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Annual GW Mon. REPORTS

DATE:

2009

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Effective Solutions

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Environmental Bureau
Oil Conservation Division

2009
ANNUAL MONITORING REPORT

RED BYRD #1
SE ¼ NE ¼ SECTION 1, TOWNSHIP 20 SOUTH, RANGE 36 EAST
LATITUDE 32° 36' 10.15" NORTH, LONGITUDE 103° 18' 00.35" WEST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: TNM RED BYRD #1
NMOCD REF: 1RP-0085

PREPARED FOR:

PLAINS

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

PREPARED BY:

BASIN ENVIRONMENTAL CONSULTING, LLC
P. O. Box 381
Lovington, New Mexico 88260

March 2010

Curt D. Stanley
Project Manager

PLAINS
ALL AMERICAN

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APR - 1 2010

Environmental Bureau
Oil Conservation Division

March 30, 2010

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

Re: Plains All American – 2009 Annual Monitoring Reports
4 Sites in Lea County, New Mexico
1 Site in Eddy County, New Mexico

Dear Mr. Hansen:

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

Lovington Gathering WTI	1RP-838	Section 06, T17S, R37E, Lea County
Red Byrd #1	1R-0085	Section 01, T20S, R36E, Lea County
DCP Plant to Lea Sta. 6" #2	1R-2136	Section 31, T20S, R37E, Lea County
DCP Plant to Lea Sta. 6" Sec.31	1R-2166	Section 31, T20S, R37E, Lea County
Ballard Grayburg 5-Inch	2R-0053	Section 10, T18S, R29E, Eddy County

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

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

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Enclosures

TABLE OF CONTENTS

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), Basin Environmental Consulting, LLC (Basin) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2009 only. For reference, a Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2009 to assess the levels and extent of dissolved phase constituents and Phase Separated Hydrocarbon (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH 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 approximately four (4) miles southwest of the town of Monument, New Mexico in the SE 1/4 of the NE 1/4 of Section 1, Township 20 South, Range 36 East. Evidence of a historical release was brought to the attention of Enron Oil Trading and Transportation (EOTT) (who acquired the pipeline from Texas New Mexico Pipeline Company in 1999), by Mr. Red Byrd in January 2000. On January 1, 2009, Basin assumed oversight of groundwater daily operations, sampling and reporting at the release site.

Approximately 8,900 cubic yards of impacted soil was excavated, shredded and blended with nutrients. Approximately 3,700 cubic yards of the impacted soil was transported to Plains Lea Station to be used as berm material. On completion of excavation activities, confirmation soil samples were collected from the excavation and stockpiles. Review of analytical results indicated soil samples collected from the excavation were less than NMOCD regulatory standards. The excavation was backfilled with the blended soil and approximately 3,500 cubic yards of topsoil was transported onsite and the area was contoured to topographic grade.

At the Red Byrd #1 site, two areas of hydrocarbon impact related to the Plains pipeline have been identified. The first area of impact (Red Byrd#1) is the subject of this Annual Monitoring Report and is centered on and around monitor well MW-1. The soil issues at the Red Byrd #1 site have been have been remediated and groundwater monitoring and sampling are on going. The second area of impact (Red Byrd Ranch Historical – 1R 1299) related to the Plains pipeline is centered on monitor well MW-12.

In May 2008, Plains submitted a Site Investigation Report to the NMOCD. The Site Investigation Report documented the delineation and remediation activities to date at the site(s). In the report, Plains presented evidence indicating there are likely additional sources of dissolved phase contaminates (including petroleum hydrocarbons, chlorides, and total dissolved solids), which are or have contributed to the groundwater issues at the Red Byrd #1 site. These contaminates, outside of the Plains pipelines, have not been fully indentified.

On May 29, 2008, in correspondence to Plains, the NMOCD recommended the installation of one (1) monitor well (MW-19), located to the southeast of existing monitor well MW-15 to delineate the groundwater contaminant plume down gradient of monitor well MW-15. On July 15, 2008, Plains installed monitor well MW-19 to a depth of approximately forty-five (45) feet below ground surface (bgs).

On November 17, 2008, Plains assigned excavation oversight of the Red Byrd Ranch Historical release site to Basin. On December 10, 2008, Basin restarted excavation activities at the release site and on September 9, 2009 backfilling and restoration activities at the Red Byrd Ranch Historical release site were completed.

During the 1st quarter 2009 sampling event, additional groundwater samples were collected from each of the nineteen (19) on-site monitor wells and analyzed for concentrations of chloride and total dissolved solids (TDS). The analytical results indicated elevated TDS concentrations, in excess of 10,000 mg/L in fifteen (15) monitor wells, were present in the on-site monitor wells. Monitor wells located up gradient of the Red Byrd #1 and Red Byrd Ranch Historical releases exhibited elevated TDS concentrations, as well as monitor wells associated with the release(s). Based on the up gradient position of the monitor wells containing elevated TDS and the presence of numerous (20 plus) pipelines in the area, abandoned pits located northwest and south of the releases, numerous facility and drilling pads, production wells, a refinery and a chemical plant all within one half mile of the release site, indicates there are multiple potential responsible parties contributing to the area groundwater plume. The NMWQQC regulations state groundwater exhibiting a TDS in excess of 10,000 mg/L is not abatable.

On September 9, 2009, Plains requested NMOCD approval to plug and abandon monitor wells exhibiting TDS concentrations exceeding 10,000 mg/L (MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14, MW-15, MW-16, and MW-19). Plains requested, monitor wells associated with the ongoing groundwater issues at the Red Byrd Ranch Historical release (MW-6, MW-7, MW-11, MW-12, MW-17, and MW-18) be placed on semi-annual sampling schedule to monitor the Red Byrd Ranch Historical PSH plume. On October 2, 2009, Plains received correspondence form the NMOCD Santa Fe Office, indicating the NMOCD had approved the modified sampling schedule and proposed plugging of monitor wells. The correspondence indicated monitor wells MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18 and MW-19 may be placed on a semi-annual sampling schedule and monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14 and MW-15 may be plugged and abandoned.

In October 2009, a Red Byrd Ranch Historical Remediation Summary and Soil Closure Request was submitted to the NMOCD Santa Fe Office. On December 9, 2009, Plains received correspondence from the NMOCD Santa Fe Office, indicating the report was accepted and no further soil remediation was required at the site.

On October 29, 2009, monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14 and MW-15 were plugged and abandoned by a State of New Mexico licensed water well driller, as approved by the NMOCD. Following the plugging activities, plugging reports were submitted to the NMOCD Santa Fe Office.

During the 1st, 2nd, and 3rd quarter sampling events, eighteen (18) monitor wells were located at the Red Byrd #1 site. Currently, a total of eight (8) monitor wells (MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18 and MW-19) are located on the Red Byrd #1 site.

RECENT FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was detected in monitor well MW-12 throughout the 2009 reporting period. The average PSH thickness reported in monitor well MW-12 during the reporting period was 1.60 feet. The maximum PSH thickness was 2.17 feet on February 20, 2009.

Groundwater Monitoring

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

1st, 2nd and 3rd QUARTER 2009 NMOCD APPROVED SAMPLING SCHEDULE					
Location	**Schedule**	**Location**	**Schedule**	**Location**	**Schedule**
MW-1	Quarterly	MW-8	Quarterly	MW-15	Quarterly
MW-2	P&A 11/9/06	MW-9	Quarterly	MW-16	Quarterly
MW-3	Quarterly	MW-10	Quarterly	MW-17	Quarterly
MW-4	Quarterly	MW-11	Quarterly	MW-18	Quarterly
MW-5	Quarterly	MW-12	Quarterly	MW-19	Quarterly
MW-6	Quarterly	MW-13	Quarterly		
MW-7	Quarterly	MW-14	Quarterly		

NMOCD correspondence received on October 2, 2009, concerns the following modifications to the sampling schedule.

4th QUARTER 2009 and subsequent years NMOCD APPROVED SAMPLING SCHEDULE					
Location	**Schedule**	**Location**	**Schedule**	**Location**	**Schedule**
MW-1	P&A 10/29/09	MW-8	P&A 10/29/09	MW-15	P&A 10/29/09
MW-2	P&A 11/9/06	MW-9	P&A 10/29/09	MW-16	Semi-Annually
MW-3	P&A 10/29/09	MW-10	P&A 10/29/09	MW-17	Semi-Annually
MW-4	P&A 10/29/09	MW-11	Semi-Annually	MW-18	Semi-Annually
MW-5	P&A 10/29/09	MW-12	Semi-Annually	MW-19	Semi-Annually
MW-6	Semi-Annually	MW-13	P&A 10/29/09		
MW-7	Semi-Annually	MW-14	P&A 10/29/09		

The site monitor wells were gauged and sampled on February 27, June 24, September 9 and November 12, 2009. During each sampling event, sampled monitor wells were purged of a minimum of three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of at a licensed disposal facility.

Locations of the monitor wells and the inferred groundwater gradient, which were constructed from measurements collected during the four quarterly monitoring events, are depicted on Figures 2A through 2D, the Inferred Groundwater Gradient Maps. Groundwater elevation data for 2009 is provided as Table 1.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0035 feet/foot to the south southeast as measured between monitor well MW-18 and MW-16. This is consistent with data presented from earlier in the year. The corrected groundwater elevation has ranged between 3531.19 and 3535.27 feet above mean sea level, in monitor wells MW-19 on November 12, 2009 and MW-13 on February 26, 2009, respectively.

LABORATORY RESULTS

Groundwater samples were collected from groundwater monitor wells during the quarterly monitoring events were delivered to Xenco Laboratories, Odessa, Texas for determination of benzene, toluene, ethylbenzene and xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. Pursuant to an NMOCD request, the groundwater monitor wells were sampled annually for concentrations of Poly Aromatic Hydrocarbons (PAH) utilizing EPA Method SW 8270C. A summary of 2009 Concentrations of Benzene, BTEX, Chloride and TDS in Groundwater and Concentrations of Poly Aromatic Hydrocarbons in Groundwater are presented in Table 2 and Table 4, respectively. The laboratory reports are provided as Appendix A.

Monitor well MW-1 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.285 mg/L during the 2nd quarter to 0.7952 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard of 0.01 mg/L during the 1st, 2nd and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.004 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard of 0.75 mg/L during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0425 mg/L during the 2nd quarter to 0.145 mg/L during the 3rd quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard of 0.75 mg/L during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.1024 mg/L during the 3rd quarter of the reporting period. Total xylene concentrations were less than the NMOCD regulatory standard of 0.62 mg/L during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 7,440 mg/L and 11,200 mg/L, respectively. The TDS concentration exceeded the NMOCD regulatory standard of 10,000 mg/L, for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-1 was plugged and abandoned on October 29, 2009.

Monitor well MW-3 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.1608 mg/L during the 2nd quarter to 0.5818

mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Toluene concentrations were less than the laboratory MDL and the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from 0.022 mg/L during the 2nd quarter to 0.0866 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from 0.0714 mg/L during the 2nd quarter to 0.164 mg/L during the 1st quarter of the reporting period. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 13,400 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-3 was plugged and abandoned on October 29, 2009.

Monitor well MW-4 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.0235 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st and 3rd quarters of the reporting period. Toluene concentrations ranged from 0.0033 mg/L during the 2nd quarter to 0.0176 mg/L during the 3rd quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from 0.027 mg/L during the 2nd quarter to 0.1089 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from 0.0362 mg/L during the 2nd quarter to 0.1538 mg/L during the 3rd quarter of the reporting period. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 11,300 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-4 was plugged and abandoned on October 29, 2009.

Monitor well MW-5 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.0063 mg/L during the 3rd quarter to 0.0254 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st quarter of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 1st quarter to 0.0062 mg/L during the 3rd quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0107 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory

standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from 0.0665 mg/L during the 3rd quarter to 0.1028 mg/L during the 2nd quarter of 2009.Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 7,270 mg/L and 12,900 mg/L, respectively. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-5 was plugged and abandoned on October 29, 2009.

Monitor well MW-6 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0287 mg/L during the 1st quarter to 0.5374 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations ranged from 0.0152 mg/L during the 4th quarter to 0.7818 mg/L during the 3rd quarter of the reporting period. Toluene concentrations were above the NMOCD regulatory standard during the 3rd quarter of the reporting period. Ethylbenzene concentrations ranged from 0.0028 mg/L during the 4th quarter to 0.0242 mg/L during the 2nd quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from 0.0518 mg/L during the 1st quarter to 1.5516 mg/L during the 3rd quarter of the reporting period. Total xylene concentrations were above the NMOCD regulatory standard during the 3rd quarter of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 14,600 mg/L. Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-7 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0011 mg/L during the 2nd quarter to 0.0051 mg/L during the 3rd quarter of 2009. Benzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were less than the MDL and NMOCD regulatory standard for all four (4) quarters of the 2009 reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 1st, 2nd, and 4th quarters to 0.0012 mg/L during the 3rd quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from 0.0011 mg/L during the 2nd quarter to 0.0095 mg/L during the 3rd quarter of the reporting period. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 14,200 mg/L.

Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-8 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.005 mg/L during the 2nd quarter to 0.0344 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0026 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.004 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from 0.0033 mg/L during the 2nd quarter to 0.0145 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 7,630 mg/L and 11,900 mg/L, respectively. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-8 was plugged and abandoned on October 29, 2009.

Monitor well MW-9 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.0011 mg/L during the 2nd quarter to 0.6513 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0069 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.0233 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0352 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 10,300 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-9 was plugged and abandoned on October 29, 2009.

Monitor well MW-10 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.0015 mg/L during the 3rd quarter to 0.0816 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory

standard during the 1st and 2nd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0046 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0078 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0124 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 16,400 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-10 was plugged and abandoned on October 29, 2009.

Monitor well MW-11 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0089 mg/L during the 4th quarter to 0.432 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st, 2nd, and 3rd quarters of the reporting period. Toluene concentrations were less than the MDL and NMOCD regulatory standard for all four (4) quarters of the 2009 reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.0566 mg/L during the 1st quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.027 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 6,670 mg/L and 10,600 mg/L, respectively. Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-12 was monitored/sampled on a quarterly schedule during the 2009 reporting period. Monitor well MW-12 was not sampled during the first three quarters of the reporting period, due to the reported presence of PSH in the monitor well. PSH thicknesses of 1.54 feet, 1.82 feet and 1.61 feet were reported during the 1st, 2nd and 3rd quarters of 2009, respectively. Monitor well MW-12 was sampled during the 4th quarter of 2009 for BTEX, TPH and PAH. The analytical results of the groundwater collected from monitor well MW-12 indicated a benzene concentration of 0.0892 mg/L, a toluene concentration of less than the laboratory MDL of 0.0200 mg/L, a ethylbenzene concentration of 0.0112 mg/L and a total xylene concentration of 0.1691 mg/L during the 4th quarter of 2009. BTEX constituent concentrations were less than the NMOCD regulatory standard, with the exception of the benzene concentration, which exhibited a

concentration exceeding the NMOCD regulatory standard of 0.01 mg/L. Analytical results further indicated, a total TPH concentration of 700.3 mg/L.

Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-13 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene, toluene, ethylbenzene and xylene concentrations were less than the laboratory MDL and the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 5,130 mg/L and 9,910 mg/L, respectively. As approved by the NMOCD Santa Fe Office, monitor well MW-13 was plugged and abandoned on October 29, 2009.

Monitor well MW-14 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.0037 mg/L during the 2nd quarter to 0.0067 mg/L during the 1st quarter of 2009. Benzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.0033 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0012 mg/L during the 2nd quarter to 0.0019 mg/L during the 3rd quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0091 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 12,500 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-14 was plugged and abandoned on October 29, 2009.

Monitor well MW-15 was sampled during the 1st, 2nd and 3rd quarters of 2009. Analytical results indicated benzene concentrations ranged from 0.6999 mg/L during the 2nd quarter to 0.9894 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0034 mg/L during the 1st quarter of the reporting period. Toluene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0789 during the 2nd quarter to 0.1772 mg/L during the 3rd quarter of the reporting period. Ethylbenzene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Total xylene concentrations

ranged from 0.0405 mg/L during the 2nd quarter to 0.0776 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 10,700 mg/L. The TDS concentration exceeded the NMOCD regulatory standard for abatable groundwater. As approved by the NMOCD Santa Fe Office, monitor well MW-15 was plugged and abandoned on October 29, 2009.

Monitor well MW-16 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.014 mg/L during the 4th quarter to 0.2908 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 3rd quarters to 0.0053 mg/L during the 1st and 4th quarters of 2009. Toluene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0103 mg/L during the 4th quarter to 0.2225 mg/L during the 1st quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from 0.0566 mg/L during the 4th quarter to 0.6568 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during the 2nd, 3rd and 4th quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 10,800 mg/L. Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-17 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0039 mg/L during the 4th quarter to 0.1962 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st, 2nd and 3rd quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 3rd and 4th quarters to 0.0046 mg/L during the 1st quarter of 2009. Toluene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0067 mg/L during the 2nd quarter to 0.0934 mg/L during the 3rd quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from 0.0021 mg/L during the 4th quarter to 0.0696 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 5,460 mg/L and 7,200 mg/L, respectively. Analytical results indicate PAH

constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-18 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0013 mg/L during the 4th quarter to 0.0158 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 3rd quarter of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 4th quarters to 0.0073 mg/L during the 1st quarter of 2009. Toluene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.1158 mg/L during the 3rd quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.0858 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of chloride and TDS. The analytical results for chloride and TDS indicated concentrations of 6,520 mg/L and 10,200 mg/L, respectively. Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-19 was sampled on a quarterly schedule during the 2009 reporting period. Analytical results indicated benzene concentrations ranged from 0.0018 mg/L during the 2nd quarter to 0.0064 mg/L during the 4th quarter of 2009. Benzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Toluene concentrations were less than the laboratory MDL and the NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from 0.0025 mg/L during the 4th quarter to 0.0878 mg/L during the 3rd quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.0163 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period.

During the 1st quarter 2009 sampling event, groundwater samples were analyzed for concentrations of TDS. The analytical results for TDS indicated a concentration of 14,200 mg/L. Analytical results indicate PAH constituent concentrations were less than the MDL for each constituent during the 4th quarter of the reporting period.

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

SUMMARY

This report presents the results of monitoring activities for the 2009 annual monitoring period. Currently, there are eight (8) groundwater monitor wells (MW-6, MW-7, MW-11, MW-12, MW-16, MW-17, MW-18 and MW-19) on-site.

On October 29, 2009, monitor wells MW-1, MW-3, MW-4, MW-5, MW-8, MW-9, MW-10, MW-13, MW-14 and MW-15 were plugged and abandoned by a State of New Mexico licensed water well driller, as approved by the NMOCD. Following the plugging activities, plugging reports were submitted to the NMOCD Santa Fe Office.

The most recent Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0035 feet/foot to the south southeast.

A measurable thickness of PSH was detected in monitor well MW-12 throughout the 2009 reporting period. The average PSH thickness reported in monitor well MW-12 during the reporting period was 1.60 feet. The maximum PSH thickness was 2.17 feet on February 20, 2009.

During the reporting period approximately one hundred four (104) gallons of PSH was recovered from monitor well MW-12. Approximately 524 gallons of PSH has been recovered by manual recovery since project inception.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2009 monitoring period indicates the benzene concentrations were above the NMOCD regulatory standard in two (2) of the eight (8) site monitor wells during the 4th quarter of the reporting period.

ANTICIPATED ACTIONS

PSH recovery will continue on a weekly schedule at monitor well MW-12. Recovered PSH will be disposed of at an NMOCD approved facility. Groundwater monitoring and sampling will continue in 2010. Annual Monitoring Report will be submitted to the NMOCD before April 1, 2011.

LIMITATIONS

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

Basin has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin 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. Basin has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin 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 Basin and/or Plains.

