene-d5	5.44	4.94	mg/L	1	8	68	62	40 - 110
2-Fluorobiphenyl	Q _{sr}	Q _{sr}	14.5	15.8	mg/L	1	8	181 50 - 110
Terphenyl-d14	4.62	4.52	mg/L	1	8	58	56	50 - 135

Calibration Standards

Standard (CCV-1)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0909	91	80 - 120	2013-12-31
Toluene		2	mg/L	0.100	0.0876	88	80 - 120	2013-12-31
Ethylbenzene		2	mg/L	0.100	0.0932	93	80 - 120	2013-12-31
Xylene		2	mg/L	0.300	0.285	95	80 - 120	2013-12-31

Standard (CCV-2)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0928	93	80 - 120	2013-12-31
Toluene		2	mg/L	0.100	0.0908	91	80 - 120	2013-12-31
Ethylbenzene		2	mg/L	0.100	0.0959	96	80 - 120	2013-12-31
Xylene		2	mg/L	0.300	0.290	97	80 - 120	2013-12-31

Standard (CCV-3)

QC Batch: 107901

Date Analyzed: 2013-12-31

Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		2	mg/L	0.100	0.0923	92	80 - 120	2013-12-31
Toluene		2	mg/L	0.100	0.0890	89	80 - 120	2013-12-31
Ethylbenzene		2	mg/L	0.100	0.0950	95	80 - 120	2013-12-31
Xylene		2	mg/L	0.300	0.287	96	80 - 120	2013-12-31

Report Date: January 3, 2014
NM-2012

Work Order: 13123002
Townsend

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NM

Standard (CCV-1)

QC Batch: 108003

Date Analyzed: 2014-01-03

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	56.0	93	80 - 120	2014-01-03
2-Methylnaphthalene		1	mg/L	60.0	50.4	84	80 - 120	2014-01-03
1-Methylnaphthalene			mg/L	60.0	56.5	94	80 - 120	2014-01-03
Acenaphthylene		1	mg/L	60.0	51.7	86	80 - 120	2014-01-03
Acenaphthene		1	mg/L	60.0	50.6	84	80 - 120	2014-01-03
Dibenzofuran		1	mg/L	60.0	57.1	95	80 - 120	2014-01-03
Fluorene		1	mg/L	60.0	57.5	96	80 - 120	2014-01-03
Anthracene		1	mg/L	60.0	53.1	88	80 - 120	2014-01-03
Phenanthrene		1	mg/L	60.0	52.2	87	80 - 120	2014-01-03
Fluoranthene		1	mg/L	60.0	50.5	84	80 - 120	2014-01-03
Pyrene		1	mg/L	60.0	53.6	89	80 - 120	2014-01-03
Benzo(a)anthracene		1	mg/L	60.0	55.4	92	80 - 120	2014-01-03
Chrysene		1	mg/L	60.0	54.6	91	80 - 120	2014-01-03
Benzo(b)fluoranthene		1	mg/L	60.0	48.7	81	80 - 120	2014-01-03
Benzo(k)fluoranthene		1	mg/L	60.0	50.3	84	80 - 120	2014-01-03
Benzo(a)pyrene		1	mg/L	60.0	50.4	84	80 - 120	2014-01-03
Indeno(1,2,3-cd)pyrene		1	mg/L	60.0	50.3	84	80 - 120	2014-01-03
Dibenzo(a,h)anthracene		1	mg/L	60.0	51.4	86	80 - 120	2014-01-03
Benzo(g,h,i)perylene		1	mg/L	60.0	50.8	85	80 - 120	2014-01-03

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5			69.6	mg/L	1	60.0	116	-
2-Fluorobiphenyl			55.3	mg/L	1	60.0	92	-
Terphenyl-d14			56.3	mg/L	1	60.0	94	-

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	T104704219-13-9	Lubbock
2	NELAP	T104704392-13-7	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 than 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.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
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.