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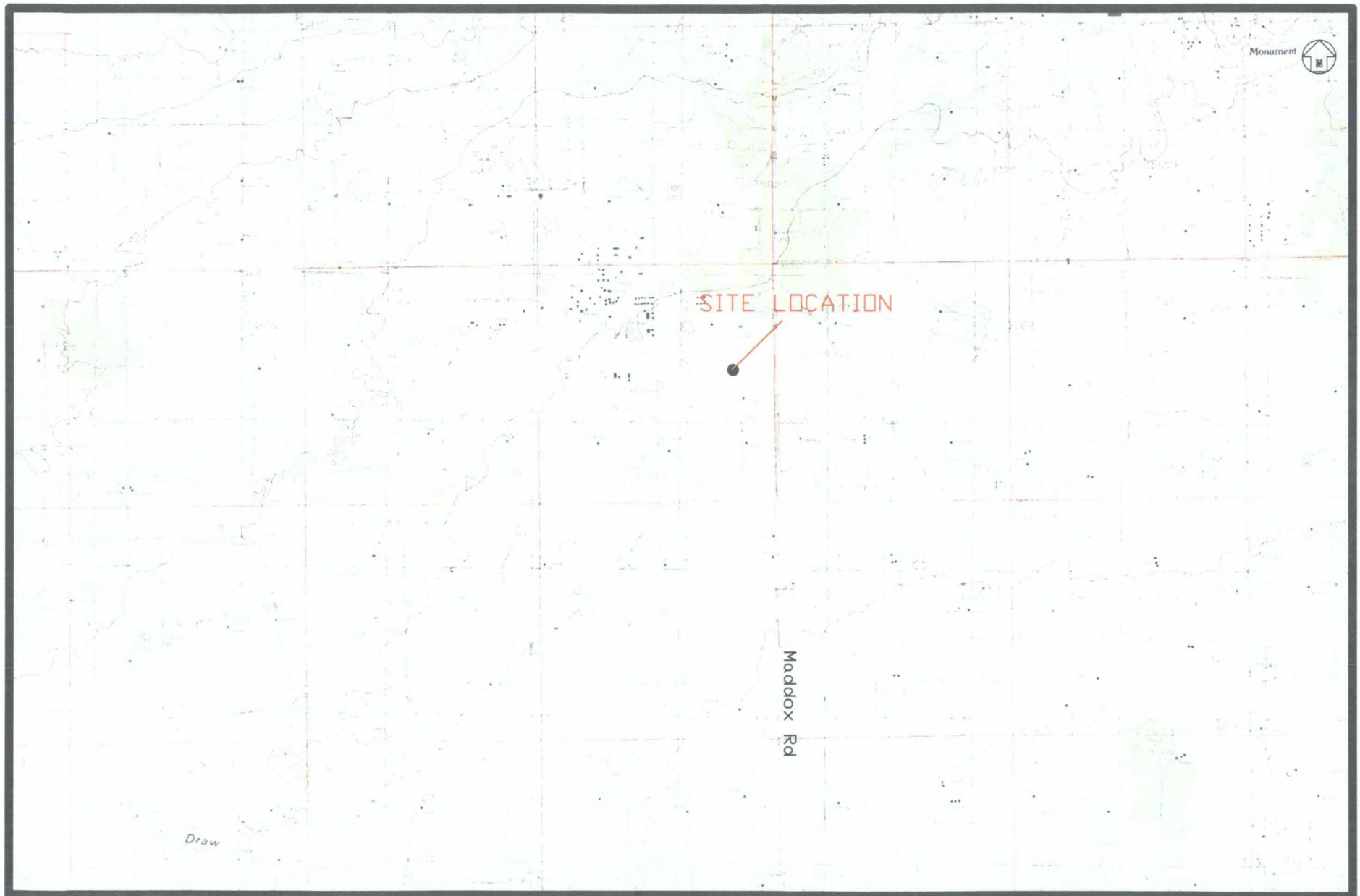
Figures



3000 1500 0 1500 3000

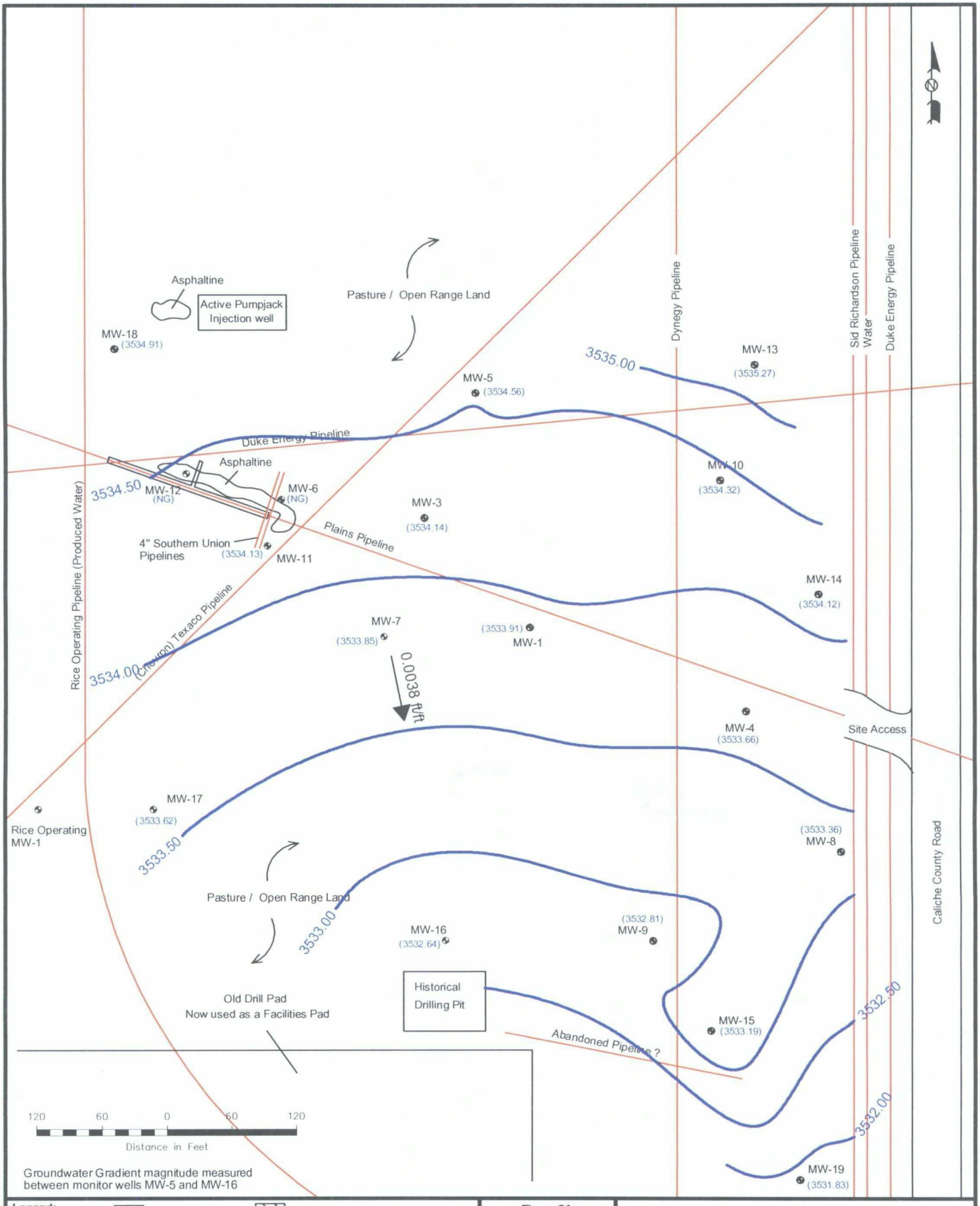
Distance in Feet

Figure 1
Site Location Map
Plains Marketing, L.P.
Red Byrd #1
Lea County, New Mexico

1RP-0085

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
October 7, 2009	Scale 1"=3000'



Legend:

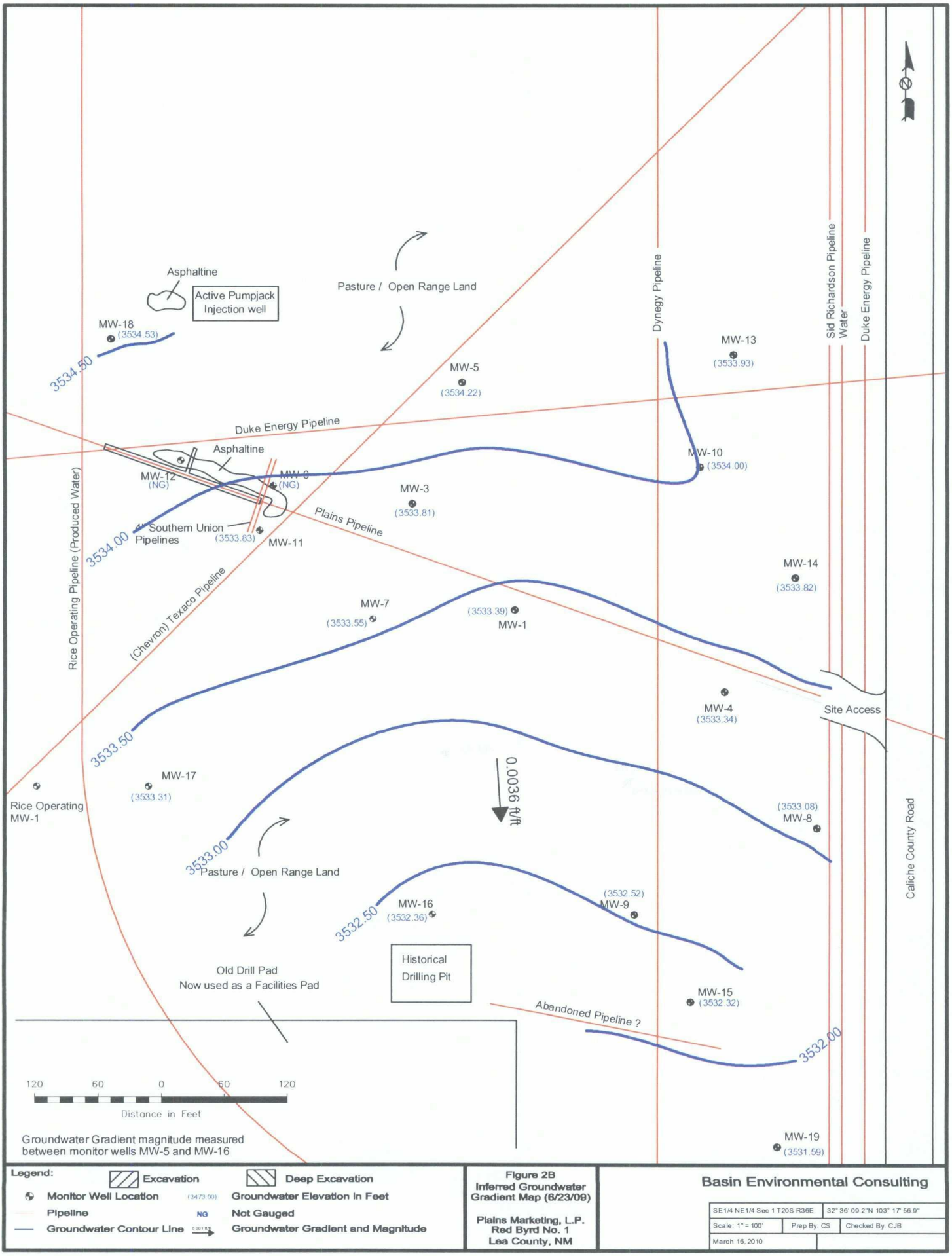
- Excavation
- Deep Excavation
- Monitor Well Location (3473.00) Groundwater Elevation in Feet
- Pipeline NG Not Gauged
- Groundwater Contour Line 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2A
Inferred Groundwater Gradient Map (2/26/09)

Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM

Basin Environmental Consulting

SE1/4 NE1/4 Sec 1 T20S R36E		32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: CS	Checked By: CJB
March 16, 2010		



Legend:

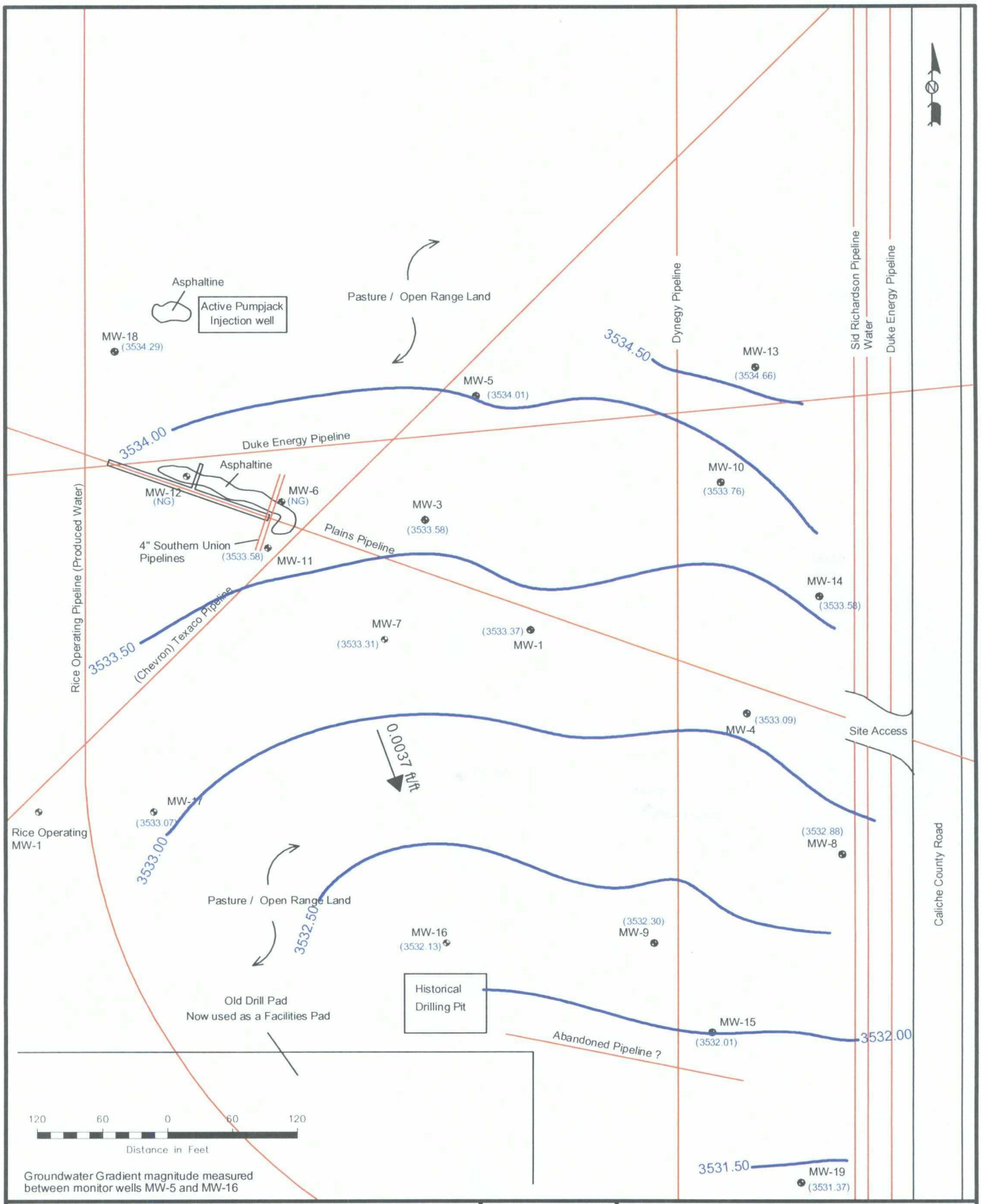
- Excavation
- Deep Excavation
- Monitor Well Location (3473.99)
- Groundwater Elevation in Feet
- Pipeline
- NG Not Gauged
- Groundwater Contour Line
- Groundwater Gradient and Magnitude

Figure 2B
Inferred Groundwater Gradient Map (6/23/09)

Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM

Basin Environmental Consulting

SE1/4 NE1/4 Sec 1 T20S R36E	32° 36' 09.2"N 103° 17' 56.9"	
Scale: 1" = 100'	Prep By: CS	Checked By: CJB
March 16, 2010		



Legend:

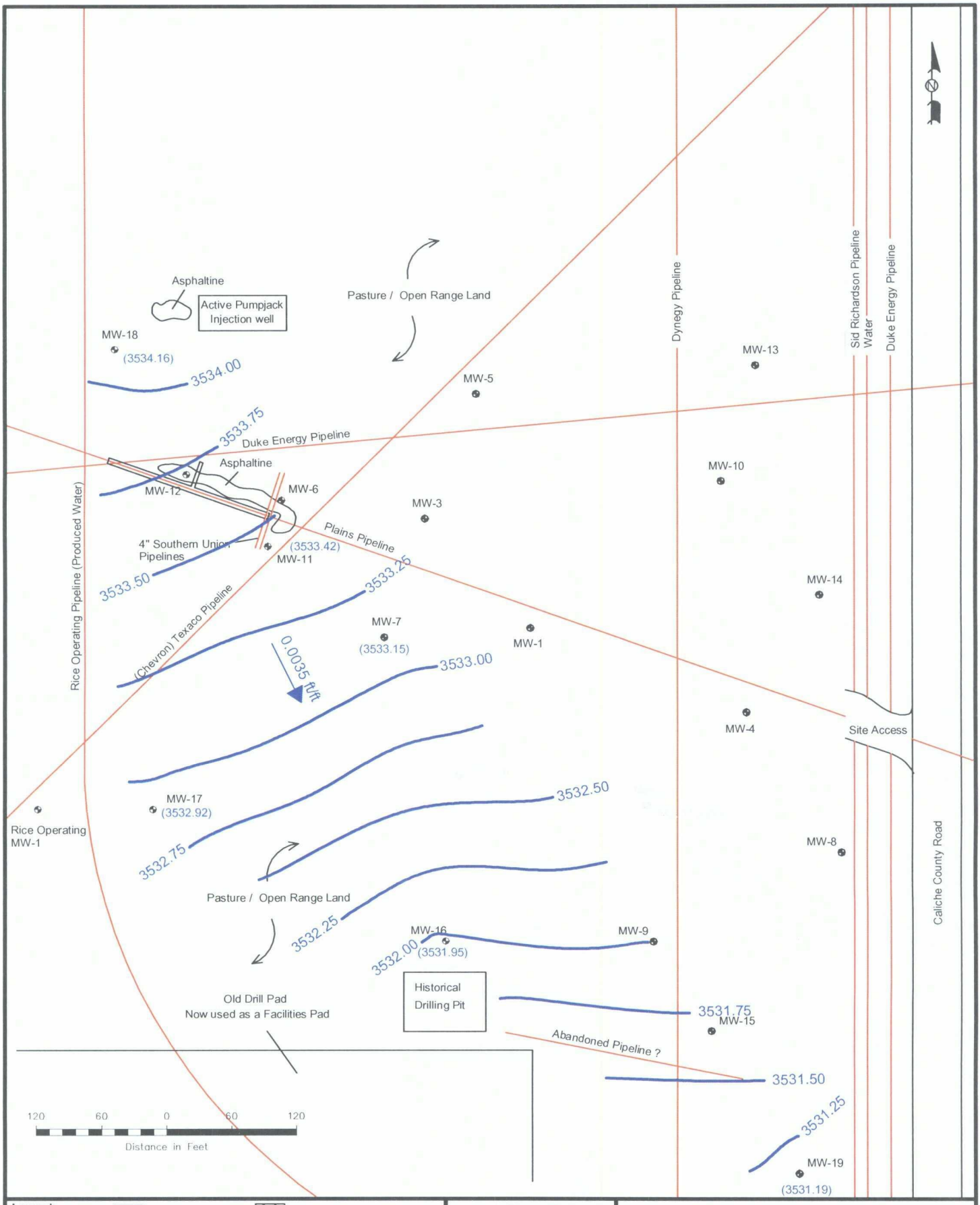
- Excavation
- Deep Excavation
- Monitor Well Location (3473.09)
- Groundwater Elevation In Feet
- Pipeline NG Not Gauged
- Groundwater Contour Line 0.001 ft/ft Groundwater Gradient and Magnitude

Figure 2C
Inferred Groundwater Gradient Map (9/08/09)

Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM

Basin Environmental Consulting

SE1/4 NE1/4 Sec 1 T20S R36E	32° 36' 09.2"N 103° 17' 56.9"	
Scale: 1" = 100'	Prep By: CS	Checked By: CJB
March 16, 2010		



Legend:

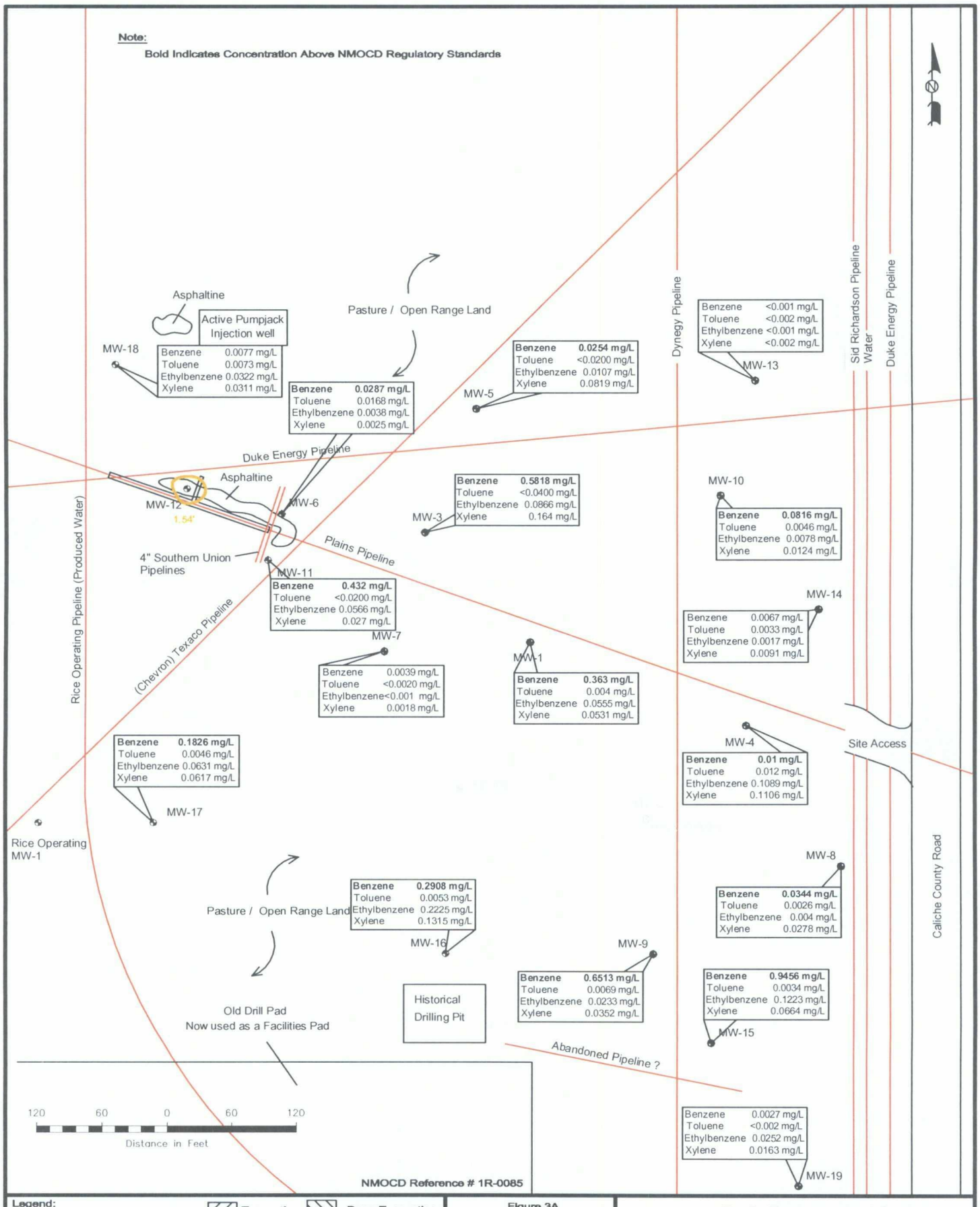
- Excavation
- Deep Excavation
- Monitor Well Location (3473.00)
- Groundwater Elevation in Feet
- Pipeline NG Not Gauged
- Groundwater Contour Line 0.001 ft/ft Groundwater Gradient and Magnitude

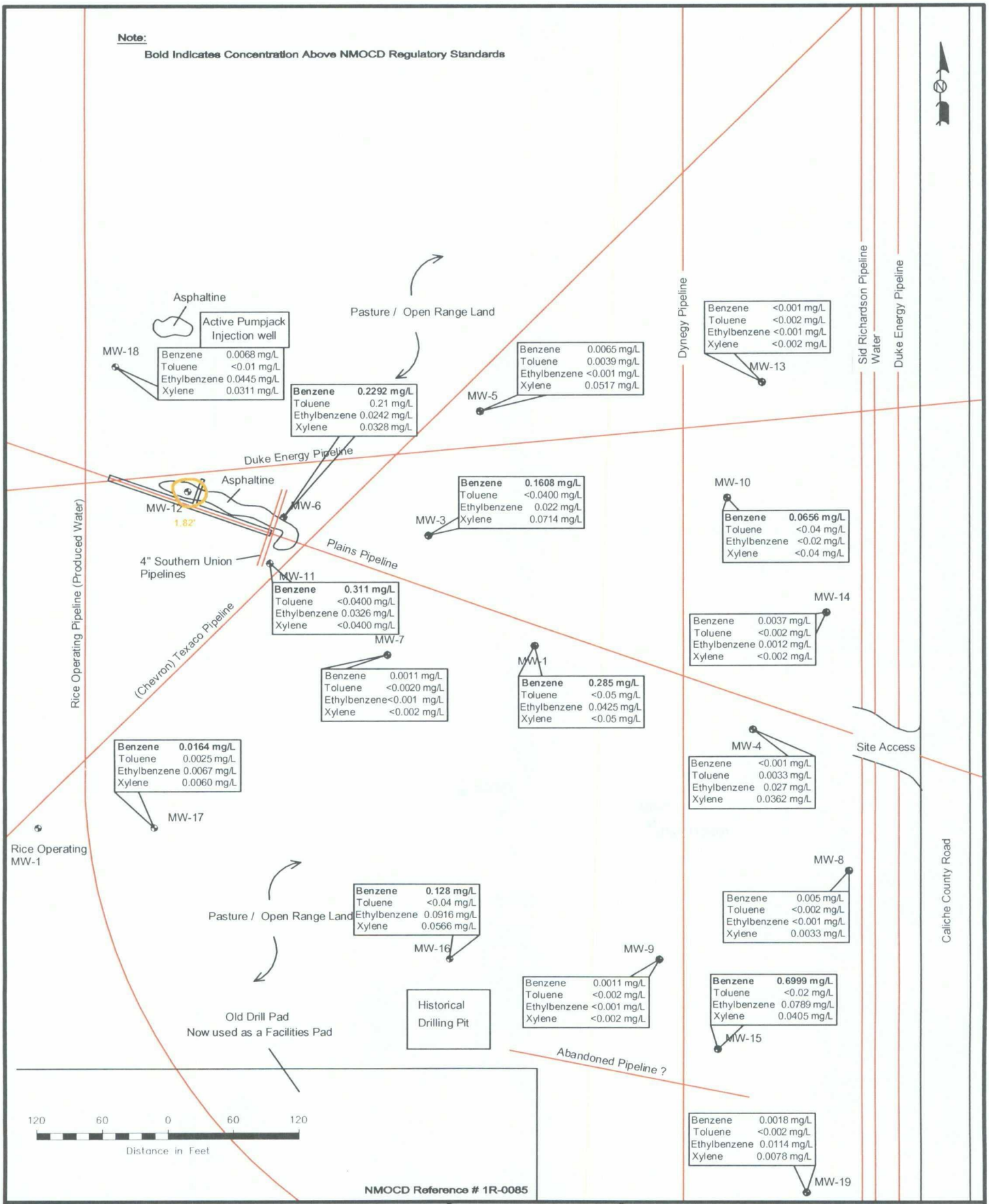
Figure 2D
Inferred Groundwater Gradient Map (11/12/09)

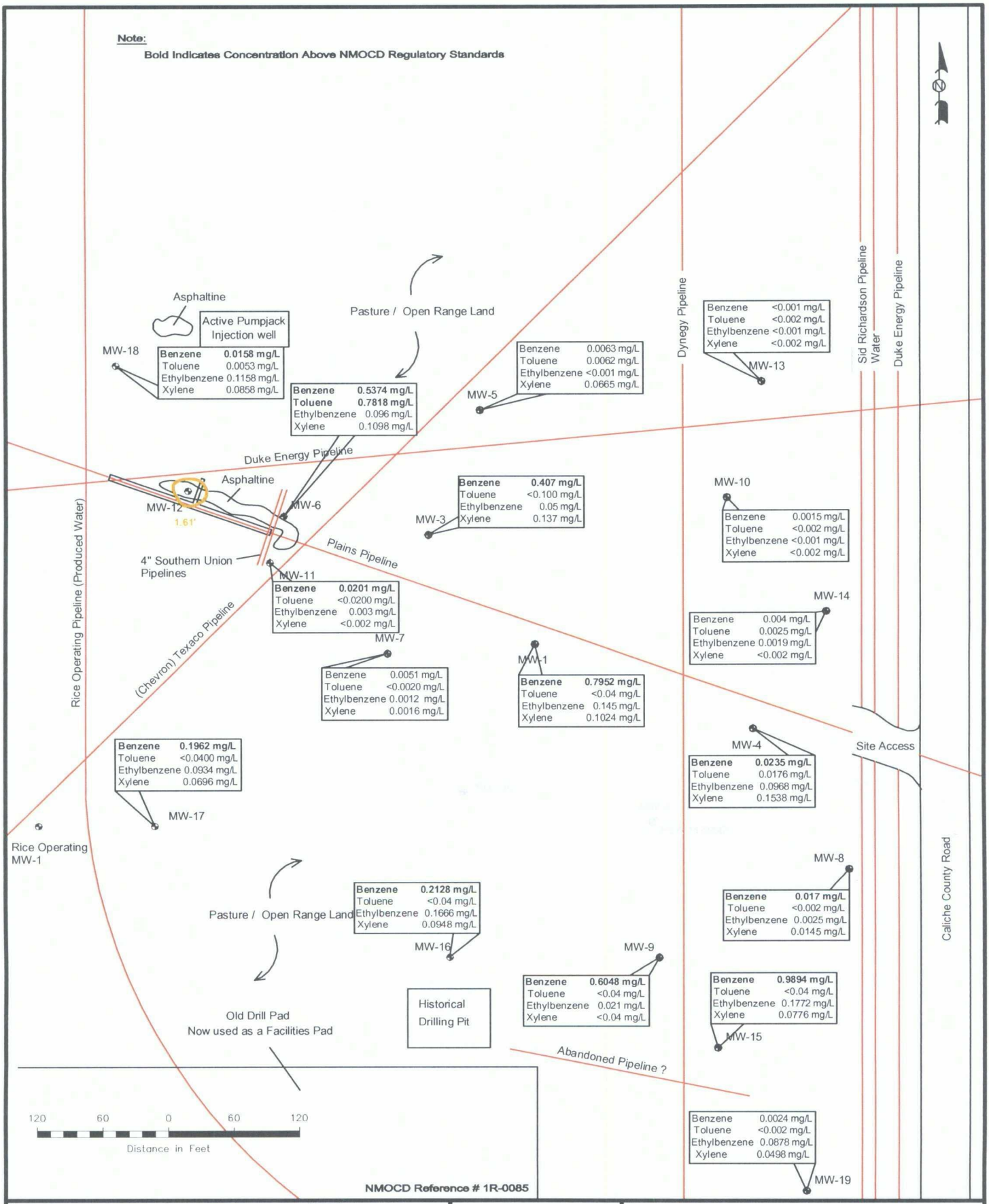
Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM

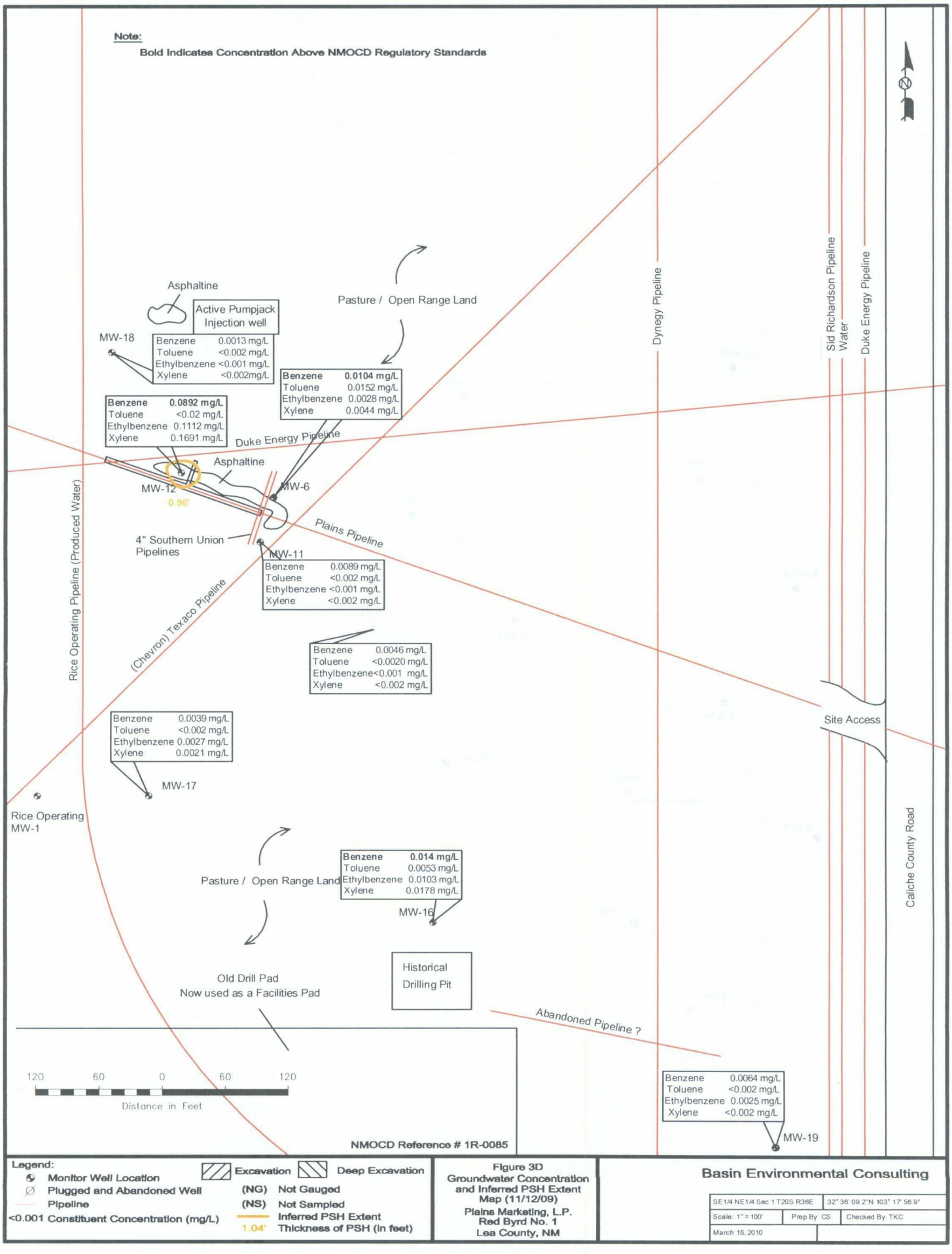
Basin Environmental Consulting

SE1/4 NE1/4 Sec 1 T20S R36E	32° 36' 09.2"N 103° 17' 56.9"	
Scale: 1" = 100'	Prep By: CS	Checked By: CDS
Februray 10, 2010		


Note:
Bold Indicates Concentration Above NMOCD Regulatory Standards
Asphaltine
Active Pumpjack Injection well
MW-18
Benzene 0.0077 mg/L
Toluene 0.0073 mg/L
Ethylbenzene 0.0322 mg/L
Xylene 0.0311 mg/L
Pasture / Open Range Land
Benzene 0.0287 mg/L
Toluene 0.0168 mg/L
Ethylbenzene 0.0038 mg/L
Xylene 0.0025 mg/L
MW-5
Benzene 0.0254 mg/L
Toluene <0.0200 mg/L
Ethylbenzene 0.0107 mg/L
Xylene 0.0819 mg/L
Dynegy Pipeline
Benzene <0.001 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
MW-13
Sid Richardson Pipeline
Water
Duke Energy Pipeline
Duke Energy Pipeline
Asphaltine
MW-12
1.54'
MW-6
Benzene 0.5818 mg/L
Toluene <0.0400 mg/L
Ethylbenzene 0.0866 mg/L
Xylene 0.164 mg/L
MW-3
MW-10
Benzene 0.0816 mg/L
Toluene 0.0046 mg/L
Ethylbenzene 0.0078 mg/L
Xylene 0.0124 mg/L
Plains Pipeline
4" Southern Union Pipelines
MW-11
Benzene 0.432 mg/L
Toluene <0.0200 mg/L
Ethylbenzene 0.0566 mg/L
Xylene 0.027 mg/L
MW-14
Benzene 0.0067 mg/L
Toluene 0.0033 mg/L
Ethylbenzene 0.0017 mg/L
Xylene 0.0091 mg/L
Rice Operating Pipeline (Produced Water)
(Chevron) Texaco Pipeline
MW-7
Benzene 0.0039 mg/L
Toluene <0.0020 mg/L
Ethylbenzene <0.001 mg/L
Xylene 0.0018 mg/L
MW-1
Benzene 0.363 mg/L
Toluene 0.004 mg/L
Ethylbenzene 0.0555 mg/L
Xylene 0.0531 mg/L
Benzene 0.1826 mg/L
Toluene 0.0046 mg/L
Ethylbenzene 0.0631 mg/L
Xylene 0.0617 mg/L
MW-17
MW-4
Benzene 0.01 mg/L
Toluene 0.012 mg/L
Ethylbenzene 0.1089 mg/L
Xylene 0.1106 mg/L
Site Access
Rice Operating MW-1
MW-8
Benzene 0.0344 mg/L
Toluene 0.0026 mg/L
Ethylbenzene 0.004 mg/L
Xylene 0.0278 mg/L
Pasture / Open Range Land
Benzene 0.2908 mg/L
Toluene 0.0053 mg/L
Ethylbenzene 0.2225 mg/L
Xylene 0.1315 mg/L
MW-16
MW-9
Benzene 0.6513 mg/L
Toluene 0.0069 mg/L
Ethylbenzene 0.0233 mg/L
Xylene 0.0352 mg/L
Benzene 0.9456 mg/L
Toluene 0.0034 mg/L
Ethylbenzene 0.1223 mg/L
Xylene 0.0664 mg/L
MW-15
Historical Drilling Pit
Old Drill Pad
Now used as a Facilities Pad
Abandoned Pipeline ?
Caliche County Road
120 60 0 60 120
Distance in Feet
Benzene 0.0027 mg/L
Toluene <0.002 mg/L
Ethylbenzene 0.0252 mg/L
Xylene 0.0163 mg/L
MW-19
NMOCD Reference # 1R-0085
Legend:
Monitor Well Location
Plugged and Abandoned Well
Pipeline
<0.001 Constituent Concentration (mg/L)
Excavation
Deep Excavation
(NG) Not Gauged
(NS) Not Sampled
Inferred PSH Extent
1.04' Thickness of PSH (In feet)
Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (2/27/09)
Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM
Basin Environmental Consulting
SE1/4 NE1/4 Sec 1 T20S R36E
32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'
Prep By: CS
Checked By: TKC
March 16, 2010


Note:
Bold Indicates Concentration Above NMOCD Regulatory Standards
Asphaltine
Active Pumpjack Injection well
MW-18
Benzene 0.0068 mg/L
Toluene <0.01 mg/L
Ethylbenzene 0.0445 mg/L
Xylene 0.0311 mg/L
Pasture / Open Range Land
Benzene 0.2292 mg/L
Toluene 0.21 mg/L
Ethylbenzene 0.0242 mg/L
Xylene 0.0328 mg/L
MW-5
Benzene 0.0065 mg/L
Toluene 0.0039 mg/L
Ethylbenzene <0.001 mg/L
Xylene 0.0517 mg/L
Dynegy Pipeline
Benzene <0.001 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
MW-13
Sid Richardson Pipeline
Water
Duke Energy Pipeline
Duke Energy Pipeline
Asphaltine
MW-12
1.82'
MW-6
Benzene 0.1608 mg/L
Toluene <0.0400 mg/L
Ethylbenzene 0.022 mg/L
Xylene 0.0714 mg/L
MW-3
MW-10
Benzene 0.0656 mg/L
Toluene <0.04 mg/L
Ethylbenzene <0.02 mg/L
Xylene <0.04 mg/L
Plains Pipeline
4" Southern Union Pipelines
MW-11
Benzene 0.311 mg/L
Toluene <0.0400 mg/L
Ethylbenzene 0.0326 mg/L
Xylene <0.0400 mg/L
MW-14
Benzene 0.0037 mg/L
Toluene <0.002 mg/L
Ethylbenzene 0.0012 mg/L
Xylene <0.002 mg/L
Rice Operating Pipeline (Produced Water)
(Chevron) Texaco Pipeline
MW-7
Benzene 0.0011 mg/L
Toluene <0.0020 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
MW-1
Benzene 0.285 mg/L
Toluene <0.05 mg/L
Ethylbenzene 0.0425 mg/L
Xylene <0.05 mg/L
Benzene 0.0164 mg/L
Toluene 0.0025 mg/L
Ethylbenzene 0.0067 mg/L
Xylene 0.0060 mg/L
MW-17
MW-4
Benzene <0.001 mg/L
Toluene 0.0033 mg/L
Ethylbenzene 0.027 mg/L
Xylene 0.0362 mg/L
Site Access
Rice Operating MW-1
Pasture / Open Range Land
Benzene 0.128 mg/L
Toluene <0.04 mg/L
Ethylbenzene 0.0916 mg/L
Xylene 0.0566 mg/L
MW-16
MW-8
Benzene 0.005 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene 0.0033 mg/L
Caliche County Road
MW-9
Benzene 0.0011 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
Historical Drilling Pit
Benzene 0.6999 mg/L
Toluene <0.02 mg/L
Ethylbenzene 0.0789 mg/L
Xylene 0.0405 mg/L
MW-15
Old Drill Pad
Now used as a Facilities Pad
Abandoned Pipeline ?
120 60 0 60 120
Distance in Feet
Benzene 0.0018 mg/L
Toluene <0.002 mg/L
Ethylbenzene 0.0114 mg/L
Xylene 0.0078 mg/L
MW-19
NMOCD Reference # 1R-0085
Legend:
Monitor Well Location
Plugged and Abandoned Well
Pipeline
<0.001 Constituent Concentration (mg/L)
Excavation
Deep Excavation
(NG) Not Gauged
(NS) Not Sampled
Inferred PSH Extent
1.04' Thickness of PSH (in feet)
Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (6/24/09)
Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM
Basin Environmental Consulting
SE1/4 NE1/4 Sec 1 T20S R36E
32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'
Prep By: CS
Checked By: TKC
March 16, 2010


Note:
Bold Indicates Concentration Above NMOCD Regulatory Standards
Asphaltine
Active Pumpjack Injection well
MW-18
Benzene 0.0158 mg/L
Toluene 0.0053 mg/L
Ethylbenzene 0.1158 mg/L
Xylene 0.0858 mg/L
Pasture / Open Range Land
Benzene 0.5374 mg/L
Toluene 0.7818 mg/L
Ethylbenzene 0.096 mg/L
Xylene 0.1098 mg/L
MW-5
Benzene 0.0063 mg/L
Toluene 0.0062 mg/L
Ethylbenzene <0.001 mg/L
Xylene 0.0665 mg/L
Dynegy Pipeline
Benzene <0.001 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
MW-13
Sid Richardson Pipeline
Water
Duke Energy Pipeline
Duke Energy Pipeline
Asphaltine
MW-12
1.61'
MW-6
MW-3
Benzene 0.407 mg/L
Toluene <0.100 mg/L
Ethylbenzene 0.05 mg/L
Xylene 0.137 mg/L
MW-10
Benzene 0.0015 mg/L
Toluene <0.002 mg/L
Ethylbenzene <0.001 mg/L
Xylene <0.002 mg/L
4" Southern Union Pipelines
Plains Pipeline
MW-11
Benzene 0.0201 mg/L
Toluene <0.0200 mg/L
Ethylbenzene 0.003 mg/L
Xylene <0.002 mg/L
MW-14
Benzene 0.004 mg/L
Toluene 0.0025 mg/L
Ethylbenzene 0.0019 mg/L
Xylene <0.002 mg/L
Rice Operating Pipeline (Produced Water)
(Chevron) Texaco Pipeline
MW-7
Benzene 0.0051 mg/L
Toluene <0.0020 mg/L
Ethylbenzene 0.0012 mg/L
Xylene 0.0016 mg/L
MW-1
Benzene 0.7952 mg/L
Toluene <0.04 mg/L
Ethylbenzene 0.145 mg/L
Xylene 0.1024 mg/L
Benzene 0.1962 mg/L
Toluene <0.0400 mg/L
Ethylbenzene 0.0934 mg/L
Xylene 0.0696 mg/L
MW-17
MW-4
Benzene 0.0235 mg/L
Toluene 0.0176 mg/L
Ethylbenzene 0.0968 mg/L
Xylene 0.1538 mg/L
Site Access
Rice Operating MW-1
Pasture / Open Range Land
Benzene 0.2128 mg/L
Toluene <0.04 mg/L
Ethylbenzene 0.1666 mg/L
Xylene 0.0948 mg/L
MW-16
MW-8
Benzene 0.017 mg/L
Toluene <0.002 mg/L
Ethylbenzene 0.0025 mg/L
Xylene 0.0145 mg/L
Caliche County Road
MW-9
Benzene 0.6048 mg/L
Toluene <0.04 mg/L
Ethylbenzene 0.021 mg/L
Xylene <0.04 mg/L
Benzene 0.9894 mg/L
Toluene <0.04 mg/L
Ethylbenzene 0.1772 mg/L
Xylene 0.0776 mg/L
MW-15
Historical Drilling Pit
Old Drill Pad
Now used as a Facilities Pad
Abandoned Pipeline ?
Benzene 0.0024 mg/L
Toluene <0.002 mg/L
Ethylbenzene 0.0878 mg/L
Xylene 0.0498 mg/L
MW-19
120 60 0 60 120
Distance in Feet
NMOCD Reference # 1R-0085
Legend:
Monitor Well Location
Plugged and Abandoned Well
Pipeline
<0.001 Constituent Concentration (mg/L)
Excavation
Deep Excavation
(NG) Not Gauged
(NS) Not Sampled
Inferred PSH Extent
1.04' Thickness of PSH (in feet)
Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (9/09/09)
Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM
Basin Environmental Consulting
SE1/4 NE1/4 Sec 1 T20S R36E
32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'
Prep By: CS
Checked By: TKC
March 16, 2010



Legend:

- Monitor Well Location
- Plugged and Abandoned Well
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- Excavation
- Deep Excavation
- (NG) Not Gauged
- (NS) Not Sampled
- Inferred PSH Extent
- 1.04' Thickness of PSH (in feet)

Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/12/09)
Plains Marketing, L.P.
Red Byrd No. 1
Lea County, NM

Basin Environmental Consulting

SE1/4 NE1/4 Sec 1 T20S R36E		32° 36' 09.2"N 103° 17' 56.9"
Scale: 1" = 100'	Prep By: CS	Checked By: TKC
March 16, 2010		

Tables

TABLE 1

2009 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0085

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-1	01/06/09	3,567.59	-	33.56	0.00	3,534.03
MW-1	*02/26/09*	3,567.59	-	33.68	0.00	3,533.91
MW-1	03/31/09	3,567.59	-	33.80	0.00	3,533.79
MW-1	*06/23/09*	3,567.59	-	34.20	0.00	3,533.39
MW-1	07/14/09	3,567.59	-	34.06	0.00	3,533.53
MW-1	*09/08/09*	3,567.59	-	34.22	0.00	3,533.37
MW-1	10/29/09	Plugged and Abandoned				
MW-2	11/09/06	Plugged and Abandoned				
MW-3	01/06/09	3,567.55	-	33.27	0.00	3,534.28
MW-3	*02/26/09*	3,567.55	-	34.41	0.00	3,533.14
MW-3	03/31/09	3,567.55	-	33.53	0.00	3,534.02
MW-3	*06/23/09*	3,567.55	-	33.74	0.00	3,533.81
MW-3	07/14/09	3,567.55	-	33.79	0.00	3,533.76
MW-3	*09/08/09*	3,567.55	-	33.97	0.00	3,533.58
MW-3	10/29/09	Plugged and Abandoned				
MW-4	01/06/09	3,567.80	-	34.03	0.00	3,533.77
MW-4	*02/26/09*	3,567.80	-	34.14	0.00	3,533.66
MW-4	03/31/09	3,567.80	-	34.28	0.00	3,533.52
MW-4	*06/23/09*	3,567.80	-	34.46	0.00	3,533.34
MW-4	07/14/09	3,567.80	-	34.52	0.00	3,533.28
MW-4	*09/08/09*	3,567.80	-	34.71	0.00	3,533.09
MW-4	10/29/09	Plugged and Abandoned				
MW-5	01/06/09	3,569.50	-	34.77	0.00	3,534.73
MW-5	*02/26/09*	3,569.50	-	34.94	0.00	3,534.56
MW-5	03/31/09	3,569.50	-	35.05	0.00	3,534.45
MW-5	*06/23/09*	3,569.50	-	35.28	0.00	3,534.22
MW-5	07/14/09	3,569.50	-	35.32	0.00	3,534.18
MW-5	*09/08/09*	3,569.50	-	35.49	0.00	3,534.01
MW-5	10/29/09	Plugged and Abandoned				
MW-6	01/06/09	-	-	20.25	0.00	-
MW-6	*02/26/09*	-	-	20.25	0.00	-
MW-6	03/31/09	-	-	30.26	0.00	-
MW-6	*06/23/09*	-	-	30.41	0.00	-
MW-6	07/14/09	-	-	30.50	0.00	-
MW-6	*09/08/09*	-	-	37.50	0.00	-
MW-6	*11/12/09*	-	-	37.53	0.00	-
MW-7	01/06/09	3,567.53	-	33.53	0.00	3,534.00
MW-7	*02/26/09*	3,567.53	-	33.68	0.00	3,533.85
MW-7	03/31/09	3,567.53	-	33.80	0.00	3,533.73
MW-7	*06/23/09*	3,567.53	-	33.98	0.00	3,533.55
MW-7	07/14/09	3,567.53	-	34.04	0.00	3,533.49
MW-7	*09/08/09*	3,567.53	-	34.22	0.00	3,533.31
MW-7	*11/12/09*	3,567.53	-	34.38	0.00	3,533.15

TABLE 1

2009 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0085

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-8	01/06/09	3,567.79	-	34.30	0.00	3,533.49
MW-8	*02/26/09*	3,567.79	-	34.43	0.00	3,533.36
MW-8	03/31/09	3,567.79	-	34.52	0.00	3,533.27
MW-8	*06/23/09*	3,567.79	-	34.71	0.00	3,533.08
MW-8	07/14/09	3,567.79	-	35.75	0.00	3,532.04
MW-8	*09/08/09*	3,567.79	-	34.91	0.00	3,532.88
MW-8	10/29/09	Plugged and Abandoned				
MW-9	01/06/09	3,568.62	-	35.69	0.00	3,532.93
MW-9	*02/26/09*	3,568.62	-	35.81	0.00	3,532.81
MW-9	03/31/09	3,568.62	-	35.90	0.00	3,532.72
MW-9	*06/23/09*	3,568.62	-	36.10	0.00	3,532.52
MW-9	07/14/09	3,568.62	-	36.13	0.00	3,532.49
MW-9	*09/08/09*	3,568.62	-	36.32	0.00	3,532.30
MW-9	10/29/09	Plugged and Abandoned				
MW-10	01/06/09	3,570.11	-	35.66	0.00	3,534.45
MW-10	*02/26/09*	3,570.11	-	35.79	0.00	3,534.32
MW-10	03/31/09	3,570.11	-	35.92	0.00	3,534.19
MW-10	*06/23/09*	3,570.11	-	36.11	0.00	3,534.00
MW-10	07/14/09	3,570.11	-	36.18	0.00	3,533.93
MW-10	*09/08/09*	3,570.11	-	36.35	0.00	3,533.76
MW-10	10/29/09	Plugged and Abandoned				
MW-11	01/06/09	3,567.96	-	33.77	0.00	3,534.19
MW-11	*02/26/09*	3,567.96	-	33.83	0.00	3,534.13
MW-11	03/31/09	3,567.96	-	33.94	0.00	3,534.02
MW-11	*06/23/09*	3,567.96	-	34.13	0.00	3,533.83
MW-11	07/14/09	3,567.96	-	34.20	0.00	3,533.76
MW-11	*09/08/09*	3,567.96	-	34.38	0.00	3,533.58
MW-11	*11/12/09*	3,567.96	-	34.54	0.00	3,533.42
MW-12	01/11/08	Excavated around and cut down MW-12			0.00	-
MW-12	01/06/09	-	19.61	21.70	2.09	-
MW-12	01/13/09	-	19.66	21.54	1.88	-
MW-12	01/22/09	-	19.70	21.49	1.79	-
MW-12	01/29/09	-	16.73	18.60	1.87	-
MW-12	02/03/09	-	16.76	18.39	1.63	-
MW-12	02/12/09	-	16.76	18.49	1.73	-
MW-12	02/20/09	-	16.29	18.46	2.17	-
MW-12	*02/27/09*	-	20.59	22.13	1.54	-
MW-12	03/12/09	-	20.64	22.53	1.89	-
MW-12	03/19/09	-	30.69	32.44	1.75	-
MW-12	03/24/09	-	30.70	32.58	1.88	-
MW-12	03/31/09	-	30.72	32.62	1.90	-
MW-12	04/07/09	-	30.73	32.37	1.64	-
MW-12	04/15/09	-	30.75	32.39	1.64	-
MW-12	04/21/09	-	30.78	32.31	1.53	-

TABLE 1

2009 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0085

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-12	04/28/09	-	30.81	32.37	1.56	-
MW-12	05/05/09	-	30.81	32.38	1.57	-
MW-12	05/15/09	-	30.81	32.51	1.70	-
MW-12	05/19/09	-	30.86	32.39	1.53	-
MW-12	05/28/09	-	30.87	32.55	1.68	-
MW-12	06/01/09	-	31.90	32.46	0.56	-
MW-12	06/22/09	-	30.90	32.72	1.82	-
MW-12	*06/23/09*	-	30.90	32.72	1.82	-
MW-12	06/29/09	-	30.92	32.65	1.73	-
MW-12	07/08/09	-	31.05	32.17	1.12	-
MW-12	07/14/09	-	31.00	32.63	1.63	-
MW-12	07/27/09	-	36.94	38.45	1.51	-
MW-12	08/03/09	-	36.93	38.63	1.70	-
MW-12	08/11/09	-	36.97	38.66	1.69	-
MW-12	08/18/09	-	37.00	38.62	1.62	-
MW-12	08/28/09	-	37.02	38.70	1.68	-
MW-12	09/03/09	-	37.04	38.72	1.68	-
MW-12	*09/08/09*	-	37.03	38.64	1.61	-
MW-12	09/17/09	-	37.08	38.74	1.66	-
MW-12	09/22/09	-	37.12	38.68	1.56	-
MW-12	10/01/09	-	37.11	38.74	1.63	-
MW-12	10/06/09	-	37.15	38.72	1.57	-
MW-12	10/13/09	-	37.16	38.75	1.59	-
MW-12	10/20/09	-	37.16	38.68	1.52	-
MW-12	10/29/09	-	37.19	38.74	1.55	-
MW-12	11/03/09	-	37.25	38.62	1.45	-
MW-12	11/10/09	-	37.29	38.73	1.45	-
MW-12	*11/12/09*	-	37.25	38.21	0.96	-
MW-12	11/17/09	-	37.31	38.62	1.31	-
MW-12	11/24/09	-	37.34	38.64	1.30	-
MW-12	12/08/09	-	37.28	38.88	1.60	-
MW-12	12/17/09	-	37.32	38.91	1.59	-
MW-12	12/23/09	-	37.41	38.52	1.11	-
MW-12	12/29/09	-	37.39	38.96	1.57	-
MW-13	01/06/09	3,571.78	-	36.32	0.00	3,535.46
MW-13	*02/26/09*	3,571.78	-	36.51	0.00	3,535.27
MW-13	03/31/09	3,571.78	-	36.61	0.00	3,535.17
MW-13	*06/23/09*	3,571.78	-	37.85	0.00	3,533.93
MW-13	07/14/09	3,571.78	-	36.90	0.00	3,534.88
MW-13	*09/08/09*	3,571.78	-	37.12	0.00	3,534.66
MW-13	10/29/09	Plugged and Abandoned				
MW-14	01/06/09	3,571.69	-	37.41	0.00	3,534.28
MW-14	*02/26/09*	3,571.69	-	37.57	0.00	3,534.12
MW-14	03/31/09	3,571.69	-	37.67	0.00	3,534.02
MW-14	*06/23/09*	3,571.69	-	37.87	0.00	3,533.82
MW-14	07/14/09	3,571.69	-	37.92	0.00	3,533.77
MW-14	*09/08/09*	3,571.69	-	38.11	0.00	3,533.58

TABLE 1

2009 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0085

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW-14	10/29/09	Plugged and Abandoned				
MW-15	01/06/09	3,569.33	-	36.65	0.00	3,532.68
MW-15	*02/26/09*	3,569.33	-	36.14	0.00	3,533.19
MW-15	03/31/09	3,569.33	-	36.84	0.00	3,532.49
MW-15	*06/23/09*	3,569.33	-	37.01	0.00	3,532.32
MW-15	07/14/09	3,569.33	-	37.07	0.00	3,532.26
MW-15	*09/08/09*	3,569.33	-	37.32	0.00	3,532.01
MW-15	10/29/09	Plugged and Abandoned				
MW-16	01/06/09	3,568.89	-	36.15	0.00	3,532.74
MW-16	*02/26/09*	3,568.89	-	36.25	0.00	3,532.64
MW-16	03/31/09	3,568.89	-	36.35	0.00	3,532.54
MW-16	*06/23/09*	3,568.89	-	36.53	0.00	3,532.36
MW-16	07/14/09	3,568.89	-	36.60	0.00	3,532.29
MW-16	*09/08/09*	3,568.89	-	36.76	0.00	3,532.13
MW-16	*11/12/09*	3,568.89	-	36.94	0.00	3,531.95
MW-17	01/06/09	3,569.66	-	35.90	0.00	3,533.76
MW-17	*02/26/09*	3,569.66	-	36.04	0.00	3,533.62
MW-17	03/31/09	3,569.66	-	36.15	0.00	3,533.51
MW-17	*06/23/09*	3,569.66	-	36.35	0.00	3,533.31
MW-17	07/14/09	3,569.66	-	36.42	0.00	3,533.24
MW-17	*09/08/09*	3,569.66	-	36.59	0.00	3,533.07
MW-17	*11/12/09*	3,569.66	-	36.74	0.00	3,532.92
MW-18	01/06/09	3,571.17	-	36.06	0.00	3,535.11
MW-18	*02/26/09*	3,571.17	-	36.26	0.00	3,534.91
MW-18	03/31/09	3,571.17	-	36.39	0.00	3,534.78
MW-18	*06/23/09*	3,571.17	-	36.64	0.00	3,534.53
MW-18	07/14/09	3,571.17	-	36.71	0.00	3,534.46
MW-18	*09/08/09*	3,571.17	-	36.88	0.00	3,534.29
MW-18	*11/12/09*	3,571.17	-	37.01	0.00	3,534.16
MW-19	01/06/09	3,569.78	-	37.87	0.00	3,531.91
MW-19	*02/26/09*	3,569.78	-	37.95	0.00	3,531.83
MW-19	03/31/09	3,569.78	-	38.03	0.00	3,531.75
MW-19	*06/23/09*	3,569.78	-	38.19	0.00	3,531.59
MW-19	07/14/09	3,569.78	-	38.24	0.00	3,531.54
MW-19	*09/08/09*	3,569.78	-	38.41	0.00	3,531.37
MW-19	*11/12/09*	3,569.78	-	38.59	0.00	3,531.19

Elevations based on the North American Vertical Datum of 1929.

TABLE 2

CONCENTRATIONS OF BENZENE, BTEX, CHLORIDE AND TDS IN GROUNDWATER
PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: TNM-RED BYRD #1
NMOCD REF NO: 1RP-0085

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030						EPA 300	SM2540C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)	CHLORIDES (mg/L)	TDS (mg/L)
MW-1	02/27/09	0.363	0.004	0.0555	0.0516	0.0015	0.4756	7,440	11,200
	06/24/09	0.285	<0.0500	0.0425	<0.0500	<0.0250	0.3275	-	-
	09/09/09	0.7952	<0.0400	0.145	0.1024	<0.0200	1.0426	-	-
	10/29/09	Plugged and Abandoned							
MW-3	02/27/09	0.5818	<0.0400	0.0866	0.164	<0.0200	0.8324	-	13,400
	06/24/09	0.1608	<0.0400	0.022	0.0714	<0.0200	0.0934	-	-
	09/09/09	0.407	<0.100	0.05	0.137	<0.0500	0.594	-	-
	10/29/09	Plugged and Abandoned							
MW-4	02/27/09	0.01	0.012	0.1089	0.1041	0.0065	0.2415	-	11,300
	06/24/09	<0.0010	0.0033	0.027	0.0351	0.0011	0.0665	-	-
	09/09/09	0.0235	0.0176	0.0968	0.1289	0.0249	0.2917	-	-
	10/29/09	Plugged and Abandoned							
MW-5	02/27/09	0.0254	<0.0200	0.0107	0.0819	<0.0100	0.118	7,270	12,900
	06/24/09	0.0065	0.0039	<0.0010	0.0461	0.0056	0.0621	-	-
	09/09/09	0.0063	0.0062	<0.0010	0.058	0.0085	0.079	-	-
	10/29/09	Plugged and Abandoned							
MW-6	2/27/2009	0.0287	0.0168	0.0038	0.0025	<0.0010	0.0518	-	14,600
	06/24/09	0.2292	0.21	0.0242	<0.0400	0.0328	0.4962	-	-
	09/09/09	0.5374	0.7818	0.096	0.0832	0.0266	1.525	-	-
	11/12/09	0.0104	0.0152	0.0028	0.0033	0.0011	0.0328	-	-
MW-7	02/27/09	0.0039	<0.0020	<0.0010	<0.0020	0.0018	0.0057	-	14,200
	06/24/09	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	0.0011	-	-
	09/09/09	0.0051	<0.0020	0.0012	<0.0020	0.0016	0.0079	-	-
	11/12/09	0.0046	<0.0020	<0.0010	<0.0020	<0.0010	0.0046	-	-
MW-8	02/27/09	0.0344	0.0026	0.004	0.0229	0.0049	0.0688	7,630	11,900
	06/24/09	0.005	<0.0020	<0.0010	0.0033	<0.0010	0.0083	-	-
	09/09/09	0.017	<0.0020	0.0025	0.0113	0.0032	0.034	-	-
	10/29/09	Plugged and Abandoned							
MW-9	02/27/09	0.6513	0.0069	0.0233	0.0163	0.0189	0.7167	-	10,300
	06/24/09	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	0.0011	-	-
	09/09/09	0.6048	<0.0400	0.021	<0.0400	<0.0200	0.6258	-	-
	10/29/09	Plugged and Abandoned							
MW-10	02/27/09	0.0816	0.0046	0.0078	0.0124	<0.0010	0.1064	-	16,400
	6/24/09	0.0656	<0.0400	<0.0200	<0.0400	<0.0200	0.0656	-	-
	9/9/09	0.0015	<0.0020	<0.0010	<0.0020	<0.0010	0.0015	-	-
	10/29/09	Plugged and Abandoned							
MW-11	02/27/09	0.432	<0.0200	0.0566	0.027	<0.0100	0.5156	6,670	10,600
	06/24/09	0.311	<0.0400	0.0326	<0.0400	<0.0200	0.3436	-	-
	09/09/09	0.0201	<0.0020	0.003	<0.0020	<0.0010	0.0231	-	-
	11/12/09	0.0089	<0.0020	<0.0010	<0.0020	0.0017	0.0106	-	-
MW-12	02/27/09	NOT SAMPLED DUE TO PRESENCE OF PSH							
	06/24/09	NOT SAMPLED DUE TO PRESENCE OF PSH							
	09/09/09	NOT SAMPLED DUE TO PRESENCE OF PSH							
	11/12/09	0.0892	<0.0200	0.1112	0.1559	0.0132	0.3695	-	-

TABLE 2

CONCENTRATIONS OF BENZENE, BTEX, CHLORIDE AND TDS IN GROUNDWATER
PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: TNM-RED BYRD #1
NMOCD REF NO: 1RP-0085

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030						EPA 300	SM2540C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)	CHLORIDES (mg/L)	TDS (mg/L)
MW-13	02/27/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	5,130	9,910
	06/24/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	-	-
	09/09/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	-	-
	10/29/09	Plugged and Abandoned							
MW-14	02/27/09	0.0067	0.0033	0.0017	0.0045	0.0046	0.0208	-	12,500
	06/24/09	0.0037	<0.0020	0.0012	<0.0020	<0.0010	0.0049	-	-
	09/09/09	0.004	0.0025	0.0019	<0.0020	<0.0010	0.0084	-	-
	10/29/09	Plugged and Abandoned							
MW-15	02/27/09	0.9456	0.0034	0.1223	0.0594	0.007	1.1377	-	10,700
	06/24/09	0.6999	<0.0200	0.0789	0.0405	<0.0100	0.8193	-	-
	09/09/09	0.9894	<0.0400	0.1772	0.0776	<0.0200	1.2442	-	-
	10/29/09	Plugged and Abandoned							
MW-16	02/27/09	0.2908	0.0053	0.2225	0.1248	0.0067	0.6501	-	10,800
	06/24/09	0.128	<0.0400	0.0916	0.0566	<0.0200	0.2762	-	-
	09/09/09	0.2128	<0.0400	0.1666	0.0948	<0.0200	0.4742	-	-
	11/12/09	0.014	0.0053	0.0103	0.0086	0.0092	0.0474	-	-
MW-17	02/27/09	0.1826	0.0046	0.0631	0.0596	0.0021	0.312	5,460	7,200
	06/24/09	0.0164	0.0025	0.0067	0.0049	0.0011	0.0316	-	-
	09/09/09	0.1962	<0.0400	0.0934	0.0696	<0.0200	0.3592	-	-
	11/12/09	0.0039	<0.0020	0.0027	0.0021	<0.0010	0.0087	-	-
MW-18	02/27/09	0.0077	0.0073	0.0322	0.0258	0.0053	0.0783	6,520	10,200
	06/24/09	0.0068	<0.0100	0.0445	0.0311	<0.0050	0.0824	-	-
	09/09/09	0.0158	0.0053	0.1158	0.0858	<0.0010	0.2227	-	-
	11/12/09	0.0013	<0.0020	<0.0010	<0.0020	<0.0010	0.0013	-	-
MW-19	02/27/09	0.0027	<0.0020	0.0252	0.0159	0.004	0.0478	-	14,200
	06/24/09	0.0018	<0.0020	0.0114	0.0067	0.0011	0.021	-	-
	09/09/09	0.0024	<0.0020	0.0878	0.0498	<0.0010	0.14	-	-
	11/12/09	0.0064	<0.0020	0.0025	<0.0020	<0.0010	0.0089	-	-

TABLE 3

CONCENTRATIONS OF TPH IN GROUNDWATER

PLAINS MARKETING, L.P.
RED BYRD #1
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: TNM-RED BYRD #1
NMOCD REF NO: 1RP-0385

SAMPLE LOCATION	SAMPLE DATE	METHOD: EPA SW 846-8015 Modified			
		GRO C_6-C_{12} (mg/L)	DRO C_{12}-C_{28} (mg/L)	ORO C_{28}-C_{35} (mg/L)	TOTAL TPH C_6-C_{35} (mg/L)
MW-12	11/12/09	259	420	21.3	700.3

TABLE 4

CONCENTRATIONS OF POLY AROMATIC HYDROCARBONS IN GROUNDWATER

PLAINS MARKETING, L.P.
TNM Red Byrd # 1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R-0085

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[k]fluoranthene	Benzo[g,h,i]perylene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
MW - 6	11/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW - 7	11/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW - 11	11/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW - 12	11/12/09	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
MW - 16	11/12/09	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW - 17	11/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW - 18	11/12/09	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW - 19	11/12/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Appendices

Appendix A
Laboratory Reports

Analytical Report 326325

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd # 1

TNM-Red Byrd 1

06-MAR-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

06-MAR-09

Project Manager: **Jason Henry**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **326325**
Red Byrd # 1
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 326325. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 326325 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 326325

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-19	W	Feb-27-09 10:00		326325-001
MW-13	W	Feb-27-09 10:15		326325-002
MW-8	W	Feb-27-09 10:30		326325-003
MW-14	W	Feb-27-09 11:00		326325-004
MW-7	W	Feb-27-09 11:15		326325-005
MW-18	W	Feb-27-09 11:30		326325-006
MW-9	W	Feb-27-09 11:50		326325-007
MW-17	W	Feb-27-09 12:25		326325-008
MW-11	W	Feb-27-09 12:25		326325-009
MW-16	W	Feb-27-09 12:40		326325-010
MW-5	W	Feb-27-09 12:45		326325-011
MW-15	W	Feb-27-09 13:00		326325-012
MW-10	W	Feb-27-09 13:15		326325-013
MW-4	W	Feb-27-09 13:30		326325-014
MW-1	W	Feb-27-09 13:45		326325-015
MW-6	W	Feb-27-09 14:00		326325-016
MW-3	W	Feb-27-09 14:10		326325-017

Certificate of Analysis Summary 326325

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 06-MAR-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	326325-001		326325-002		326325-003		326325-004		326325-005		326325-006	
	Field Id:	MW-19		MW-13		MW-8		MW-14		MW-7		MW-18	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Feb-27-09 10:00		Feb-27-09 10:15		Feb-27-09 10:30		Feb-27-09 11:00		Feb-27-09 11:15		Feb-27-09 11:30	
BTEX by EPA 8021B	***Extracted:***	Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00	
	Analyzed:	Mar-03-09 13:08		Mar-03-09 13:29		Mar-03-09 13:49		Mar-03-09 14:10		Mar-03-09 15:16		Mar-03-09 15:36	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0027	0.0010	ND	0.0010	0.0344	0.0010	0.0067	0.0010	0.0039	0.0010	0.0077	0.0010
Toluene		ND	0.0020	ND	0.0020	0.0026	0.0020	0.0033	0.0020	ND	0.0020	0.0073	0.0020
Ethylbenzene		0.0252	0.0010	ND	0.0010	0.0040	0.0010	0.0017	0.0010	ND	0.0010	0.0322	0.0010
m,p-Xylenes		0.0159	0.0020	ND	0.0020	0.0229	0.0020	0.0045	0.0020	ND	0.0020	0.0258	0.0020
o-Xylene		0.0040	0.0010	ND	0.0010	0.0049	0.0010	0.0046	0.0010	0.0018	0.0010	0.0053	0.0010
Total Xylenes		0.0199	0.0010	ND	0.0010	0.0278	0.0010	0.0091	0.0010	0.0018	0.0010	0.0311	0.0010
Total BTEX		0.0478	0.0010	ND	0.0010	0.0688	0.0010	0.0208	0.0010	0.0057	0.0010	0.0783	0.0010

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 326325

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: *TNM-Red Byrd 1*
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 06-MAR-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	326325-007		326325-008		326325-009		326325-010		326325-011		326325-012	
	Field Id:	MW-9		MW-17		MW-11		MW-16		MW-5		MW-15	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Feb-27-09 11:50		Feb-27-09 12:25		Feb-27-09 12:25		Feb-27-09 12:40		Feb-27-09 12:45		Feb-27-09 13:00	
BTEX by EPA 8021B	*Extracted:*	Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00		Mar-03-09 11:00	
	Analyzed:	Mar-03-09 16:38		Mar-03-09 17:19		Mar-03-09 17:40		Mar-03-09 18:00		Mar-03-09 18:21		Mar-03-09 18:41	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.6513 D	0.0100	0.1826	0.0010	0.4320	0.0100	0.2908	0.0010	0.0254	0.0100	0.9456 D	0.0100
Toluene		0.0069	0.0020	0.0046	0.0020	ND	0.0200	0.0053	0.0020	ND	0.0200	0.0034	0.0020
Ethylbenzene		0.0233	0.0010	0.0631	0.0010	0.0566	0.0100	0.2225	0.0010	0.0107	0.0100	0.1223	0.0010
m,p-Xylenes		0.0163	0.0020	0.0596	0.0020	0.0270	0.0200	0.1248	0.0020	0.0819	0.0200	0.0594	0.0020
o-Xylene		0.0189	0.0010	0.0021	0.0010	ND	0.0100	0.0067	0.0010	ND	0.0100	0.0070	0.0010
Total Xylenes		0.0352	0.0010	0.0617	0.0010	0.027	0.0100	0.1315	0.0010	0.0819	0.0100	0.0664	0.0010
Total BTEX		0.7167	0.0010	0.312	0.0010	0.5156	0.0100	0.6501	0.0010	0.118	0.0100	1.1380	0.0010

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 326325

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 06-MAR-09
Project Manager: Brent Barron, II

Analysis Requested																
	Lab Id:	326325-013		326325-014		326325-015		326325-016		326325-017						
	Field Id:	MW-10		MW-4		MW-1		MW-6		MW-3						
	Depth:															
	Matrix:	WATER		WATER		WATER		WATER		WATER						
	Sampled:	Feb-27-09 13:15		Feb-27-09 13:30		Feb-27-09 13:45		Feb-27-09 14:00		Feb-27-09 14:10						
BTEX by EPA 8021B	***Extracted:***	Mar-03-09 11:00		Mar-05-09 09:00		Mar-03-09 11:00		Mar-04-09 08:00		Mar-04-09 08:00						
	Analyzed:	Mar-03-09 19:22		Mar-05-09 17:25		Mar-03-09 20:03		Mar-04-09 10:10		Mar-04-09 10:30						
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL					
Benzene		0.0816	0.0010	0.0100	0.0050	0.3630	0.0010	0.0287	0.0010	0.5818	0.0200					
Toluene		0.0046	0.0020	0.0120	0.0100	0.0040	0.0020	0.0168	0.0020	ND	0.0400					
Ethylbenzene		0.0078	0.0010	0.1089	0.0050	0.0555	0.0010	0.0038	0.0010	0.0866	0.0200					
m,p-Xylenes		0.0124	0.0020	0.1041	0.0100	0.0516	0.0020	0.0025	0.0020	0.1640	0.0400					
o-Xylene		ND	0.0010	0.0065	0.0050	0.0015	0.0010	ND	0.0010	ND	0.0200					
Total Xylenes		0.0124	0.0010	0.1106	0.0050	0.0531	0.0010	0.0025	0.0010	0.164	0.0200					
Total BTEX		0.1064	0.0010	0.2415	0.0050	0.4756	0.0010	0.0518	0.0010	0.8324	0.0200					

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751455 **Sample:** 525791-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 10:34

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 751455 **Sample:** 525791-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 10:55

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 751455 **Sample:** 525791-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 11:36

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 751455 **Sample:** 326325-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 13:08

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 751455 **Sample:** 326325-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 13:29

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751455 **Sample:** 326325-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 13:49

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 751455 **Sample:** 326325-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 14:10

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0382	0.0300	127	80-120	**

Lab Batch #: 751455 **Sample:** 326325-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 15:16

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 751455 **Sample:** 326325-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 15:36

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0388	0.0300	129	80-120	**
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 751455 **Sample:** 326325-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 16:38

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0362	0.0300	121	80-120	**
4-Bromofluorobenzene	0.0393	0.0300	131	80-120	**

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751455 **Sample:** 326325-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 17:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 751455 **Sample:** 326325-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 17:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 751455 **Sample:** 326325-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 18:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

Lab Batch #: 751455 **Sample:** 326325-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 18:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 751455 **Sample:** 326325-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 18:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0241	0.0300	80	80-120	
4-Bromofluorobenzene	0.0228	0.0300	76	80-120	**

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751455 **Sample:** 326325-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 19:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 751455 **Sample:** 326325-015 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 20:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 751455 **Sample:** 326325-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 20:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 751455 **Sample:** 326325-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/03/09 20:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 751501 **Sample:** 525822-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 08:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751501 **Sample:** 525822-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 09:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 751501 **Sample:** 525822-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 09:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 751501 **Sample:** 326325-016 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 10:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 751501 **Sample:** 326325-017 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 10:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 751501 **Sample:** 326084-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 18:02

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751501 **Sample:** 326084-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/04/09 18:23

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 751716 **Sample:** 525901-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 13:33

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0249	0.0300	83	80-120	

Lab Batch #: 751716 **Sample:** 525901-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 13:53

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 751716 **Sample:** 525901-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 14:36

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 751716 **Sample:** 326325-007 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 16:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0239	0.0300	80	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 326325,

Project ID: TNM-Red Byrd 1

Lab Batch #: 751716 **Sample:** 326325-012 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 17:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 751716 **Sample:** 326325-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/05/09 17:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0394	0.0300	131	80-120	**
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 326325 **Project ID:** TNM-Red Byrd 1

Analyst: ASA **Date Prepared:** *03/03/2009* ***Date Analyzed:*** *03/03/2009*

Lab Batch ID: 751455 **Sample:** 525791-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1115	112	0.1	0.1046	105	6	70-125	25	
Toluene	ND	0.1000	0.1114	111	0.1	0.1043	104	7	70-125	25	
Ethylbenzene	ND	0.1000	0.1107	111	0.1	0.1026	103	8	71-129	25	
m,p-Xylenes	ND	0.2000	0.2308	115	0.2	0.2146	107	7	70-131	25	
o-Xylene	ND	0.1000	0.1121	112	0.1	0.1044	104	7	71-133	25	

Analyst: ASA **Date Prepared:** 03/04/2009 **Date Analyzed:** 03/04/2009

Lab Batch ID: 751501 **Sample:** 525822-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1007	101	0.1	0.1016	102	1	70-125	25	
Toluene	ND	0.1000	0.1009	101	0.1	0.1017	102	1	70-125	25	
Ethylbenzene	ND	0.1000	0.1003	100	0.1	0.1020	102	2	71-129	25	
m,p-Xylenes	ND	0.2000	0.2099	105	0.2	0.2133	107	2	70-131	25	
o-Xylene	ND	0.1000	0.1023	102	0.1	0.1049	105	3	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 326325
Project ID: TNM-Red Byrd 1
Analyst: ASA
Date Prepared: 03/05/2009
Date Analyzed: 03/05/2009
Lab Batch ID: 751716
Sample: 525901-1-BKS
Batch #: 1
Matrix: Water
Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0973	97	0.1	0.0921	92	5	70-125	25	
Toluene	ND	0.1000	0.0966	97	0.1	0.0911	91	6	70-125	25	
Ethylbenzene	ND	0.1000	0.0964	96	0.1	0.0907	91	6	71-129	25	
m,p-Xylenes	ND	0.2000	0.2019	101	0.2	0.1899	95	6	70-131	25	
o-Xylene	ND	0.1000	0.0987	99	0.1	0.0933	93	6	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd # 1

Work Order # : 326325 **Project ID:** TNM-Red Byrd 1

Lab Batch ID: 751455 **QC- Sample ID:** 326325-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/03/2009 **Date Prepared:** 03/03/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0027	0.1000	0.0986	96	0.1000	0.0989	96	0	70-125	25	
Toluene	ND	0.1000	0.0956	96	0.1000	0.0954	95	0	70-125	25	
Ethylbenzene	0.0252	0.1000	0.1199	95	0.1000	0.1203	95	0	71-129	25	
m,p-Xylenes	0.0159	0.2000	0.2124	98	0.2000	0.2115	98	0	70-131	25	
o-Xylene	0.0040	0.1000	0.0949	91	0.1000	0.0962	92	1	71-133	25	

Lab Batch ID: 751501 **QC- Sample ID:** 326084-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/04/2009 **Date Prepared:** 03/04/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0987	0.1000	0.0987	0	0.1000	0.0971	0	2	70-125	25	X
Toluene	0.0967	0.1000	0.0967	0	0.1000	0.0952	0	2	70-125	25	X
Ethylbenzene	0.0952	0.1000	0.0952	0	0.1000	0.0937	0	2	71-129	25	X
m,p-Xylenes	0.1997	0.2000	0.1997	0	0.2000	0.1964	0	2	70-131	25	X
o-Xylene	0.0975	0.1000	0.0975	0	0.1000	0.0961	0	1	71-133	25	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 01 OF 02

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-2244

Fax No: (505) 396-1429

Sampler Signature: [signature]

e-mail: cstanley@basinenv.com

Project Name: Red Byrd #1

Project #: TNM - Red Byrd 1

Project Loc: Lea County, NM

PO #: PAA - Jason Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 326325

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO3	HCl VOC	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW = Drinking Water SL = Sludge, GW = Groundwater S = Soil/Solid, NP = Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH 8270			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-19			2/27/2009	1000		2	X		X						GW									X							X
02	MW-13			2/27/2009	1015		2	X		X						GW									X							X
03	MW-8			2/27/2009	1030		2	X		X						GW									X							X
04	MW-14			2/27/2009	1100		2	X		X						GW									X							X
05	MW-7			2/27/2009	1115		2	X		X						GW									X							X
06	MW-18			2/27/2009	1130		2	X		X						GW									X							X
07	MW-9			2/27/2009	1150		2	X		X						GW									X							X
08	MW-17			2/27/2009	1225		2	X		X						GW									X							X
09	MW-11			2/27/2009	1225		2	X		X						GW									X							X
10	MW-16			2/27/2009	1240		2	X		X						GW									X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/3/09	1024			
			Received by ELOT: Andrea [signature]	3/3/09	10:24

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 5.0 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 02 OF 02

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-2244 Fax No. (505) 396-1429

Sampler Signature: [signature] e-mail: cstanley@basinenv.com

Project Name: Red Byrd #1

Project #: TNM - Red Byrd 1

Project Loc: Lea County, NM

PO #: PAA - Jason Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 326325

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl VOA	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge, GW=Groundwater S=Soil/Solid, NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH 8270			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	MW-5			2/27/2009	1245		2	X		X						GW									X							X
12	MW-15			2/27/2009	1300		2	X		X						GW									X							X
13	MW-10			2/27/2009	1315		2	X		X						GW									X							X
14	MW-4			2/27/2009	1330		2	X		X						GW									X							X
15	MW-1			2/27/2009	1345		2	X		X						GW									X							X
16	MW-6			2/27/2009	1400		2	X		X						GW									X							X
17	MW-3			2/27/2009	1410		2	X		X						GW									X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/3/09	1024			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea [signature]	3/3/09	10:24

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 5.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Plains

Date/ Time: 3·3·09 10:24

Lab ID #: 326325

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 326327

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd # 1

TNM-Red Byrd 1

09-MAR-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

09-MAR-09

Project Manager: **Jason Henry**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **326327**
Red Byrd # 1
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 326327. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 326327 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 326327

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-19	W	Feb-27-09 10:00		326327-001
MW-13	W	Feb-27-09 10:15		326327-002
MW-8	W	Feb-27-09 10:30		326327-003
MW-14	W	Feb-27-09 11:00		326327-004
MW-7	W	Feb-27-09 11:15		326327-005
MW-18	W	Feb-27-09 11:30		326327-006
MW-9	W	Feb-27-09 11:50		326327-007
MW-17	W	Feb-27-09 12:25		326327-008
MW-11	W	Feb-27-09 12:25		326327-009
MW-16	W	Feb-27-09 12:40		326327-010
MW-5	W	Feb-27-09 12:45		326327-011
MW-15	W	Feb-27-09 13:00		326327-012
MW-10	W	Feb-27-09 13:15		326327-013
MW-4	W	Feb-27-09 13:30		326327-014
MW-1	W	Feb-27-09 13:45		326327-015
MW-6	W	Feb-27-09 14:00		326327-016
MW-3	W	Feb-27-09 14:10		326327-017

Certificate of Analysis Summary 326327

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 09-MAR-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	326327-001		326327-002		326327-003		326327-004		326327-005		326327-006	
	Field Id:	MW-19		MW-13		MW-8		MW-14		MW-7		MW-18	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Feb-27-09 10:00		Feb-27-09 10:15		Feb-27-09 10:30		Feb-27-09 11:00		Feb-27-09 11:15		Feb-27-09 11:30	
Anions by EPA 300	***Extracted:***												
	Analyzed:	Mar-06-09 03:36		Mar-03-09 11:41		Mar-03-09 11:41						Mar-03-09 11:41	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL					mg/L	RL
Chloride		8530	250	5130	100	7630	100					6520	100
TDS by SM2540C	***Extracted:***												
	Analyzed:	Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Total dissolved solids		14200	5.00	9910	5.00	11900	5.00	12500	5.00	14200	5.00	10200	5.00

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 326327

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 09-MAR-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	326327-007		326327-008		326327-009		326327-010		326327-011		326327-012	
	Field Id:	MW-9		MW-17		MW-11		MW-16		MW-5		MW-15	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Feb-27-09 11:50		Feb-27-09 12:25		Feb-27-09 12:25		Feb-27-09 12:40		Feb-27-09 12:45		Feb-27-09 13:00	
Anions by EPA 300	*Extracted:*												
	Analyzed:			Mar-03-09 11:41		Mar-03-09 11:41				Mar-03-09 11:41			
	Units/RL:			mg/L	RL	mg/L	RL			mg/L	RL		
Chloride				5460	100	6670	100			7270	100		
TDS by SM2540C	*Extracted:*												
	Analyzed:	Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Total dissolved solids		10300	5.00	7200	5.00	10600	5.00	10800	5.00	12900	5.00	10700	5.00

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 326327

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Mar-03-09 10:24 am
Report Date: 09-MAR-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	326327-013		326327-014		326327-015		326327-016		326327-017	
	Field Id:	MW-10		MW-4		MW-1		MW-6		MW-3	
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER		WATER	
	Sampled:	Feb-27-09 13:15		Feb-27-09 13:30		Feb-27-09 13:45		Feb-27-09 14:00		Feb-27-09 14:10	
Anions by EPA 300	***Extracted:***										
	Analyzed:					Mar-03-09 11:41					
	Units/RL:					mg/L	RL				
Chloride						7440	100				
TDS by SM2540C	***Extracted:***										
	Analyzed:	Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18		Mar-03-09 16:18	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Total dissolved solids		16400	5.00	11300	5.00	11200	5.00	14600	5.00	13400	5.00

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Outside XENCO's scope of NELAC Accreditation.

Blank Spike Recovery

Project Name: Red Byrd # 1

Work Order #: 326327 **Project ID:** TNM-Red Byrd 1

Lab Batch #: 751380 **Sample:** 751380-1-BKS **Matrix:** Water

Date Analyzed: 03/03/2009 **Date Prepared:** 03/03/2009 **Analyst:** LATCOR

Reporting Units: mg/L **Batch #:** 1

Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	10.8	108	90-110	

Lab Batch #: 751696 **Sample:** 751696-1-BKS **Matrix:** Water

Date Analyzed: 03/06/2009 **Date Prepared:** 03/06/2009 **Analyst:** LATCOR

Reporting Units: mg/L **Batch #:** 1

Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	9.28	93	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS Recoveries

Project Name: Red Byrd # 1

Work Order #: 326327

Lab Batch #: 751380 **Project ID:** TNM-Red Byrd 1

Date Analyzed: 03/03/2009 **Date Prepared:** 03/03/2009 **Analyst:** LATCOR

QC- Sample ID: 326327-002 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	5130	2000	7460	117	80-120	

Lab Batch #: 751696

Date Analyzed: 03/06/2009 **Date Prepared:** 03/06/2009 **Analyst:** LATCOR

QC- Sample ID: 326618-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	434	200	665	116	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Sample Duplicate Recovery

Project Name: Red Byrd # 1

Work Order #: 326327

Lab Batch #: 751380 **Project ID:** TNM-Red Byrd I
Date Analyzed: 03/03/2009 **Date Prepared:** 03/03/2009 **Analyst:** LATCOR
QC- Sample ID: 326327-002 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	5130	5280	3	20	

Lab Batch #: 751696
Date Analyzed: 03/06/2009 **Date Prepared:** 03/06/2009 **Analyst:** LATCOR
QC- Sample ID: 326618-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	434	414	5	20	

Lab Batch #: 751476
Date Analyzed: 03/03/2009 **Date Prepared:** 03/03/2009 **Analyst:** WRU
QC- Sample ID: 326237-002 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

TDS by SM2540C	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	524	592	12	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 01 OF 02 Project Name: Red Byrd #1

Company Name: Basin Environmental Service Technologies, LLC Project #: TNM - Red Byrd 1

Company Address: P. O. Box 301 Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA - Jason Henry

Telephone No: (505) 441-2244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: CS for Lance Pope email: cstanley@basinenv.com

(lab use only)
ORDER #: 320327

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW – Drinking Water S – Soil/Solid GW – Groundwater W – Wastewater Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	TOTAL: TDS	Chloride E300.0	PAH 8270			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-19			2/27/2009	1000		1	X								GW												X						X
02	MW-13			2/27/2009	1015		1	X								GW												X	X					X
03	MW-8			2/27/2009	1030		1	X								GW												X	X					X
04	MW-14			2/27/2009	1100		1	X								GW												X						X
05	MW-7			2/27/2009	1115		1	X								GW												X						X
06	MW-18			2/27/2009	1130		1	X								GW												X	X					X
07	MW-9			2/27/2009	1150		1	X								GW												X						X
08	MW-17			2/27/2009	1225		1	X								GW												X	X					X
09	MW-11			2/27/2009	1225		1	X								GW												X	X					X
10	MW-16			2/27/2009	1240		1	X								GW												X						X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/3/09	1024			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: [signature]	3/3/09	10:24

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered by Sampler/Client Rep.? N
by Courier? UPS OHL FedEx Lone Star
250 ml poly
Temperature Upon Receipt: 5.0 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 02 OF 02

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-2244 Fax No: (505) 396-1429

Sampler Signature: [signature] e-mail: cstanley@basinenv.com

Project Name: Red Byrd #1

Project #: TNM - Red Byrd 1

Project Loc: Lea County, NM

PO #: PAA - Jason Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 326327

Analyze For: TCLP: / TOTAL: X

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW = Drinking Water SL = Sludge, GW = Groundwater S = Soil/Solid, NP = Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	TDS	Chlorides E300.0	PAH 8270			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	MW-5			2/27/2009	1245		1	X								GW										X	X					X
12	MW-15			2/27/2009	1300		1	X								GW										X						X
13	MW-10			2/27/2009	1315		1	X								GW										X						X
14	MW-4			2/27/2009	1330		1	X								GW										X						X
15	MW-1			2/27/2009	1345		1	X								GW										X	X					X
16	MW-6			2/27/2009	1400		1	X								GW										X						X
17	MW-3			2/27/2009	1410		1	X								GW										X						X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/3/09	1024			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			[signature]	3/3/09	10:24

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
250ml poly
Temperature Upon Receipt: 5.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Brain | Plains

Date/ Time: 3.3.09 10.24

Lab ID #: 326327

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Gracie Avalos

From: Curt Stanley [cstanley@basinenv.com]
Sent: Wednesday, March 04, 2009 5:57 PM
To: Gracie Avalos
Cc: Camille Bryant w/Basin; Jason Henry
Subject: Re: WO 326327 / Red Byrd #1

Gracie,

Please run chloride by E300 on MW-19

Thank you
Curt Stanley

On Mar 4, 2009, at 4:05 PM, "Gracie Avalos" <gracie.avalos@xenco.com> wrote:

Gracie Avalos
Project Assistant
Xenco Labs - Odessa
432-563-1800 Office
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gracie.avalos@xenco.com

<2009_326327_TNM-Red_Byrd_1.pdf>

3/5/2009

Analytical Report 336446

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd # 1

TNM_Red Byrd # 1

07-JUL-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX
Corpus Christi, TX T104704370-08-TX - Dallas, TX T104704295-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

Arixona certification numbers:
Houston, TX AZ0738

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

07-JUL-09

Project Manager: **Jason Henry**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **336446**
Red Byrd # 1
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 336446. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 336446 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 336446

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-8	W	Jun-24-09 08:00		336446-001
MW-19	W	Jun-24-09 08:10		336446-002
MW-15	W	Jun-24-09 08:20		336446-003
MW-9	W	Jun-24-09 08:30		336446-004
MW-4	W	Jun-24-09 08:40		336446-005
MW-13	W	Jun-24-09 08:50		336446-006
MW-14	W	Jun-24-09 09:00		336446-007
MW-10	W	Jun-24-09 09:10		336446-008
MW-1	W	Jun-24-09 09:20		336446-009
MW-7	W	Jun-24-09 09:40		336446-010
MW-16	W	Jun-24-09 09:50		336446-011
MW-3	W	Jun-24-09 10:00		336446-012
MW-5	W	Jun-24-09 10:10		336446-013
MW-17	W	Jun-24-09 10:20		336446-014
MW-11	W	Jun-24-09 10:30		336446-015
MW-6	W	Jun-24-09 10:40		336446-016
MW-18	W	Jun-24-09 11:30		336446-017

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Red Byrd # 1

Project ID:	*TNM_Red Byrd # 1*	*Report Date:*	*07-JUL-09*
Work Order Number:	*336446*	*Date Received:*	*06/25/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-763989 BTEX-MTBE EPA 8021B
SW8021BM

Batch 763989, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 336446-002.

4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis.
Samples affected are: 532811-1-BLK,336446-003.
Matrix interferences is suspected.

Batch: LBA-764292 BTEX-MTBE EPA 8021B
SW8021BM

Batch 764292, 4-Bromofluorobenzene recovered below QC limits QC Data not confirmed by re-analysis. Samples affected are: 532981-1-BLK.

Batch: LBA-764349 BTEX-MTBE EPA 8021B
SW8021BM

Batch 764349, Toluene, o-Xylene recovered below QC limits in the Matrix Spike.
Samples affected are: 336446-014, -008, -010, -011, -012, -016, -009, -015, 336446-014 S
The Laboratory Control Sample for Toluene, o-Xylene is within laboratory Control Limits.

SW8021BM

Batch 764349, 1,4-Difluorobenzene recovered below QC limits . data not confirmed by re-analysis
Samples affected are: 336446-011. Matrix interferences is suspected.

4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis.
Samples affected are: 533007-1-BLK,336446-004, 336446-010,336446-008,336446-009,336446-016,336446-011,336446-012,336446-015. Matrix interferences is suspected in sample surrogate failures.

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Red Byrd # 1

Project ID:	*TNM_Red Byrd # 1*	*Report Date:*	*07-JUL-09*
Work Order Number:	*336446*	*Date Received:*	*06/25/2009*

Batch: LBA-764532 BTEX-MTBE EPA 8021B
SW8021BM

Batch 764532, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 336446-005,336446-007, 336446-013.

4-Bromofluorobenzene recovered below QC limits; QC Data not confirmed by re-analysis.
Samples affected are: 533123-1-BLK

4-Bromofluorobenzene recovered above QC limits; QC data not confirmed by re-analysis. Matrix interferences is suspected; Sample Data confirmed by re-analysis.
Sample affected are: 533123-1-BKS, 533123-1-BSD, 336617-004 S, 336617-004 SD, 336446-013

Certificate of Analysis Summary 336446

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM_Red Byrd # 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Jun-25-09 09:05 am
Report Date: 07-JUL-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	336446-001		336446-002		336446-003		336446-004		336446-005		336446-006	
	Field Id:	MW-8		MW-19		MW-15		MW-9		MW-4		MW-13	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Jun-24-09 08:00		Jun-24-09 08:10		Jun-24-09 08:20		Jun-24-09 08:30		Jun-24-09 08:40		Jun-24-09 08:50	
BTEX by EPA 8021B	***Extracted:***	Jul-01-09 15:45		Jun-27-09 09:00		Jun-27-09 09:00		Jun-27-09 09:00		Jul-02-09 17:15		Jul-02-09 17:15	
	Analyzed:	Jul-01-09 20:50		Jun-30-09 02:44		Jun-30-09 04:32		Jul-01-09 12:34		Jul-03-09 19:29		Jul-03-09 19:51	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0050	0.0010	0.0018	0.0010	0.6999	0.0100	0.0011	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0200	ND	0.0020	0.0033	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	0.0114	0.0010	0.0789	0.0100	ND	0.0010	0.0270	0.0010	ND	0.0010
m,p-Xylenes		0.0033	0.0020	0.0067	0.0020	0.0405	0.0200	ND	0.0020	0.0351	0.0020	ND	0.0020
o-Xylene		ND	0.0010	0.0011	0.0010	ND	0.0100	ND	0.0010	0.0011	0.0010	ND	0.0010
Total Xylenes		0.0033	0.0010	0.0078	0.0010	0.0405	0.0100	ND	0.0010	0.0362	0.0010	ND	0.0010
Total BTEX		0.0083	0.0010	0.021	0.0010	0.8193	0.0100	0.0011	0.0010	0.0665	0.0010	ND	0.0010

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 336446

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM_Red Byrd # 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Jun-25-09 09:05 am
Report Date: 07-JUL-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	336446-007		336446-008		336446-009		336446-010		336446-011		336446-012	
	Field Id:	MW-14		MW-10		MW-1		MW-7		MW-16		MW-3	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Jun-24-09 09:00		Jun-24-09 09:10		Jun-24-09 09:20		Jun-24-09 09:40		Jun-24-09 09:50		Jun-24-09 10:00	
BTEX by EPA 8021B	***Extracted:***	Jul-02-09 17:15		Jun-27-09 09:00		Jun-27-09 09:00		Jun-27-09 09:00		Jun-27-09 09:00		Jun-27-09 09:00	
	Analyzed:	Jul-03-09 20:56		Jul-01-09 13:38		Jul-01-09 14:00		Jul-01-09 11:51		Jul-01-09 14:21		Jul-01-09 14:43	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0037	0.0010	0.0656	0.0200	0.2850	0.0250	0.0011	0.0010	0.1280	0.0200	0.1608	0.0200
Toluene		ND	0.0020	ND	0.0400	ND	0.0500	ND	0.0020	ND	0.0400	ND	0.0400
Ethylbenzene		0.0012	0.0010	ND	0.0200	0.0425	0.0250	ND	0.0010	0.0916	0.0200	0.0220	0.0200
m,p-Xylenes		ND	0.0020	ND	0.0400	ND	0.0500	ND	0.0020	0.0566	0.0400	0.0714	0.0400
o-Xylene		ND	0.0010	ND	0.0200	ND	0.0250	ND	0.0010	ND	0.0200	ND	0.0200
Total Xylenes		ND	0.0010	ND	0.0200	ND	0.0250	ND	0.0010	0.0566	0.0200	0.0714	0.0200
Total BTEX		0.0049	0.0010	0.0656	0.0200	0.3275	0.0250	0.0011	0.0010	0.2762	0.0200	0.2542	0.0200

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 336446

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM_Red Byrd # 1
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Jun-25-09 09:05 am
Report Date: 07-JUL-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	336446-013		336446-014		336446-015		336446-016		336446-017	
	Field Id:	MW-5		MW-17		MW-11		MW-6		MW-18	
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER		WATER	
	Sampled:	Jun-24-09 10:10		Jun-24-09 10:20		Jun-24-09 10:30		Jun-24-09 10:40		Jun-24-09 11:30	
BTEX by EPA 8021B	*Extracted:*	Jul-02-09 17:15		Jun-27-09 09:00		Jun-27-09 09:00		Jun-27-09 09:00		Jul-02-09 17:15	
	Analyzed:	Jul-03-09 21:17		Jul-01-09 12:12		Jul-01-09 16:30		Jul-01-09 16:53		Jul-03-09 23:48	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0065	0.0010	0.0164	0.0010	0.3110	0.0200	0.2292	0.0200	0.0068	0.0050
Toluene		0.0039	0.0020	0.0025	0.0020	ND	0.0400	0.2100	0.0400	ND	0.0100
Ethylbenzene		ND	0.0010	0.0067	0.0010	0.0326	0.0200	0.0242	0.0200	0.0445	0.0050
m,p-Xylenes		0.0461	0.0020	0.0049	0.0020	ND	0.0400	ND	0.0400	0.0311	0.0100
o-Xylene		0.0056	0.0010	0.0011	0.0010	ND	0.0200	0.0328	0.0200	ND	0.0050
Total Xylenes		0.0517	0.0010	0.006	0.0010	ND	0.0200	0.0328	0.0200	0.0311	0.0050
Total BTEX		0.0621	0.0010	0.0316	0.0010	0.3436	0.0200	0.4962	0.0200	0.0824	0.0050

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 763989 **Sample:** 532811-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/29/09 19:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 763989 **Sample:** 532811-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/29/09 20:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 763989 **Sample:** 532811-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/29/09 21:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0194	0.0300	65	80-120	*

Lab Batch #: 763989 **Sample:** 336446-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/30/09 02:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0232	0.0300	77	80-120	*
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 763989 **Sample:** 336446-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/30/09 04:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0194	0.0300	65	80-120	*

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 763989 **Sample:** 336104-009 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/30/09 05:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 763989 **Sample:** 336104-009 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/30/09 05:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 764292 **Sample:** 532981-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 19:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 764292 **Sample:** 532981-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 19:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0157	0.0300	52	80-120	*

Lab Batch #: 764292 **Sample:** 336446-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 20:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764292 **Sample:** 336446-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 21:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 764292 **Sample:** 336446-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 21:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 764349 **Sample:** 533007-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 10:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 764349 **Sample:** 533007-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 10:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 764349 **Sample:** 533007-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 11:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0157	0.0300	52	80-120	*

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764349 **Sample:** 336446-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 11:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0209	0.0300	70	80-120	*

Lab Batch #: 764349 **Sample:** 336446-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 12:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0239	0.0300	80	80-120	

Lab Batch #: 764349 **Sample:** 336446-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 12:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0175	0.0300	58	80-120	*

Lab Batch #: 764349 **Sample:** 336446-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 13:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0188	0.0300	63	80-120	*

Lab Batch #: 764349 **Sample:** 336446-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 14:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0183	0.0300	61	80-120	*

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764349 **Sample:** 336446-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 14:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0238	0.0300	79	80-120	*
4-Bromofluorobenzene	0.0178	0.0300	59	80-120	*

Lab Batch #: 764349 **Sample:** 336446-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 14:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0234	0.0300	78	80-120	*

Lab Batch #: 764349 **Sample:** 336446-015 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 16:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0188	0.0300	63	80-120	*

Lab Batch #: 764349 **Sample:** 336446-016 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 16:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0175	0.0300	58	80-120	*

Lab Batch #: 764349 **Sample:** 336446-014 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 17:58

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764349 **Sample:** 336446-014 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/01/09 18:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 764532 **Sample:** 533123-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 10:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0366	0.0300	122	80-120	*

Lab Batch #: 764532 **Sample:** 533123-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 10:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0366	0.0300	122	80-120	*

Lab Batch #: 764532 **Sample:** 533123-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 16:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0185	0.0300	62	80-120	*

Lab Batch #: 764532 **Sample:** 336446-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 19:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0215	0.0300	72	80-120	**
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764532 **Sample:** 336446-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 19:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 764532 **Sample:** 336446-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 20:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0231	0.0300	77	80-120	**
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 764532 **Sample:** 336446-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 21:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0233	0.0300	78	80-120	**
4-Bromofluorobenzene	0.0378	0.0300	126	80-120	**

Lab Batch #: 764532 **Sample:** 336446-017 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/03/09 23:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 764532 **Sample:** 336617-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/04/09 00:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0371	0.0300	124	80-120	*

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 336446,

Project ID: TNM_Red Byrd # 1

Lab Batch #: 764532 **Sample:** 336617-004 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/04/09 00:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0371	0.0300	124	80-120	*

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Red Byrd # 1

Work Order #: 336446 **Project ID:** TNM_Red Byrd # 1

Lab Batch #: 764292 **Sample:** 532981-1-BKS **Matrix:** Water

Date Analyzed: 07/01/2009 **Date Prepared:** 07/01/2009 **Analyst:** ASA

Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Benzene	ND	0.1000	0.1037	104	70-125	
Toluene	ND	0.1000	0.1011	101	70-125	
Ethylbenzene	ND	0.1000	0.1065	107	71-129	
m,p-Xylenes	ND	0.2000	0.2143	107	70-131	
o-Xylene	ND	0.1000	0.1018	102	71-133	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 336446 **Project ID:** TNM_Red Byrd # 1

Analyst: ASA **Date Prepared:** 06/27/2009 **Date Analyzed:** 06/29/2009

Lab Batch ID: 763989 **Sample:** 532811-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0956	96	0.1	0.1083	108	12	70-125	25	
Toluene	ND	0.1000	0.0927	93	0.1	0.1055	106	13	70-125	25	
Ethylbenzene	ND	0.1000	0.0963	96	0.1	0.1103	110	14	71-129	25	
m,p-Xylenes	ND	0.2000	0.1941	97	0.2	0.2210	111	13	70-131	25	
o-Xylene	ND	0.1000	0.0926	93	0.1	0.1055	106	13	71-133	25	

Analyst: ASA **Date Prepared:** 06/27/2009 **Date Analyzed:** 07/01/2009

Lab Batch ID: 764349 **Sample:** 533007-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0903	90	0.1	0.1084	108	18	70-125	25	
Toluene	ND	0.1000	0.0873	87	0.1	0.1051	105	19	70-125	25	
Ethylbenzene	ND	0.1000	0.0896	90	0.1	0.1083	108	19	71-129	25	
m,p-Xylenes	ND	0.2000	0.1800	90	0.2	0.2160	108	18	70-131	25	
o-Xylene	ND	0.1000	0.0868	87	0.1	0.1045	105	19	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 336446
Project ID: TNM_Red Byrd # 1
Analyst: BRB
Date Prepared: 07/02/2009
Date Analyzed: 07/03/2009
Lab Batch ID: 764532
Sample: 533123-1-BKS
Batch #: 1
Matrix: Water
Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1099	110	0.1	0.1082	108	2	70-125	25	
Toluene	ND	0.1000	0.1053	105	0.1	0.1041	104	1	70-125	25	
Ethylbenzene	ND	0.1000	0.1187	119	0.1	0.1175	118	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2425	121	0.2	0.2397	120	1	70-131	25	
o-Xylene	ND	0.1000	0.1142	114	0.1	0.1132	113	1	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd # 1

Work Order # : 336446 **Project ID:** TNM_Red Byrd # 1

Lab Batch ID: 763989 **QC- Sample ID:** 336104-009 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 06/30/2009 **Date Prepared:** 06/27/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0969	97	0.1000	0.0993	99	2	70-125	25	
Toluene	ND	0.1000	0.0935	94	0.1000	0.0963	96	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0955	96	0.1000	0.0993	99	4	71-129	25	
m,p-Xylenes	ND	0.2000	0.1821	91	0.2000	0.1908	95	5	70-131	25	
o-Xylene	ND	0.1000	0.0897	90	0.1000	0.0934	93	4	71-133	25	

Lab Batch ID: 764292 **QC- Sample ID:** 336446-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/01/2009 **Date Prepared:** 07/01/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0050	0.1000	0.0869	82	0.1000	0.0919	87	6	70-125	25	
Toluene	ND	0.1000	0.0778	78	0.1000	0.0820	82	5	70-125	25	
Ethylbenzene	ND	0.1000	0.0845	85	0.1000	0.0890	89	5	71-129	25	
m,p-Xylenes	0.0033	0.2000	0.1723	85	0.2000	0.1814	89	5	70-131	25	
o-Xylene	ND	0.1000	0.0782	78	0.1000	0.0833	83	6	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd # 1

Work Order # : 336446 **Project ID:** TNM_Red Byrd # 1

Lab Batch ID: 764349 **QC- Sample ID:** 336446-014 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/01/2009 **Date Prepared:** 06/27/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0164	0.1000	0.0893	73	0.1000	0.0977	81	9	70-125	25	
Toluene	0.0025	0.1000	0.0716	69	0.1000	0.0792	77	10	70-125	25	X
Ethylbenzene	0.0067	0.1000	0.0796	73	0.1000	0.0884	82	10	71-129	25	
m,p-Xylenes	0.0049	0.2000	0.1492	72	0.2000	0.1662	81	11	70-131	25	
o-Xylene	0.0011	0.1000	0.0685	67	0.1000	0.0778	77	13	71-133	25	X

Lab Batch ID: 764532 **QC- Sample ID:** 336617-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/04/2009 **Date Prepared:** 07/02/2009 **Analyst:** BRB

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0890	89	0.1000	0.0933	93	5	70-125	25	
Toluene	ND	0.1000	0.0850	85	0.1000	0.0893	89	5	70-125	25	
Ethylbenzene	ND	0.1000	0.0962	96	0.1000	0.1012	101	5	71-129	25	
m,p-Xylenes	ND	0.2000	0.1959	98	0.2000	0.2063	103	5	70-131	25	
o-Xylene	ND	0.1000	0.0915	92	0.1000	0.0953	95	4	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

PAGE 01 OF 02

Project Manager: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: 2800 Plains Hwy
City/State/Zip: Lovington, NM 88260
Telephone No: (575) 605-7210 Fax No: (505) 396-1429
Sampler Signature: A. Stanley for C.L. Reynolds e-mail: clbryant@basin-consulting.com

Project Name: Red Byrd #1
Project #: TNM_Red Byrd #1
Project Loc: Lea County, NM
PO #: PAA - J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 336446

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (VOA X 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: GW=Drinking Water, GW=Groundwater, SW=Surface Water, SL=Sludge, NP=Non-Potable, Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	TOTAL: RCI	N.O.R.M	PAH	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-8			6/24/2009	800		1	X		X						GW									X							X
02	MW-19			6/24/2009	810		1	X		X						GW									X							X
03	MW-15			6/24/2009	820		1	X		X						GW									X							X
04	MW-9			6/24/2009	830		1	X		X						GW									X							X
05	MW-4			6/24/2009	840		1	X		X						GW									X							X
06	MW-13			6/24/2009	850		1	X		X						GW									X							X
07	MW-14			6/24/2009	900		1	X		X						GW									X							X
08	MW-10			6/24/2009	910		1	X		X						GW									X							X
09	MW-1			6/24/2009	920		1	X		X						GW									X							X
10	MW-7			6/24/2009	940		1	X		X						GW									X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
A. Stanley	6/25/09	0905			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sam	Date 6-25-09	Time 9:05

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep.? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
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PAGE 02 OF 02

Project Manager: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: 2800 Plains Hwy
City/State/Zip: Lovington, NM 88260
Telephone No: (575) 605-7210 Fax No: (505) 396-1429
Sampler Signature: for C. L. Reynolds
Project Name: Red Byrd #1
Project #: TNM_Red Byrd #1
Project Loc: Lea County, NM
PO #: PAA - J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES
E-mail: cjbryant@basin-consulting.com

(lab use only)
ORDER #: 336446

Analyze For:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (VOA x 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	Name (Part)	Other (Specify)	Matrix: GW=Drinking Water SL=Sludge SW=Surface Water S=Soil/Solid NP=Non-Potable Specify Other	TCLP: TPH: 418.1 8015M 8015B	TCLP: TPH: TX 1005 TX 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, Alkalinity)	TCLP: SAR / ESP / CEC	TCLP: Metals: As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX by (8260B) or BTEX 8260	RCI	N O R M	PAH	EPA Point Flow Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 Hrs	Standard TAT
11	MW-16			6/24/2009	950		1	X		X						GW									X							X
12	MW-3			6/24/2009	1000		1	X		X						GW									X							X
13	MW-5			6/24/2009	1010		1	X		X						GW									X							X
14	MW-17			6/24/2009	1020		1	X		X						GW									X							X
15	MW-11			6/24/2009	1030		1	X		X						GW									X							X
16	MW-6			6/24/2009	1040		1	X		X						GW									X							X
17	MW-18			6/24/2009	1130		1	X		X						GW									X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	6/25/09	0905			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sosa	6/25/09	9:05

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep.? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin / Plains

Date/ Time: 6 25 09 9:05

Lab ID #: 336446

Initials: QL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	4.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 344010

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd # 1

TNM-Red Byrd # 01

16-SEP-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

16-SEP-09

Project Manager: **Jason Henry**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **344010**
Red Byrd # 1
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 344010. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 344010 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 344010

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-17	W	Sep-09-09 09:15		344010-001
MW-6	W	Sep-09-09 09:30		344010-002
MW-11	W	Sep-09-09 09:45		344010-003
MW-3	W	Sep-09-09 10:00		344010-004
MW-7	W	Sep-09-09 10:15		344010-005
MW-13	W	Sep-09-09 10:45		344010-006
MW-14	W	Sep-09-09 11:00		344010-007
MW-10	W	Sep-09-09 11:15		344010-008
MW-5	W	Sep-09-09 12:00		344010-009
MW-4	W	Sep-09-09 12:20		344010-010
MW-8	W	Sep-09-09 12:35		344010-011
MW-19	W	Sep-09-09 12:40		344010-012
MW-15	W	Sep-09-09 13:00		344010-013
MW-9	W	Sep-09-09 13:15		344010-014
MW-16	W	Sep-09-09 13:30		344010-015
MW-1	W	Sep-09-09 13:45		344010-016
MW-18	W	Sep-09-09 14:00		344010-017

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Red Byrd # 1

Project ID:	*TNM-Red Byrd # 01*	*Report Date:*	*16-SEP-09*
Work Order Number:	*344010*	*Date Received:*	*09/10/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-772147 BTEX-MTBE EPA 8021B
SW8021BM

Batch 772147, 4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 537626-1-BLK,344010-006,344010-008,344010-016,344010-004,344010-013,344010-014,344010-015,344010-003,344010-001. Matrix interference is suspected in sample surrogate failures.

SW8021BM

Batch 772147, Ethylbenzene recovered above QC limits in the Matrix Spike.
Samples affected are: 344010-001, -006, -013, -008, -016, -003, -004, -014, -005, -015, -012.
The Laboratory Control Sample for Ethylbenzene is within laboratory Control Limits

Batch: LBA-772402 BTEX-MTBE EPA 8021B
SW8021BM

Batch 772402, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 344010-009,344010-017. Matrix interference is suspected in sample surrogate failures.
4-Bromofluorobenzene recovered below QC limits. Data confirmed by re-analysis. Samples affected are: 537770-1-BLK,344010-002.

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Red Byrd # 1

Project ID:	*TNM-Red Byrd # 01*	*Report Date:*	*16-SEP-09*
Work Order Number:	*344010*	*Date Received:*	*09/10/2009*

Batch: LBA-772616 BTEX-MTBE EPA 8021B
SW8021BM

Batch 772616, Toluene recovered below QC limits in the Matrix Spike.
Samples affected are: 344010-010, -011.
The Laboratory Control Sample for Toluene is within laboratory Control Limits

SW8021BM

Batch 772616, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 344010-010,344010-011.
4-Bromofluorobenzene recovered below QC limits Sample Data confirmed by re-analysis.
Samples affected are: 537875-1-BLK,344010-010. QC data not confirmed by reanalysis.

Certificate of Analysis Summary 344010

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd # 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Sep-10-09 09:15 am
Report Date: 16-SEP-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	344010-001		344010-002		344010-003		344010-004		344010-005		344010-006	
	Field Id:	MW-17		MW-6		MW-11		MW-3		MW-7		MW-13	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-09-09 09:15		Sep-09-09 09:30		Sep-09-09 09:45		Sep-09-09 10:00		Sep-09-09 10:15		Sep-09-09 10:45	
BTEX by EPA 8021B	*Extracted:*	Sep-11-09 10:00		Sep-14-09 15:50		Sep-11-09 10:00		Sep-11-09 10:00		Sep-11-09 10:00		Sep-11-09 10:00	
	Analyzed:	Sep-12-09 15:18		Sep-15-09 03:44		Sep-12-09 12:48		Sep-12-09 16:51		Sep-12-09 13:06		Sep-12-09 13:25	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.1962	0.0200	0.5374	0.0200	0.0201	0.0010	0.4070	0.0500	0.0051	0.0010	ND	0.0010
Toluene		ND	0.0400	0.7818	0.0400	ND	0.0020	ND	0.1000	ND	0.0020	ND	0.0020
Ethylbenzene		0.0934	0.0200	0.0960	0.0200	0.0030	0.0010	0.0505	0.0500	0.0012	0.0010	ND	0.0010
m,p-Xylenes		0.0696	0.0400	0.0832	0.0400	ND	0.0020	0.1370	0.1000	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0200	0.0266	0.0200	ND	0.0010	ND	0.0500	0.0016	0.0010	ND	0.0010
Total Xylenes		0.0696	0.0200	0.1098	0.0200	ND	0.0010	0.1370	0.0500	0.0016	0.0010	ND	0.0010
Total BTEX		0.3592	0.0200	1.5250	0.0200	0.0231	0.0010	0.5945	0.0500	0.0079	0.0010	ND	0.0010

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 344010

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd # 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Sep-10-09 09:15 am
Report Date: 16-SEP-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	344010-007		344010-008		344010-009		344010-010		344010-011		344010-012	
	Field Id:	MW-14		MW-10		MW-5		MW-4		MW-8		MW-19	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-09-09 11:00		Sep-09-09 11:15		Sep-09-09 12:00		Sep-09-09 12:20		Sep-09-09 12:35		Sep-09-09 12:40	
BTEX by EPA 8021B	*Extracted:*	Sep-14-09 15:50		Sep-11-09 10:00		Sep-14-09 15:50		Sep-15-09 14:00		Sep-15-09 14:00		Sep-11-09 10:00	
	Analyzed:	Sep-15-09 00:04		Sep-12-09 13:44		Sep-15-09 00:22		Sep-15-09 14:34		Sep-15-09 15:11		Sep-12-09 14:22	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0040	0.0010	0.0015	0.0010	0.0063	0.0010	0.0235	0.0050	0.0170	0.0010	0.0024	0.0010
Toluene		0.0025	0.0020	ND	0.0020	0.0062	0.0020	0.0176	0.0100	ND	0.0020	ND	0.0020
Ethylbenzene		0.0019	0.0010	ND	0.0010	ND	0.0010	0.0968	0.0050	0.0025	0.0010	0.0878	0.0010
m,p-Xylenes		ND	0.0020	ND	0.0020	0.0580	0.0020	0.1289	0.0100	0.0113	0.0020	0.0498	0.0020
o-Xylene		ND	0.0010	ND	0.0010	0.0085	0.0010	0.0249	0.0050	0.0032	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	ND	0.0010	0.0665	0.0010	0.1538	0.0050	0.0145	0.0010	0.0498	0.0010
Total BTEX		0.0084	0.0010	0.0015	0.0010	0.0790	0.0010	0.2917	0.0050	0.0340	0.0010	0.1400	0.0010

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 344010

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd # 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Sep-10-09 09:15 am
Report Date: 16-SEP-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	344010-013		344010-014		344010-015		344010-016		344010-017	
	Field Id:	MW-15		MW-9		MW-16		MW-1		MW-18	
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-09-09 13:00		Sep-09-09 13:15		Sep-09-09 13:30		Sep-09-09 13:45		Sep-09-09 14:00	
BTEX by EPA 8021B	*Extracted:*	Sep-11-09 10:00		Sep-11-09 10:00		Sep-11-09 10:00		Sep-11-09 10:00		Sep-14-09 15:50	
	Analyzed:	Sep-12-09 18:05		Sep-12-09 18:24		Sep-12-09 18:42		Sep-12-09 19:01		Sep-15-09 00:59	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.9894	0.0200	0.6048	0.0200	0.2128	0.0200	0.7952	0.0200	0.0158	0.0010
Toluene		ND	0.0400	ND	0.0400	ND	0.0400	ND	0.0400	0.0053	0.0020
Ethylbenzene		0.1772	0.0200	0.0210	0.0200	0.1666	0.0200	0.1450	0.0200	0.1158	0.0010
m,p-Xylenes		0.0776	0.0400	ND	0.0400	0.0948	0.0400	0.1024	0.0400	0.0858	0.0020
o-Xylene		ND	0.0200	ND	0.0200	ND	0.0200	ND	0.0200	ND	0.0010
Total Xylenes		0.0776	0.0200	ND	0.0200	0.0948	0.0200	0.1024	0.0200	0.0858	0.0010
Total BTEX		1.2442	0.0200	0.6258	0.0200	0.4742	0.0200	1.0426	0.0200	0.2227	0.0010

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772147 **Sample:** 537626-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 11:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 772147 **Sample:** 537626-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 11:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 772147 **Sample:** 537626-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 12:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0199	0.0300	66	80-120	*

Lab Batch #: 772147 **Sample:** 344010-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 12:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0198	0.0300	66	80-120	*

Lab Batch #: 772147 **Sample:** 344010-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 13:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772147 **Sample:** 344010-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 13:25

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0231	0.0300	77	80-120	*

Lab Batch #: 772147 **Sample:** 344010-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 13:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0164	0.0300	55	80-120	*

Lab Batch #: 772147 **Sample:** 344010-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 14:22

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 772147 **Sample:** 344010-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 15:18

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0222	0.0300	74	80-120	*

Lab Batch #: 772147 **Sample:** 344010-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 16:51

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0205	0.0300	68	80-120	*

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772147 **Sample:** 344010-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 18:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0200	0.0300	67	80-120	*

Lab Batch #: 772147 **Sample:** 344010-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 18:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0153	0.0300	51	80-120	*

Lab Batch #: 772147 **Sample:** 344010-015 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 18:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0167	0.0300	56	80-120	*

Lab Batch #: 772147 **Sample:** 344010-016 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 19:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0225	0.0300	75	80-120	*

Lab Batch #: 772147 **Sample:** 344010-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 19:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772147 **Sample:** 344010-012 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/12/09 20:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 772402 **Sample:** 537770-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/14/09 22:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 772402 **Sample:** 537770-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/14/09 23:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 772402 **Sample:** 537770-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/14/09 23:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0189	0.0300	63	80-120	*

Lab Batch #: 772402 **Sample:** 344010-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 00:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772402 **Sample:** 344010-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 00:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0205	0.0300	68	80-120	**
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 772402 **Sample:** 344010-017 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 00:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0219	0.0300	73	80-120	**
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 772402 **Sample:** 344010-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 03:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0156	0.0300	52	80-120	**

Lab Batch #: 772616 **Sample:** 537875-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 10:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 772616 **Sample:** 537875-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 11:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 344010,

Project ID: TNM-Red Byrd # 01

Lab Batch #: 772616 **Sample:** 537875-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 11:52

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0163	0.0300	54	80-120	*

Lab Batch #: 772616 **Sample:** 344010-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 14:34

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0220	0.0300	73	80-120	**
4-Bromofluorobenzene	0.0188	0.0300	63	80-120	**

Lab Batch #: 772616 **Sample:** 344010-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 15:11

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0220	0.0300	73	80-120	**
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 772616 **Sample:** 344010-011 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 21:42

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 772616 **Sample:** 344010-011 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 22:00

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 344010 **Project ID:** TNM-Red Byrd # 01

Analyst: ASA **Date Prepared:** 09/11/2009 **Date Analyzed:** 09/12/2009

Lab Batch ID: 772147 **Sample:** 537626-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1035	104	0.1	0.1035	104	0	70-125	25	
Toluene	ND	0.1000	0.0984	98	0.1	0.0985	99	0	70-125	25	
Ethylbenzene	ND	0.1000	0.1108	111	0.1	0.1105	111	0	71-129	25	
m,p-Xylenes	ND	0.2000	0.2235	112	0.2	0.2254	113	1	70-131	25	
o-Xylene	ND	0.1000	0.1082	108	0.1	0.1075	108	1	71-133	25	

Analyst: ASA **Date Prepared:** 09/14/2009 **Date Analyzed:** 09/14/2009

Lab Batch ID: 772402 **Sample:** 537770-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1077	108	0.1	0.1011	101	6	70-125	25	
Toluene	ND	0.1000	0.1022	102	0.1	0.0957	96	7	70-125	25	
Ethylbenzene	ND	0.1000	0.1138	114	0.1	0.1062	106	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.2306	115	0.2	0.2159	108	7	70-131	25	
o-Xylene	ND	0.1000	0.1105	111	0.1	0.1034	103	7	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 344010 **Project ID:** TNM-Red Byrd # 01

Analyst: ASA **Date Prepared:** 09/15/2009 **Date Analyzed:** 09/15/2009

Lab Batch ID: 772616 **Sample:** 537875-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1046	105	0.1	0.1026	103	2	70-125	25	
Toluene	ND	0.1000	0.0999	100	0.1	0.0980	98	2	70-125	25	
Ethylbenzene	ND	0.1000	0.1119	112	0.1	0.1106	111	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2273	114	0.2	0.2251	113	1	70-131	25	
o-Xylene	ND	0.1000	0.1090	109	0.1	0.1075	108	1	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd # 1

Work Order # : 344010 **Project ID:** TNM-Red Byrd # 01

Lab Batch ID: 772147 **QC- Sample ID:** 344010-012 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/12/2009 **Date Prepared:** 09/11/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0024	0.1000	0.0908	88	0.1000	0.0841	82	8	70-125	25	
Toluene	ND	0.1000	0.0863	86	0.1000	0.0799	80	8	70-125	25	
Ethylbenzene	0.0878	0.1000	0.2223	135	0.1000	0.2040	116	9	71-129	25	X
m,p-Xylenes	0.0498	0.2000	0.2713	111	0.2000	0.2492	100	8	70-131	25	
o-Xylene	ND	0.1000	0.0963	96	0.1000	0.0886	89	8	71-133	25	

Lab Batch ID: 772616 **QC- Sample ID:** 344010-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/15/2009 **Date Prepared:** 09/15/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0170	0.1000	0.0914	74	0.1000	0.0950	78	4	70-125	25	
Toluene	ND	0.1000	0.0686	69	0.1000	0.0717	72	4	70-125	25	X
Ethylbenzene	0.0025	0.1000	0.0784	76	0.1000	0.0812	79	4	71-129	25	
m,p-Xylenes	0.0113	0.2000	0.1701	79	0.2000	0.1757	82	3	70-131	25	
o-Xylene	0.0032	0.1000	0.0739	71	0.1000	0.0799	77	8	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley   PAGE 01 OF 02

Company Name: Basin Environmental Service Technologies, LLC

Company Address: 2900 Plains Hwy

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 441-2244   Fax No: (575) 396-1429

Sampler Signature: CHD for CL Reynolds   e-mail: cstanley@basineny.com

Project Name: Red Bryd #1

Project #: TNM-Red Byrd #01

Project Loc: Lea County, NM

PO #: PAA - J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 344010

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl (VOA X 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-17			9/9/2009	0915		3	X		X						GW									X							X
02	MW-6			9/9/2009	0930		3	X		X						GW									X							X
03	MW-11			9/9/2009	0945		3	X		X						GW									X							X
04	MW-3			9/9/2009	1000		3	X		X						GW									X							X
05	MW-7			9/9/2009	1015		3	X		X						GW									X							X
06	MW-13			9/9/2009	1045		3	X		X						GW									X							X
07	MW-14			9/9/2009	1100		3	X		X						GW									X							X
08	MW-10			9/9/2009	1115		3	X		X						GW									X							X
09	MW-5			9/9/2009	1200		3	X		X						GW									X							X
10	MW-4			9/9/2009	1220		3	X		X						GW																

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
[signature]	09/10/09	0915			
			Received by ELOT: Andrea Fumi	9.10.09	9:15

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) (Y) N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? N
by Courier? UPS DHL FedEx Lone Star
40 ml vo's
Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 02 OF 02 Project Name: Red Bryd #1

Company Name: Basin Environmental Service Technologies, LLC Project #: TNM-Red Byrd #01

Company Address: 2800 Plains Hwy Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA - J. Henry

Telephone No: (575) 441-2244 Fax No: (575) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 344010

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (VOA X 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix: Groundwater	Wastewater	Soil/Sludge	Oil	Other (Specify)	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or 8TEX 8260	RCI	N.O.R.M.	PAH	EPA Part Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24 48 72 hrs	Standard TAT
11	MW-8			9/9/2009	1235		3	X		X						GW														X							X
12	MW-19			9/9/2009	1240		3	X		X						GW														X							X
13	MW-15			9/9/2009	1300		3	X		X						GW														X							X
14	MW-9			9/9/2009	1315		3	X		X						GW														X							X
15	MW-16			9/9/2009	1330		3	X		X						GW														X							X
16	MW-1			9/9/2009	1345		3	X		X						GW														X							X
17	MW-18			9/9/2009	1400		3	X		X						GW														X							X

Special Instructions:

Relinquished by:	Date	Time	Received by	Date	Time
	09/10/09	2915			
Relinquished by	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sam	9.10.09	9:15

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep.?	Y	N

by Courier? UPS DHL FedEx Lone Star

40 ml VOA

Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 9.10.09 9:15

Lab ID # : 344010

Initials: al

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	4.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 352094

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd # 1

TNM-Red Byrd 01

20-NOV-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

20-NOV-09

Project Manager: **Jason Henry**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **352094**
Red Byrd # 1
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 352094. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 352094 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-19	W	Nov-12-09 08:30		352094-001
MW-7	W	Nov-12-09 09:15		352094-002
MW-6	W	Nov-12-09 10:00		352094-003
MW-16	W	Nov-12-09 10:45		352094-004
MW-11	W	Nov-12-09 11:30		352094-005
MW-17	W	Nov-12-09 12:15		352094-006
MW-12	W	Nov-12-09 14:00		352094-007
MW-18	W	Nov-12-09 13:00		352094-008

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Red Byrd # 1

Project ID:	*TNM-Red Byrd 01*	*Report Date:*	*20-NOV-09*
Work Order Number:	*352094*	*Date Received:*	*11/12/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-781720 TPH by SW8015 Mod
SW8015MOD_NM

Batch 781720, C12-C28 Diesel Range Hydrocarbons RPD was outside laboratory control limits.
Samples affected are: 352094-007

Batch: LBA-782026 BTEX by EPA 8021
SW8021BM

Batch 782026, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 352094-005.

Batch: LBA-782173 SVOA PAHs List by SW-846 8270C
Initial dilutions due to dark sample matrix and odor

Batch: LBA-782222 SVOAs by SW-846 8270C
None

Batch: LBA-782521 BTEX by EPA 8021
SW8021BM

Batch 782521, Benzene recovered above QC limits in the Matrix Spike.
Samples affected are: 352094-008, -007.
The Laboratory Control Sample for Benzene is within laboratory Control Limits

Certificate of Analysis Summary 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-12-09 05:15 pm
Report Date: 20-NOV-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	352094-001		352094-002		352094-003		352094-004		352094-005		352094-006	
	Field Id:	MW-19		MW-7		MW-6		MW-16		MW-11		MW-17	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Nov-12-09 08:30		Nov-12-09 09:15		Nov-12-09 10:00		Nov-12-09 10:45		Nov-12-09 11:30		Nov-12-09 12:15	
BTEX by EPA 8021	***Extracted:***	Nov-16-09 17:00		Nov-16-09 17:00		Nov-16-09 17:00		Nov-16-09 17:00		Nov-16-09 17:00		Nov-16-09 17:00	
	Analyzed:	Nov-17-09 02:04		Nov-17-09 02:25		Nov-17-09 02:46		Nov-17-09 03:06		Nov-17-09 03:27		Nov-17-09 04:29	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0064	0.0010	0.0046	0.0010	0.0104	0.0010	0.0140	0.0010	0.0089	0.0010	0.0039	0.0010
Toluene		BRL	0.0020	BRL	0.0020	0.0152	0.0020	0.0053	0.0020	BRL	0.0020	BRL	0.0020
Ethylbenzene		0.0025	0.0010	BRL	0.0010	0.0028	0.0010	0.0103	0.0010	BRL	0.0010	0.0027	0.0010
m,p-Xylenes		BRL	0.0020	BRL	0.0020	0.0033	0.0020	0.0086	0.0020	BRL	0.0020	0.0021	0.0020
o-Xylene		BRL	0.0010	BRL	0.0010	0.0011	0.0010	0.0092	0.0010	0.0017	0.0010	BRL	0.0010
Xylenes, Total		BRL	0.0010	BRL	0.0010	0.0044	0.0010	0.0178	0.0010	0.0017	0.0010	0.0021	0.0010
Total BTEX		0.0089	0.0010	0.0046	0.0010	0.0328	0.0010	0.0474	0.0010	0.0106	0.0010	0.0087	0.0010

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-12-09 05:15 pm
Report Date: 20-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	352094-001		352094-002		352094-003		352094-004		352094-005		352094-006	
	Field Id:	MW-19		MW-7		MW-6		MW-16		MW-11		MW-17	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Nov-12-09 08:30		Nov-12-09 09:15		Nov-12-09 10:00		Nov-12-09 10:45		Nov-12-09 11:30		Nov-12-09 12:15	
SVOA PAHs List	*Extracted:*	Nov-14-09 11:00		Nov-14-09 11:03		Nov-14-09 11:06		Nov-14-09 11:09		Nov-14-09 11:12		Nov-14-09 11:15	
SUB: T104704215-08B-TX	*Analyzed:*	Nov-17-09 12:33		Nov-17-09 13:11		Nov-17-09 13:49		Nov-17-09 15:43		Nov-17-09 14:27		Nov-17-09 15:05	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Acenaphthylene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Anthracene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Benzo(a)anthracene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Benzo(a)pyrene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Benzo(b)fluoranthene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Benzo(k)fluoranthene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Benzo(g,h,i)perylene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Chrysene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Dibenz(a,h)anthracene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Fluoranthene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Fluorene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Indeno(1,2,3-c,d)Pyrene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
1-Methylnaphthalene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	0.006	0.005
2-Methylnaphthalene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Naphthalene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Phenanthrene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005
Pyrene		BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.050	BRL	0.005	BRL	0.005

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-12-09 05:15 pm
Report Date: 20-NOV-09
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	352094-007		352094-008				
	Field Id:	MW-12		MW-18				
	Depth:							
	Matrix:	WATER		WATER				
	Sampled:	Nov-12-09 14:00		Nov-12-09 13:00				
BTEX by EPA 8021	*Extracted:*	Nov-18-09 17:00		Nov-18-09 17:00				
	Analyzed:	Nov-19-09 06:05		Nov-19-09 06:26				
	Units/RL:	mg/L	RL	mg/L	RL			
Benzene		0.0892	0.0100	0.0013	0.0010			
Toluene		BRL	0.0200	BRL	0.0020			
Ethylbenzene		0.1112	0.0100	BRL	0.0010			
m,p-Xylenes		0.1559	0.0200	BRL	0.0020			
o-Xylene		0.0132	0.0100	BRL	0.0010			
Xylenes, Total		0.1691	0.0100	BRL	0.0010			
Total BTEX		0.3695	0.0100	0.0013	0.0010			

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Certificate of Analysis Summary 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-12-09 05:15 pm
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Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	352094-007		352094-008				
	Field Id:	MW-12		MW-18				
	Depth:							
	Matrix:	WATER		WATER				
	Sampled:	Nov-12-09 14:00		Nov-12-09 13:00				
SVOA PAHs List	*Extracted:*	Nov-14-09 11:18		Nov-17-09 10:00				
SUB: T104704215-08B-TX	*Analyzed:*	Nov-17-09 16:21		Nov-18-09 11:44				
	Units/RL:	mg/L	RL	mg/L	RL			
Acenaphthene		BRL	0.100	BRL	0.050			
Acenaphthylene		BRL	0.100	BRL	0.050			
Anthracene		BRL	0.100	BRL	0.050			
Benzo(a)anthracene		BRL	0.100	BRL	0.050			
Benzo(a)pyrene		BRL	0.100	BRL	0.050			
Benzo(b)fluoranthene		BRL	0.100	BRL	0.050			
Benzo(k)fluoranthene		BRL	0.100	BRL	0.050			
Benzo(g,h,i)perylene		BRL	0.100	BRL	0.050			
Chrysene		BRL	0.100	BRL	0.050			
Dibenz(a,h)anthracene		BRL	0.100	BRL	0.050			
Fluoranthene		BRL	0.100	BRL	0.050			
Fluorene		BRL	0.100	BRL	0.050			
Indeno(1,2,3-c,d)Pyrene		BRL	0.100	BRL	0.050			
1-Methylnaphthalene		0.370	0.100	BRL	0.050			
2-Methylnaphthalene		0.173	0.100	BRL	0.050			
Naphthalene		BRL	0.100	BRL	0.050			
Phenanthrene		BRL	0.100	BRL	0.050			
Pyrene		BRL	0.100	BRL	0.050			

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 352094

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd # 1

Project Id: TNM-Red Byrd 01
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-12-09 05:15 pm
Report Date: 20-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	352094-007	352094-008				
	Field Id:	MW-12	MW-18				
	Depth:						
	Matrix:	WATER	WATER				
	Sampled:	Nov-12-09 14:00	Nov-12-09 13:00				
TPH by SW8015 Mod	***Extracted:***	Nov-13-09 10:45					
	Analyzed:	Nov-14-09 12:43					
	Units/RL:	mg/L RL					
C6-C12 Gasoline Range Hydrocarbons		259 1.50					
C12-C28 Diesel Range Hydrocarbons		420 1.50					
C28-C35 Oil Range Hydrocarbons		21.3 1.50					
Total TPH		700 1.50					

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782026 **Sample:** 543367-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/16/09 22:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 782026 **Sample:** 543367-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/16/09 23:18

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 782026 **Sample:** 543367-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 00:00

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 782026 **Sample:** 352094-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 02:04

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 782026 **Sample:** 352094-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 02:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782026 **Sample:** 352094-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 02:46

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 782026 **Sample:** 352094-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 03:06

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 782026 **Sample:** 352094-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 03:27

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0237	0.0300	79	80-120	*
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 782026 **Sample:** 352094-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 04:29

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 782026 **Sample:** 352059-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 07:55

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782026 **Sample:** 352059-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 08:16

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 782521 **Sample:** 543676-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 01:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 782521 **Sample:** 543676-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 02:13

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 782521 **Sample:** 543676-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 02:56

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 782521 **Sample:** 352094-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 06:05

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782521 **Sample:** 352094-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 06:26

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 782521 **Sample:** 352163-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 12:12

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 782521 **Sample:** 352163-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/19/09 12:33

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 782173 **Sample:** 543183-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 10:37

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.042	0.050	84	43-116	
2-Fluorophenol	0.030	0.050	60	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.020	0.050	40	10-94	
Terphenyl-D14	0.048	0.050	96	33-141	
2,4,6-Tribromophenol	0.035	0.050	70	10-123	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782173 **Sample:** 543183-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 11:15

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.050	86	43-116	
2-Fluorophenol	0.030	0.050	60	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.021	0.050	42	10-94	
Terphenyl-D14	0.049	0.050	98	33-141	
2,4,6-Tribromophenol	0.045	0.050	90	10-123	

Lab Batch #: 782173 **Sample:** 543183-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 11:54

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.046	0.050	92	43-116	
2-Fluorophenol	0.036	0.050	72	21-100	
Nitrobenzene-d5	0.045	0.050	90	35-114	
Phenol-d6	0.027	0.050	54	10-94	
Terphenyl-D14	0.054	0.050	108	33-141	
2,4,6-Tribromophenol	0.050	0.050	100	10-123	

Lab Batch #: 782173 **Sample:** 352094-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 12:33

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.040	0.050	80	35-114	
Phenol-d6	0.014	0.050	28	10-94	
Terphenyl-D14	0.049	0.050	98	33-141	
2,4,6-Tribromophenol	0.051	0.050	102	10-123	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782173 **Sample:** 352094-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 13:11

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.044	0.050	88	43-116	
2-Fluorophenol	0.025	0.050	50	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.054	0.050	108	10-123	

Lab Batch #: 782173 **Sample:** 352094-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 13:49

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.044	0.050	88	43-116	
2-Fluorophenol	0.026	0.050	52	21-100	
Nitrobenzene-d5	0.043	0.050	86	35-114	
Phenol-d6	0.014	0.050	28	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.055	0.050	110	10-123	

Lab Batch #: 782173 **Sample:** 352094-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 14:27

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.022	0.050	44	21-100	
Nitrobenzene-d5	0.038	0.050	76	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.048	0.050	96	10-123	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782173 **Sample:** 352094-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 15:05

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.050	86	43-116	
2-Fluorophenol	0.020	0.050	40	21-100	
Nitrobenzene-d5	0.041	0.050	82	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.048	0.050	96	10-123	

Lab Batch #: 782173 **Sample:** 352094-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 15:43

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.048	0.050	96	43-116	
2-Fluorophenol	0.029	0.050	58	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.014	0.050	28	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.050	0.050	100	10-123	

Lab Batch #: 782173 **Sample:** 352094-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 16:21

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.051	0.050	102	43-116	
2-Fluorophenol	0.031	0.050	62	21-100	
Nitrobenzene-d5	0.047	0.050	94	35-114	
Phenol-d6	0.023	0.050	46	10-94	
Terphenyl-D14	0.060	0.050	120	33-141	
2,4,6-Tribromophenol	0.047	0.050	94	10-123	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094, **Project ID:** TNM-Red Byrd 01

Lab Batch #: 782222 **Sample:** 543417-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 20:08

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.029	0.050	58	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.020	0.050	40	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

Lab Batch #: 782222 **Sample:** 543417-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 20:46

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.031	0.050	62	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.022	0.050	44	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

Lab Batch #: 782222 **Sample:** 543417-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/17/09 21:24

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.031	0.050	62	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.022	0.050	44	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.044	0.050	88	10-123	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 782222 **Sample:** 352094-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/18/09 11:44

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.048	0.050	96	43-116	
2-Fluorophenol	0.026	0.050	52	21-100	
Nitrobenzene-d5	0.040	0.050	80	35-114	
Phenol-d6	0.014	0.050	28	10-94	
Terphenyl-D14	0.054	0.050	108	33-141	
2,4,6-Tribromophenol	0.050	0.050	100	10-123	

Lab Batch #: 781720 **Sample:** 543233-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/14/09 03:36

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.2	10.0	122	70-135	
o-Terphenyl	5.95	5.00	119	70-135	

Lab Batch #: 781720 **Sample:** 543233-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/14/09 04:01

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.9	10.0	129	70-135	
o-Terphenyl	6.28	5.00	126	70-135	

Lab Batch #: 781720 **Sample:** 543233-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/14/09 04:28

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.81	10.0	98	70-135	
o-Terphenyl	6.40	5.00	128	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd # 1

Work Orders : 352094,

Project ID: TNM-Red Byrd 01

Lab Batch #: 781720 **Sample:** 352094-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/14/09 12:43

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.8	10.0	118	70-135	
o-Terphenyl	6.42	5.00	128	70-135	

Lab Batch #: 781720 **Sample:** 352057-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/14/09 13:09

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	12.4	10.0	124	70-135	
o-Terphenyl	6.09	5.00	122	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 352094 **Project ID:** TNM-Red Byrd 01

Analyst: ASA **Date Prepared:** 11/16/2009 **Date Analyzed:** 11/16/2009

Lab Batch ID: 782026 **Sample:** 543367-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.0010	0.1000	0.0944	94	0.1	0.0945	95	0	70-125	25	
Toluene	<0.0020	0.1000	0.0941	94	0.1	0.0946	95	1	70-125	25	
Ethylbenzene	<0.0010	0.1000	0.0923	92	0.1	0.0921	92	0	71-129	25	
m,p-Xylenes	<0.0020	0.2000	0.1978	99	0.2	0.1978	99	0	70-131	25	
o-Xylene	<0.0010	0.1000	0.0992	99	0.1	0.0981	98	1	71-133	25	

Analyst: ASA **Date Prepared:** 11/18/2009 **Date Analyzed:** 11/19/2009

Lab Batch ID: 782521 **Sample:** 543676-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.0010	0.1000	0.0933	93	0.1	0.0950	95	2	70-125	25	
Toluene	<0.0020	0.1000	0.0938	94	0.1	0.0951	95	1	70-125	25	
Ethylbenzene	<0.0010	0.1000	0.0929	93	0.1	0.0940	94	1	71-129	25	
m,p-Xylenes	<0.0020	0.2000	0.2030	102	0.2	0.2049	102	1	70-131	25	
o-Xylene	<0.0010	0.1000	0.0980	98	0.1	0.0999	100	2	71-133	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 352094
Analyst: KAN
Lab Batch ID: 782173
Sample: 543183-1-BKS
Units: mg/L

Date Prepared: 11/14/2009
Batch #: 1

Project ID: TNM-Red Byrd 01
Date Analyzed: 11/17/2009
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.005	0.050	0.040	80	0.05	0.044	88	10	27-132	31	
Acenaphthylene	<0.005	0.050	0.040	80	0.05	0.044	88	10	46-108	25	
Anthracene	<0.005	0.050	0.040	80	0.05	0.044	88	10	47-145	25	
Benzo(a)anthracene	<0.005	0.050	0.039	78	0.05	0.043	86	10	33-143	25	
Benzo(a)pyrene	<0.005	0.050	0.042	84	0.05	0.045	90	7	65-135	25	
Benzo(b)fluoranthene	<0.005	0.050	0.042	84	0.05	0.046	92	9	24-159	25	
Benzo(k)fluoranthene	<0.005	0.050	0.041	82	0.05	0.045	90	9	25-125	25	
Benzo(g,h,i)perylene	<0.005	0.050	0.048	96	0.05	0.051	102	6	65-135	25	
Chrysene	<0.005	0.050	0.043	86	0.05	0.048	96	11	65-135	25	
Dibenz(a,h)anthracene	<0.005	0.050	0.044	88	0.05	0.047	94	7	50-125	25	
Fluoranthene	<0.005	0.050	0.039	78	0.05	0.042	84	7	47-125	25	
Fluorene	<0.005	0.050	0.042	84	0.05	0.047	94	11	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.005	0.050	0.044	88	0.05	0.047	94	7	27-160	25	
Naphthalene	<0.005	0.050	0.040	80	0.05	0.043	86	7	26-175	25	
Phenanthrene	<0.005	0.050	0.039	78	0.05	0.043	86	10	65-135	25	
Pyrene	<0.005	0.050	0.046	92	0.05	0.052	104	12	23-152	31	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 352094
Analyst: KAN
Lab Batch ID: 782222
Sample: 543417-1-BKS
Units: mg/L

Date Prepared: 11/16/2009
Batch #: 1

Project ID: TNM-Red Byrd 01
Date Analyzed: 11/17/2009
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.005	0.050	0.039	78	0.05	0.040	80	3	27-132	31	
Acenaphthylene	<0.005	0.050	0.039	78	0.05	0.040	80	3	46-108	25	
Anthracene	<0.005	0.050	0.039	78	0.05	0.040	80	3	47-145	25	
Benzo(a)anthracene	<0.005	0.050	0.039	78	0.05	0.040	80	3	33-143	25	
Benzo(a)pyrene	<0.005	0.050	0.041	82	0.05	0.042	84	2	65-135	25	
Benzo(b)fluoranthene	<0.005	0.050	0.043	86	0.05	0.043	86	0	24-159	25	
Benzo(k)fluoranthene	<0.005	0.050	0.041	82	0.05	0.040	80	2	25-125	25	
Benzo(g,h,i)perylene	<0.005	0.050	0.043	86	0.05	0.045	90	5	65-135	25	
Chrysene	<0.005	0.050	0.042	84	0.05	0.044	88	5	65-135	25	
Dibenz(a,h)anthracene	<0.005	0.050	0.041	82	0.05	0.043	86	5	50-125	25	
Fluoranthene	<0.005	0.050	0.037	74	0.05	0.038	76	3	47-125	25	
Fluorene	<0.005	0.050	0.041	82	0.05	0.043	86	5	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.005	0.050	0.041	82	0.05	0.042	84	2	27-160	25	
Naphthalene	<0.005	0.050	0.039	78	0.05	0.040	80	3	26-175	25	
Phenanthrene	<0.005	0.050	0.038	76	0.05	0.039	78	3	65-135	25	
Pyrene	<0.005	0.050	0.047	94	0.05	0.048	96	2	23-152	31	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Red Byrd # 1

Work Order #: 352094
Analyst: BEV
Lab Batch ID: 781720
Sample: 543233-1-BKS
Batch #: 1
Units: mg/L

Date Prepared: 11/13/2009
Project ID: TNM-Red Byrd 01
Date Analyzed: 11/14/2009
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<1.50	100	100	100	100	104	104	4	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<1.50	100	94.3	94	100	70.2	70	29	70-135	25	F

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Red Byrd # 1

Work Order #: 352094

Lab Batch #: 781720

Project ID: TNM-Red Byrd 01

Date Analyzed: 11/14/2009

Date Prepared: 11/13/2009

Analyst: BEV

QC- Sample ID: 352057-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

TPH by SW8015 Mod Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	<5.00	100	104	104	70-135	
C12-C28 Diesel Range Hydrocarbons	<5.00	100	70.6	71	70-135	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd # 1

Work Order # : 352094 **Project ID:** TNM-Red Byrd 01

Lab Batch ID: 782026 **QC- Sample ID:** 352059-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/17/2009 **Date Prepared:** 11/16/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.0010	0.1000	0.0879	88	0.1000	0.0846	85	4	70-125	25	
Toluene	<0.0020	0.1000	0.0879	88	0.1000	0.0842	84	4	70-125	25	
Ethylbenzene	<0.0010	0.1000	0.0837	84	0.1000	0.0806	81	4	71-129	25	
m,p-Xylenes	<0.0020	0.2000	0.1756	88	0.2000	0.1676	84	5	70-131	25	
o-Xylene	<0.0010	0.1000	0.0882	88	0.1000	0.0856	86	3	71-133	25	

Lab Batch ID: 782521 **QC- Sample ID:** 352163-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/19/2009 **Date Prepared:** 11/18/2009 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0019	0.1000	0.1301	128	0.1000	0.1147	113	13	70-125	25	X
Toluene	0.0062	0.1000	0.1028	97	0.1000	0.0983	92	4	70-125	25	
Ethylbenzene	0.0020	0.1000	0.0889	87	0.1000	0.0879	86	1	71-129	25	
m,p-Xylenes	0.0043	0.2000	0.1916	94	0.2000	0.1899	93	1	70-131	25	
o-Xylene	0.0029	0.1000	0.0991	96	0.1000	0.0961	93	3	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 01 OF 01 Project Name: Red Bryd #1

Company Name: Basin Environmental Service Technologies, LLC Project #: TNM-RED Byrd 01

Company Address: 2800 Plains Hwy Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260 PO #: PAA - J. Henry

Telephone No: (575) 441-2244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: for C.D. Reynolds e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 352094

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (VOA X 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW - Drinking Water; GW - Groundwater; NP - Non-Potable; SL - Sludge; S - Soil/Solid; Specify Other	Analyze For: TPH: 418.1 (8015M)	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH 8270	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT
								TCLP:																	X							
								TOTAL:																									
01	MW-19			11/12	0830		4	X		X						GW									X			X			X	
02	MW-7				0915																											
03	MW-6				1000																											
04	MW-16				1045																											
05	MW-11				1130																											
06	MW-17				1215																											
07	MW-12				1400		7										X															

Special Instructions:

Laboratory Comments: 40 mL VOAS

Relinquished by:	Date: 11/12/09	Time: 1715	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by ELOT:	Date: 11/12/09	Time: 17:15	

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep.?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin /Plains

Date/ Time: 11/12/09 17:15

Lab ID # : 352094

Initials: gmA

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	4.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: C. Stanley Contacted by: G. Avalos Date/ Time: 11.13.09

Regarding: MW-18 not listed on COC, but received 3x40ml voa w/Hcl and one 1L amber.

Corrective Action Taken:

Check all that Apply:

- ☒ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Gracie Avalos

From: Curt Stanley [cdstanley@basin-consulting.com]
Sent: Friday, November 13, 2009 3:11 PM
To: Gracie Avalos
Subject: Re: WO 352094 / Red Byrd #1

Please add MW-18 and run for BTEX and PAH

Curt

On Nov 13, 2009, at 9:48 AM, "Gracie Avalos" <gracie.avalos@xenco.com> wrote:

> Mr. Stanley,
>
> The above mentioned project was dropped off yesterday evening in which 3 40-mL voas and a 1L glass amber have been received for MW-18 sampled 11/12/09 @ 13:00 with the same project name and #. Should these samples be added onto the chain of custody and analyzed or should we just hold for you. Please let me know as soon as you're able so that I may ship out the PAH if necessary.
>
> Gracie Avalos
> Project Assistant
> Xenco Labs - Odessa
> 432-563-1800 Office
> 432-4563-1713 Fax
> gracie.avalos@xenco.com
>
>

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

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact:	Camille Reynolds
Address:	3705 E. Hwy 158, Midland, TX 79706	Telephone No.	505-441-0965
Facility Name:	Red Byrd # 1	Facility Type:	Steel Pipeline

Surface Owner: Red Byrd	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	1	20S	36E					Lea

Latitude 32° 36' 09.8" N **Longitude** 103° 17' 58.5" W

NATURE OF RELEASE

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

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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

Attach Additional Sheets If Necessary